Dear Students,

Thank you so much for choosing the University of Alaska Anchorage to help meet your higher education needs. Now, more than ever, a college education is vital to achieving success in the workplace. UAA, Alaska’s largest source of workforce training and education, offers more than 150 programs, many in high-demand fields such as health, education, business, engineering and more. From certificates and occupational endorsements to master’s degrees and a joint PhD, we think that you’ll find something that fits your needs at UAA.

More than 20,000 students attend UAA at one of our five campuses throughout Southcentral Alaska – Anchorage, Kenai, Kodiak, Mat-Su and Prince William Sound. Many of our programs are distance delivered, which allows students greater flexibility than ever before. Last year, more than 2,100 students graduated from UAA – our largest graduating class ever!

UAA is the University of Alaska’s Health Campus, and in 2011 we will open the new Health Sciences Building, which will house Alaska’s Medical School, WWAMI, as well as nursing and other health programs. Just last year we opened the ConocoPhillips Integrated Science Building, providing 120,000 square feet of state-of-the-art space for student instruction and research. As you can see, we are growing!

UAA students are gaining national recognition in many areas. This past year three of our students received Fulbright scholarships. Students have also earned Truman scholarships, Congress-Bundestag scholarships, and recently, a Marshall scholarship. The breadth and consistency of our student scholars reflects not only the dedication of our students, but also UAA faculty dedicated to mentoring students and helping them achieve their best.

In 2010, the Seawolf Debate team ranked 12th in the world and tied with Harvard for second place in the United States behind Yale.

Our student athletes are breaking school records and stepping onto the national scene, the latest being our track and field team ranking third in the nation last May. We are very proud that our student athletes are successful both in the classroom and in their sports. Our basketball players, gymnasts, volleyball players, skiers, hockey players and runners are consistently on all-academic teams in their sports.

Serving Alaska is important to us. Eight out of 10 of our graduates live and work in Alaska. We believe that college is more than going to classes; it is a time to learn the value of giving back, working collaboratively and finding ways to use education to make progress for our state and nation.

We wish you much success as you pursue your education and future goals at UAA!

Sincerely,

Fran Ulmer
Chancellor
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 and Matanuska-Susitna.

It is the policy of the University of Alaska to provide equal education and employment opportunities and to provide service and benefits to all students and employees without regard to race, color, religion, national origin, age, sex, veteran status, physical or mental disability, marital status, pregnancy or parenthood. This policy is in accordance with the laws enforced by the Department of Education and the Department of Labor, including Presidential Executive Order 11246, as amended, Title VI and Title VII of the 1964 Civil Rights Act, Title IX of the Education Amendments of 1972, the Public Health Service Act of 1971, the Veterans’ Readjustment Assistance Act of 1974, the Vocational Rehabilitation Act of 1973, the Age Discrimination in Employment Act of 1967, the Equal Pay Act of 1963, the 14th Amendment, EEOC’s Sex Discrimination Guidelines, and Alaska Statutes 18.80.220 and 14.18. Inquiries regarding application of these and other regulations should be directed to the University of Alaska Anchorage’s Director of Campus Diversity and Compliance, the Office of Civil Rights (Department of Education, Washington, DC), or the Office of Federal Contract Compliance Programs (Department of Labor, Washington, DC).
Schools and Colleges

**College of Arts and Sciences**
http://cas.uaa.alaska.edu
(907) 786-1707, Fax (907) 786-4630
Dr. James Jakob Liszka, Dean
Social Sciences Building (SSB), Room 335

**College of Business and Public Policy**
www.cbpp.uaa.alaska.edu
(907) 786-4100, Fax (907) 786-4131
Dr. Elisha Baker, Dean
Edward and Cathryn Rasmuson Hall (RH), Room 301

**College of Education**
http://coe.uaa.alaska.edu
(907) 786-4401, Fax (907) 786-4445
Dr. Mary Snyder, Dean
Professional Studies Building (PSB), Room 234

**College of Health and Social Welfare**
http://chw.uaa.alaska.edu
(907) 786-4406, Fax (907) 786-4440
Dr. Cheryl Easley, Dean
Professional Studies Building (PSB), Room 205

**Community & Technical College**
www.uaa.alaska.edu/ctc
(907) 786-6400, Fax (907) 786-6401
Dr. Karen Schmitt, Dean
University Center (UC), Room 141

**School of Engineering**
www.engr.uaa.alaska.edu/soe
(907) 786-1900, Fax (907) 786-1079
Dr. Robert Lang, Dean
Engineering Building (ENGR), Room 201

**University Honors College**
www.uaa.alaska.edu/honors
(907) 786-1086, Fax (907) 786-1060
Ronald Spatz, Dean
Edward and Cathryn Rasmuson Hall (RH), Room 119

**Community Campuses**

**Chugiak-Eagle River Campus**
http://eagle.uaa.alaska.edu
(907) 694-3313, Fax (907) 694-1491
Peter G. Risse, Director
10928 Eagle River Road, Suite 228
Eagle River, Alaska 99577

**Kenai Peninsula College**
www.kpc.alaska.edu
(907) 262-0330, Fax (907) 262-0330, Fax (907) 262-0322
Gary J. Turner, College Director
156 College Road
Soldotna, Alaska 99669

**Kachemak Bay Campus**
www.homer.alaska.edu
(907) 235-7743, Fax (907) 235-1686
Carol Swartz, Campus Director
533 East Pioneer Avenue
Homer, Alaska 99603

**Kenai River Campus**
www.kpc.alaska.edu
(907) 262-0330
156 College Road
Soldotna, Alaska 99669

**Resurrection Bay Extension Site**
www.kpc.alaska.edu/resurrection
(907) 224-2285, Fax (907) 224-3306
Jackie Marshall, Coordinator
P. O. Box 1049
Seward, Alaska 99664

**Kodiak College**
www.koc.alaska.edu
(907) 486-4161, Fax (907) 486-1257
Barbara J. Bolson, Director
117 Benny Benson Drive
Kodiak, Alaska 99615

**Matanuska-Susitna College**
www.matsu.alaska.edu
(907) 745-9774, Fax (907) 745-9711
Dennis Clark, Director
P. O. Box 2889
Palmer, Alaska 99645

**Military Education Services**

**Anchorage Area Military Education Services**

**Elmendorf Air Force Base**
(907) 753-0204, Fax (907) 753-8390
Mel Kalkowski, Director
3 MSS/DPE 4109 Bullard Avenue, Suite 107
Elmendorf AFB, Alaska 99506

**Fort Richardson Army Post**
(907) 428-1228, Fax (907) 428-1002
Mel Kalkowski, Director
Building 7, Chilkoot Avenue
Fort Richardson, Alaska 99505

**Affiliate College**

**Prince William Sound Community College**
www.pwscc.edu
(907) 834-1600, Fax (907) 834-1627
Douglas Desorcie, President
P. O. Box 97
Valdez, Alaska 99686
with centers at Cordova and Copper Basin


**ACADEMIC PROGRAMS**

UAA offers over 150 certificate, associate’s, baccalaureate, and master’s degree programs. The availability of small classes provides accessibility to faculty. In addition, the university offers tailored short courses, workshops and seminars throughout the year, as well as institutes and conferences.

The following list of certificates and degrees offered by the University of Alaska Anchorage indicates the diverse educational opportunities available to students.

**Campus Key**

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<tr>
<th>Code</th>
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**Undergraduate Programs**

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<td>CAD for Building Construction (AI)</td>
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### Key To Colleges Offering Programs

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### Associate’s Degrees

#### Associate of Applied Sciences

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## Bachelor of Science

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## Baccalaureate Degrees

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### Bachelor of Business Administration

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## Minors

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Physical Education (AI)  199  CTC
Physics (AI)  120  CAS
Political Science (AI)  121  CAS
Psychology (AI)  123  CAS
Public Administration (AI)  121  CAS
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**Graduate Programs**

**Master's Degrees**

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**Master of Arts**

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English (AI)  262  CAS
Interdisciplinary Studies (AI)  252  CAS
Teaching (AI)  269  COE

**Master of Business Administration**

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**Master of Civil Engineering (AI)**  298  SOE

**Master of Education**

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Early Childhood Special Education (AI)  274  COE
Educational Leadership (AI)  275  COE
Master Teacher with Specialty Options-Suspended (AI)  276  COE
Special Education (AI)  276  COE

**Master of Fine Arts**

Creative Writing and Literary Arts (AI)  262  CAS

**Master of Public Administration (AI)**  267  CBPP

**Master of Public Health**

Public Health Practice (AI)  286  CHSW

**Master of Science**

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Arctic Engineering (AI)  296  SOE
Biological Sciences (AI)  258  CAS
Career and Technical Education (AI)  291  CTC
Civil Engineering (AI)  297  SOE
Clinical Psychology (AI)  259  CAS
Computer Science * (AI)  261  CAS
Engineering Management (AI)  299  SOE
Global Supply Chain Management (AI)  266  CBPP
Interdisciplinary Studies (AI)  252  CAS
Nursing Science (AI)  283  CHSW
Project Management (AI)  301  SOE
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* Joint Collaborative Program

**Graduate Certificates**

Advanced Human Service Systems (AI)  282  CHSW
Clinical Social Work Practice (AI)  290  CHSW
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e-Learning-Suspended (AI)  279  COE
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Language Education (AI)  279  COE
Nursing Education (AI)  286  CHSW
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**Doctoral Programs**

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( Cooperative Program with UAF)
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Medical School WWAMI  255  CAS
(Collaborative with the University of Washington)

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Institutional Accreditation

UAA is accredited by the Northwest Commission on Colleges and Universities (NWCCU), one of six Higher Education Regional Accrediting Associations recognized by the U.S. Department of Education.

Accreditation is a process of recognizing educational institutions for performance, integrity, and quality that entitles them to the confidence of the educational community and the public. The dedication of UAA to the continuation of that performance, integrity, and quality is displayed in the certifications and accomplishments of the faculty, the breadth, depth, and substance of the academic programs, and in the availability and quality of services to the students and the community.

Program Accreditation

When available, individual academic programs often seek verification that their program of studies 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**
Bachelor of Arts, Bachelor of Fine Arts
Accredited by the National Association of Schools of Art and Design (NASAD)

**Auto Diesel Technology**
Associate of Applied Science in Heavy Duty Transportation and Equipment
Associate of Applied Science in Automotive Technology with options in General Automotive, Ford ASSET, and General Motors ASE
Undergraduate Certificate in Automotive Technology
Accredited by the National Institute for Automotive Service Excellence

**Aviation Technology**
Certificate and Associate of Applied Science in Aviation Maintenance Technology
Approved by the Federal Aviation Administration
Associate of Applied Science in Professional Piloting and Bachelor of Science degree in Aviation Technology with a Professional Piloting emphasis
Approved by the Federal Aviation Administration

**Biomedical Technology**
Accredited by the Liaison Committee on Medical Education of the Association of American Medical Colleges - Through the University of Washington School of Medicine by agreement with the states of Washington, Wyoming, Alaska, Montana, and Idaho (WWAMI)

**Civil Engineering**
Bachelor of Science
Accredited by ABET, Inc.

**College of Business and Public Policy**
Bachelor 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
Master of Science in Global Supply Chain Management
Accredited by the Association to Advance Collegiate Schools of Business International (AACSB)

**College of Education**
Accredited by the National Council for Accreditation of Teacher Education (NCATE)
All education certification and endorsement programs are approved by the Alaska Department of Education and Early Development and are based on NCATE standards.

**Dental Assisting**
Certificate
Associate of Applied Science
Accredited by the Commission on Dental Accreditation of the American Dental Association

**Dental Hygiene**
Associate of Applied Science
Accredited by the Commission on Dental Accreditation of the American Dental Association

**Dietary Internship**
Graduate Certificate
Approved by the American Dietetics Association Commission on Accreditation

**Engineering**
Bachelor of Science in Engineering, with specialization tracks in Computer Systems Engineering, Electrical Engineering, and Mechanical Engineering
Accredited by ABET, Inc.

**Geomatics**
Bachelor of Science
Accredited by the Applied Science Accreditation Commission of ABET, Inc.

**Human Services**
Associate of Applied Science
Bachelor of Human Services
Accredited by the Council for Standards in Human Service Education (CSHSE)

**Journalism And Public Communications**
Bachelor of Arts
Accredited by the Accrediting Council on Education in Journalism and Mass Communication

**Medical Assisting**
Associate of Applied Science
Accredited by the Commission on Accreditation of Allied Health Education Programs
www.caahep.org

**Medical Laboratory Technology**
Associate of Applied Science
Accredited by the National Accrediting Agency for Clinical Laboratory Science (NAACLS)

**Medical Technology**
Bachelor of Science
Accredited by the National Accrediting Agency for Clinical Laboratory Science (NAACLS)

**Music**
Bachelor of Arts
Bachelor of Music, with Emphasis in Music Education
Bachelor of Music, Performance
Accredited by the National Association of Schools of Music (NASM)

**Nursing**
Associate of Applied Science
Bachelor of Science
Master of Science
Accredited by the National League for Nursing Accreditation Commission
Approved by Alaska Board of Nursing

**Occupational Therapy**
Occupational Therapy Doctorate offered by Creighton University with collaboration of UAA
Accredited by the Accreditation Council for Occupational Therapy Education

**Paralegal Studies**
Certificate
Approved by the American Bar Association

**Process Technology**
Associate of Applied Science
Approved by the Alaska Process Industry Career Consortium
Approved by the National Center for the Advancement of Process Technology

**Project Management**
Master of Science in Project Management
Accredited by the Global Accreditation Center for Project Management

**Social Work**
Bachelor of Social Work
Master of Social Work
Accredited by the Council on Social Work Education (CSWE)
Welcome to UAA

UAA History
UAA 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's 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's 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 (UAA). Ten years later, ACC and UAA 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 180 programs, ranging from certificate programs to associate’s, baccalaureate and master’s degrees, are offered at campuses in Anchorage and 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. The University of Alaska Anchorage is an open-access university with academic programs leading to occupational endorsements; undergraduate and graduate certificates; and associate’s, 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 and align with the five priorities of the UAA Strategic Plan 2017. These core themes are:
1. Teaching and Learning
2. Research, Scholarship, and Creative Activity
3. Student Success
4. UAA Community
5. Public Square

The set of core themes was approved by the Chancellor’s Cabinet and the UAA Faculty Senate in 2009. Each core theme leads to specific objectives for the institution as a whole, and for those units that contribute to its outcomes. The analyses of accomplishments in the outcomes and objectives of each core theme are used to gauge institutional success and to prompt initiatives aimed at improvement of programs and services.

Institutional Learning Outcomes
In support of the university’s mission, the curriculum of the various programs is designed such that UAA graduates will be able to:
• Communicate effectively
• Employ critical thinking skills
• Employ independent learning and information literacy skills
• Demonstrate a knowledge base in the required general education areas, and
• Demonstrate specific knowledge and skills in degree or major discipline.

Diversity Statement
With freedom of speech being at our core, UAA strives to create an inclusive, respectful campus community that promotes and embraces our individual differences. We are united in our belief that diversity includes understanding and respecting differences in ideas, religion, gender, ethnicity, race, sexual orientation, disability, age and socioeconomic status. We celebrate diversity in all of our educational and employment endeavors.

Accreditation
UAA has been continuously accredited by the Northwest Commission on Colleges and Universities since 1974. Many of the academic programs are also accredited by their respective professional associations. See the program listing in the front of this catalog for further information.

UAA Campuses
Anchorage Campus
3211 Providence Drive
Anchorage, Alaska 99508
(907) 786-1480
www.uaa.alaska.edu

The largest UAA campus is in Anchorage, where students have access to the greatest number and variety of courses, programs and services. Located at UAA Drive and Providence Drive, the campus features modern facilities and houses the administration of all of the academic schools and colleges. Enrollment Management, the Advising & Testing Center, Accounting Services and many of the technical programs are housed at the University Center on Old Seward Highway, about one mile west of campus.

Chugiak-Eagle River Campus
10928 Eagle River Road, No. 228
Eagle River, Alaska 99577
(907) 694-3313
www.uaa.alaska.edu/ctc/programs/chugiak-eagleriver

Located 10 miles north of Anchorage, the Chugiak-Eagle River Campus offers a wide variety of general education and degree-oriented courses. Most classes are scheduled in the evenings or on weekends.
Kenai Peninsula College
156 College Road
Soldotna, Alaska 99669
(907) 262-0330
(877) 262-0330
www.kpc.alaska.edu

Kenai Peninsula College (KPC) is located about 180 road miles from Anchorage. KPC has campuses in Soldotna and Homer, and extension sites in Anchorage and Seward. KPC offers two-year Associate of Arts and Associate of Applied Science degrees, as well as courses leading to vocational certificates. Some programs leading to baccalaureate degrees, such as the Bachelor of Arts in Art, Bachelor of Arts in Elementary Education, Bachelor of Arts in Psychology, Bachelor of Liberal Studies and the Bachelor of Science in Psychology, 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 distance education program with more than 60 courses delivered each semester, reaching thousands of 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.

Anchorage Extension Site
University Center
3901 Old Seward Highway
Anchorage, Alaska 99503
(907) 786-6143
www.kpc.alaska.edu/anchorage

KPC offers two programs through an extension site at the University Center in Anchorage. More than 100 students pursue the Associate of Applied Science in either Process Technology or Occupational Safety and Health. The site includes lab simulators, classrooms and computer labs.

Kachemak Bay Campus
533 E. Pioneer Avenue
Homer, Alaska 99603
(907) 235-7743
www.homer.alaska.edu

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 delivers KPC’s programs and services on the southern Kenai Peninsula, serving more than 500 students. The campus offers a wide variety of degree and continuing education courses and programs of excellence in a friendly, personalized setting. It consists of two facilities offering classrooms, bookstore, science laboratories, art studio, computer lab, commons, library, learning resource center and student services center.

Kenai River Campus
156 College Road
Soldotna, Alaska 99669
(907) 262-0330
www.kpc.alaska.edu

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. 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.

Resurrection Bay Extension Site
P. O. Box 1049
Seward, Alaska 99664
(907) 224-2285
www.kpc.alaska.edu/resurrection

KPC also offers classes on the Kenai Peninsula in Seward. Various General Education Requirement (GER) courses and personal enrichment classes are offered utilizing high school classrooms. KPC has an onsite coordinator at Seward High School and more than 10 classes are offered each semester.

Kodiak College
117 Benny Benson Drive
Kodiak, Alaska 99615
(907) 486-4161
www.koc.alaska.edu

Kodiak College, located on Kodiak Island, 250 air miles south of Anchorage, serves the town of Kodiak and the communities of Akhiok, Karluk, Larsen Bay, Old Harbor, Ouzinkie and Port Lions. Kodiak College provides courses leading to associate’s or baccalaureate degrees, plus adult basic education, and GED preparation. Special interest, continuing education, vocational technical courses and support for distance education are also offered. The campus is a cultural center in the community, sponsoring events such as readings, lectures, seminars, art shows and exhibits.

Matanuska-Susitna College
P.O. Box 2889
Palmer, Alaska 99645
(907) 745-9774
www.matsu.alaska.edu

Matanuska-Susitna College (Mat-Su College) is an extended college of the University of Alaska Anchorage. Located on Trunk Road, 40 miles north of Anchorage, and about halfway between Wasilla and Palmer, Mat-Su College serves over 1,900 students per semester and continues to experience record growth rates. The Mat-Su Borough is the fastest growing area of the state and Mat-Su College is responding to this growth by offering approximately 30 associate’s degrees, occupational endorsements and certificates with a focus on career and workforce development. Academic programs include architecture and engineering, computer technology and digital media, refrigeration and heating, fire and emergency medical services, and veterinary assisting and renewable energy. Graduates leave prepared to enter the Alaska workforce or pursue further academic studies.

Other Academic Opportunities

Student Exchanges and Study Abroad

Students are encouraged to explore educational experiences through a number of study abroad, internship abroad and national or international student exchange opportunities available to UAA students.

Office of Admissions

University Center
3901 Old Seward Highway
Anchorage, Alaska 99503
(907) 786-1480

International Exchange Students Coming to UAA

www.uaa.alaska.edu/iss

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.
Office of International Affairs (OIA)
Rasmuson Hall, Suite 115
(907) 786-4300
www.uaa.alaska.edu/oia

Development of international expertise is an important skill for all individuals in the 21st century. Many jobs and careers require familiarity with and understanding of the languages, cultures, history, practices and peoples of other parts of the world. Knowledge of diverse cultures also broadens and deepens one's understanding of one's own culture. Enhanced internationalization of UAA is recognized as a priority in UAA 2017, the university’s strategic plan.

The Office of International Affairs (OIA) coordinates and promotes international activities at UAA. Students consult the office for information on education abroad academic activities, including research, internships, engaged learning opportunities and degree programs that support or make use of the development of international expertise. Faculty discuss teaching and research opportunities abroad with the Office of International Affairs and their deans. The Office of International Affairs also coordinates and manages UAA's relationships with current and prospective international partner institutions.

International Educational Experiences

Study Abroad and International Exchanges
One of the pivotal elements in developing global awareness and intercultural competence is an international educational experience. International study plays an important role in preparing graduates for exciting career opportunities and graduate study, often giving them a competitive edge. UAA offers education abroad and exchange opportunities in more than 50 countries in Africa, Asia, Europe, Latin America, the Middle East and Oceania. Language immersion programs offer students the chance to accelerate their mastery of another language. Internships and service learning options engage students in applied learning at the same time allowing them to interact more fully with their host cultures and gain valuable work-related experience.

Students who wish to go abroad are strongly encouraged to plan ahead. Early in their studies, students should seek counsel from their academic advisors as well as the international affairs coordinator to identify programs that offer the best fit academically and personally. In consultation with their academic advisors, students need to determine how international study will fit with their degree requirements, strategically selecting courses to lay a solid foundation while advancing towards timely graduation.

The Office of International Affairs provides support, guidance, a pre-departure orientation, and administrative assistance to students wishing to participate in an international education experience from the time they begin to explore opportunities through their return to UAA and re-entry into American life. By working through the Office of International Affairs, participants in UAA’s approved programs earn resident credit. Many forms of financial aid are available to help students pay for approved experiences.

Detailed information about UAA's international exchanges and approved education abroad programs and their requirements, along with application forms, are available from the Office of International Affairs. Students are responsible for knowing and following UAA's regulations and policies, as well as those of their international program providers and host institutions.

Student Research, Scholarship and Creativity
Students may participate in student research, scholarship and creative activity across the curriculum at undergraduate and graduate levels. There is a wide range of internships and service learning settings as part of professional or technical education and training. The annual Student Showcase and the Undergraduate Research and Discovery Symposium emulate professional meetings wherein student research and creative expressions are reviewed by faculty and culminate in university publications.

Student Affairs
Through inspiration, accessibility and support, Student Affairs provides an environment for our diverse student population to reach their greatest potential. Services are facilitated by centers that focus on academic excellence, student health, learning resources, advising, counseling, career development, academic accommodations for students experiencing disabilities, educational opportunity and study abroad.

Other services assist students with financial aid or individualized needs or interests. See Chapter 6, Advising and Academic Support, for more information.

UAA offers diverse co-curricular opportunities for all students and challenges them to learn and develop in a purposeful and supportive environment. For information on UAA student residence options, or for student social, athletic and cultural activities, see Chapter 3, Student Life, or the UAA Fact Finder/Student Handbook.

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 Campus Diversity and Compliance which 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, veteran status, physical or mental disability, marital status, pregnancy, or parenthood, except as necessary and permitted by law. A student or prospective student who feels that he or she is being discriminated against has the right to contact the appropriate supervisor for assistance. The student or prospective student may also contact one of the following:

- AHAINA Student Programs Office ..................... (907) 786-4070
- Disability Support Services ......................... (907) 786-4530
- Human Resource Services Department ............ (907) 786-4608
- Native Student Services ................................ (907) 786-4680
- Office of the Dean of Students ....................... (907) 786-1214
- UAA Office of Campus Diversity and Compliance .................................................. (907) 786-4680
- U.S. Department of Labor (Office of Federal Contract Compliance Programs, Federal Building, Anchorage, Alaska) for advice on discrimination ................................. (907) 786-4680

Harassment
The University of Alaska Anchorage is a community that cherishes 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. Therefore, harassment of any kind has no place in the university. Anyone who believes he or she has been a victim of harassment should contact the appropriate dean/director office(s), the Office of the Dean of Students, the UAA Office of Campus Diversity and Compliance, or the U.S. Department of Labor (Office of Federal Contract Compliance Programs, Federal Building, Anchorage, Alaska).
Safety
Anchorage Campus Police ...................... (907) 786-1120 (V/TTY)
Kenai Peninsula College
   Soldotna Campus Security ..................... (907) 262-0300
   Kachemak Bay Branch Security ................ (907) 235-7743
Kodiak Campus Security ....................... (907) 486-1219
Mat-Su Campus Security ....................... (907) 745-9789
Safety is a priority at UAA. All members of the academic community
are encouraged to take responsibility for their own safety by taking the
time to locate the nearest exits and emergency telephones when they are
in campus buildings. Safety concerns may be brought to the attention of
UAA faculty or staff, or the University Police at (907) 786-1120. For more
safety information and the most recent campus crime report, visit www.
uaa.alaska.edu/safety.

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.
Alaska Center for Rural Health (ACRH)
Alaska Center for Supply Chain Integration (ACSCI)
Alaska Natural Heritage Program (AKNHP)
Alaska Small Business Development Center (Alaska SBDC)
Center for Alcohol & Addiction Studies (CAAS)
Center for Behavioral Health Research & Services (CBHRS)
Center for Community Engagement & Learning (CCEL)
Center for Economic Education (CEE)
Center for Human Development (CHD)
Environment & Natural Resources Institute (ENRI)
Institute for Circumpolar Health Studies (ICHS)
Institute of Social & Economic Research (ISER)
Justice Center
North Pacific Fisheries Observer Training Center (OTC)
Psychological Services Center (PSC)
University of Alaska Center for Economic Development (CED)
Centers & Institutes

A center or institute is created on approval by the University of Alaska 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 (ACRHRH)
(907) 786-6579
http://nursing.uaa.alaska.edu/acr

The ACRH is housed within the School of Nursing of the College of Health and Social Welfare. The mission of ACRH is to help strengthen systems to deliver comprehensive and culturally relevant health care to rural Alaskans. It achieves this mission through health workforce development, research and communications. Of the organization members, four represent the University of Alaska’s three major academic units — UAA, UAF, UAS — and the University of Alaska Statewide Office.

Outcomes and programs include the Raven’s Quest Summer Institute, Rural/Urban Opportunities Program, Rural Health Career Guide and the Alaska Rural Health Notes newsletter.

Alaska Center for Supply Chain Integration (ACSCI)
(907) 786-4149
www.cbpp.uaa.alaska.edu
acsci@cbpp.uaa.alaska.edu

The ACSCI, housed within the College of Business and Public Policy at the University of Alaska Anchorage, supports business system research and development of Alaskan logistics and supply chain management capabilities. The center enriches educational opportunities for students and fosters the development of university/government/industry-partnered activities while addressing business issues of economic impact for the state of Alaska. Focusing on the growing importance of logistics and supply chain activities within Alaska’s economy, from the air cargo transits at Ted Stevens Anchorage International Airport to the Alaska seafood supply chain that reaches across America and beyond, the center provides opportunities for students and faculty. Across the University of Alaska, they participate in the development of solutions addressing current business topics as well as matters associated with emerging technologies such as radio-frequency identification (RFID) and changes in public policy such as the increased emphasis on homeland security.

Alaska Natural Heritage Program (AKNHP)
(907) 257-2780
www.uaa.alaska.edu/enri

The Alaska Natural Heritage Program (AKNHP) is Alaska’s clearinghouse for information on plant and animal species of conservation concern, natural communities of conservation concern, and invasive non-native plant and animal species. We collect, validate and distribute this information, and assist natural resource managers and others in applying it effectively. AKNHP is part of NatureServe, and our data are linked to similar programs in all 50 states, Canadian provinces, and many Latin American countries.

The AKNHP is divided into three units: Zoology, Botany, and Ecology.

The Zoology program synthesizes information concerning rare and potentially endangered vertebrate species. We also conduct bird surveys, maintain a database on non-native animals, and, through the U.S. Geological Survey’s Gap Analysis Program, are modeling the distribution of all birds and mammals in Alaska.

The Botany program conducts inventories and ecological and experimental research on rare plants and lichens and non-native plants of Alaska. Additionally, we synthesize and serve data from other collaborators to the public. We maintain one of the largest, spatially explicit non-native plant databases in the country, with over 95,000 non-native plant occurrences from Alaska and Yukon Territory, which is used to facilitate both research and early detection and rapid response actions.

The AKNHP Ecology program’s main objective is to describe the major plant communities within the state of Alaska. Field projects include landcover mapping, describing all plant communities, identifying those that are rare and understanding ecosystem succession.

In addition to serving conservation data to the public, the AKNHP 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)
(907) 274-7232 • Toll Free: 1-800-478-7232
www.aksbdc.org

The Alaska SBDC is a cooperative program of the Small Business Administration (SBA) accredited by the Association of Small Business Development Centers and hosted by the University of Alaska Anchorage.

The mission of the Alaska SBDC is to foster, promote and assist the growth and development of small businesses in the state of Alaska through a family of services. The primary emphasis of the Alaska SBDC is to provide Alaska’s businesses and entrepreneurs in-depth, quality business counseling and training. Small businesses are assisted in the areas of management, marketing, sales, finance, accounting and other disciplines required for small business growth, expansion and innovation.

The Alaska SBDC is represented throughout Alaska in five regions and their corresponding main centers and satellite locations: Anchorage (Southcentral Region), Fairbanks (Great North Region), Wasilla (Central Region), Juneau (Southeast Region) with a satellite office in Ketchikan, and Soldotna (Southwest Region) with a satellite office in Homer. The Alaska SBDC also addresses business growth in rural Alaska through the Rural Outreach Program for Entrepreneurs, or ROPE, program.

The Alaska SBDC provides three other unique services for small businesses in Alaska. The Procurement Technical Assistance Center (PTAC), provides assistance to 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, www.buyalaska.com. The Technology Research Development Center (TREND) provides Small Business Innovation Research (SBIR) proposal assistance and technical database searches.

All of the Alaska SBDC’s network services encourage the involvement of the university within the public square, and the Alaska SBDC serves as a direct conduit to the business community.
Center for Alcohol and Addiction Studies (CAAS)
(907) 786-6582
www.ichs.uaa.alaska.edu/caas
The CAAS mission represents the University of Alaska’s commitment to address the problem of substance use and abuse in the state. The mission of the Center for Alcohol and Addiction Studies 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 the substance abuse problems in the state, has received numerous grants and contracts to undertake research and evaluation studies, and has 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)
(907) 561-2880
http://bhrs.uaa.alaska.edu
aybhrs@uaa.alaska.edu
The CBHRS is a research center in the College of Arts and Sciences that has been in existence since 1999. CBHRS is comprised of researchers, clinicians and educators dedicated to the behavioral and physical health of all members of our community. CBHRS research is focused on risk behavior prevention, exploration of the coexistence of substance abuse and mental illness, research and clinical ethics, and healthy lifestyle choices. CBHRS has been 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, Centers for Disease Control and Prevention, and the National Institutes of Health. CBHRS is home to two large RO1 grants from the National Institute on Drug Abuse and the National Institute of Mental Health, both focused on research ethics with vulnerable populations. CBHRS also houses the CDC-funded Arctic Fetal Alcohol Spectrum Disorders Regional Training Center (www.uaa.alaska.edu/arcticfasdrtc).

In addition to being a major research center, CBHRS provides a variety of services in the areas of mental health, substance abuse, physical health and prevention that are helpful to faculty members across campus, care providers in the larger community, administrators in health-related agencies across the state, and State of Alaska policy makers. CBHRS provides support with qualitative research methodology (including design, key informant interviews, focus groups, data coding and data analysis), quantitative research methodology (including design, data collection, data management and statistical analysis), grant production (including hypothesis generation, study design, writing, budget generation and coordination), writing for peer-reviewed literature (including manuscript production, technical report writing and book chapter creation), and training activities (including workshops, seminars and lectures). CBHRS is approved by the American Psychological Association to offer continuing education.

Center for Community Engagement and Learning (CCEL)
(907) 786-4062
http://engage.uaa.alaska.edu
engage@uaa.alaska.edu
Established in 2000, UAAs Center for Community Engagement and Learning 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 enables the university to effectively carry out its community engagement mission, to develop applied research projects and to support service learning, a proven pedagogy that links community with academic study and reflection.

Center for Economic Education (CEE)
(907) 786-1916
www.ceee.uaa.alaska.edu
aycee@uaa.alaska.edu
The Center for Economic Education is jointly sponsored by the Alaska Council on Economic Education and UAA. The goal of the center is to promote and improve the teaching of economics in Alaskas schools. The center sponsors workshops and college credit courses for teachers throughout Alaska and provides educational materials and other assistance to teachers and school districts.

Center for Human Development (CHD)
(907) 272-8270 • Toll free: 1-800-243-2199
www.alaskachd.org
info@alaskachd.org
The CHD, a University Center for Excellence in Developmental Disabilities Education, Research and Service, is an interdisciplinary unit under the College of Health and Social Welfare. Faculty and staff represent a variety of disciplines, including psychology, social work, special education, sociology, adult education, nursing and human services. The center has a variety of projects that provide paid work experience for UAA students.

The CHD is authorized under the Developmental Disabilities Assistance and Bill of Rights Act 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 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 disabilities or require long-term support by:

• Providing interdisciplinary pre-service and continuing education of students.

• Providing community service, 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.

• Disseminating information about disabilities, long-term supports, and professional best practices.

Environment and Natural Resources Institute (ENRI)
(907) 257-2700
www.uaa.alaska.edu/enri
ENRI 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, by contributing to and forming research networks, by participating in data and sample archiving and synthesis activities, and by 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 Laboratory (ASET). 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 three main research, data and information themes: 1) Ecosystem Studies and Conservation Biology; 2) Earth and Climate Processes, and 3) Human Ecology and Native Studies. Within each research theme, the research activities are comprised of multiple principal investigator-lead programs, including: 1) the Ecosystem Studies Program, 2) the Alaska Natural Heritage Program, 3) the Aquatic and Riparian Ecology Program, and 4) the Cultural Heritage Program.
Ecosystem Studies and Conservation Biology (ESCB)

Ecosystem Studies Program
(907) 257-2700
http://enri-sil.uaa.alaska.edu

This research group emphasizes understanding the magnitudes, patterns, governing processes and changes in the cycles of carbon, water, nutrients, and their interactions. The program specializes in physiological plant and ecosystem ecology with studies in tundra, at tree-line, in boreal forests and in other northern systems. This program has a strong emphasis on studying how arctic and boreal ecosystems are responding to climate change, including research in northwest Greenland and in northern Alaska at the Toolik Lake Field Station. The UAA Stable Isotope Lab serves the analytical needs of this and other programs at ENRI and UAA.

Aquatic and Riparian Ecology Program
(907) 257-2744
http://aquatic.uaa.alaska.edu

This program investigates the influences of natural and human processes on the structure and function of freshwater ecosystems. The major focus has been quantifying the baseline biological conditions of streams and rivers and the development of tools to monitor the biological health of Alaska's streams and associated terrestrial ecosystems. This program has recently embraced studies that quantify marine-terrestrial linkages via marine-derived N inputs into freshwater streams and adjoining riparian ecosystems. Training and outreach to local K-12 programs and municipalities are central to this program.

Earth and Climate Processes (ECP)

Alaska State Climate Center (ASCC)
(907) 257-2737
http://climate.uaa.alaska.edu

The ASCC provides climatological information and official weather data to the public while studying how long-term changes in weather patterns are being manifested in southcentral Alaska. The center collaborates closely with UAA's Alaska Experimental Forecast Facility and is developing links to the Alaska Ocean Observing System. ASCC is also leading coordination of our Boreal Forest Observatory located on the UAA campus that is measuring and monitoring air and soil temperatures, CO2 fluxes, and canopy properties.

Geochemistry Unit
(907) 786-6895

The Geochemistry Unit at ENRI focuses on the quantification of inorganic and organic minerals and nutrient cycles, contaminant biogeochemistry and catchment processes. The contaminant research addresses perchlorate biogeochemistry and arsenic dynamics. The isotope geochemistry research emphasizes nitrate dynamics in urban and rural watersheds as well as local, state and continental patterns and processes governing the isotopes of water in precipitation, U.S. Network of Isotopes in Precipitation (USNIP) (www.uaa.alaska.edu/enri/usnip/index.cfm). The Geochemistry Unit is supported in part by the Applied Science and Engineering Technology Laboratory (ASET) (www.uaa.alaska.edu/enri/aset), a modern analytical facility specializing in the analysis of fatty acids in fish, birds, and mammals; inorganic nutrients (NO3 and NH4) in waters; as well as organic and inorganic pollutants such as perchlorate and dissolved carbon and nitrogen in waters.

Human Ecology and Coupled Human-Environment Interactions (HECHE)
(907) 786-4942
www.uaa.alaska.edu/enri/research/hens.cfm

The HECHE program focuses on understanding modern and historical human behavior as related to environmental conditions and changing climates in northern regions. The group utilizes agent-based modeling to predict social responses to changing water supplies and synthesizes observations from vast network of Natives who are reporting environmental change in the Bering Sea region of Alaska and Russia. The group also specializes in archaeological studies of previous societies and their habitats, including the analysis of animal bones as recorders of foraging and environmental conditions. The rich cultural history of Alaska and the wealth of Native communities and issues provide a robust environment to address the human dimensions of arctic and boreal systems.

Associated Programs

Arctic Environmental Information and Data Center (AEIDC)
(907) 257-2700
www.aaa.alaska.edu/enri

The AEIDC is becoming an electronic information and data center that serves as a focus for ENRI data compilation, data archiving, data synthesis activities, data collection, sample storage, data sharing and the provision of data and information to scientists and society. AEIDC focuses on organizing data sets from large- and small-scale monitoring and measurement networks in Alaska, the north, and across the U.S. The scale of data compilation ranges from archiving data sets from individual projects lead by ENRI faculty and staff to compiling data that represents entire programs at the national level. AEIDC is upgrading its computing and personnel capacity to serve these needs.

Institute for Circumpolar Health Studies (ICHSS)
(907) 786-6575
http://ichs.uaa.alaska.edu
ayichs@uaa.alaska.edu

The ICHS was created by the Alaska Legislature in 1988 (AS 14.40.088) to develop new solutions to health problems in Alaska and the circumpolar north. Within the University of Alaska, the institute provides support and coordination for health research, information and training.

ICHSS works closely with faculty throughout the University of Alaska system providing technical assistance and support to increase the capacity within the state to address the health needs of all Alaskans. ICHS also encourages student involvement through internships and research assistantships. ICHS staff assist in the instructional mission of the College of Health and Social Welfare through conferences, guest lectures and other teaching activities.

At ICHS, research addresses a wide variety of health problems and issues facing Alaskans, many of which are common to populations in the circumpolar north. 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.

The institute maintains collaborative relationships with other universities, state and federal agencies, Alaska Native health organizations, and Alaska communities to provide relevant health information, to support local planning, and to 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)
(907) 786-7710
www.iser.uaa.alaska.edu
ayiser@uaa.alaska.edu
ISER is a public policy and social science research institute, applying multidisciplinary skills to the analysis of social and economic change in Alaska and northern regions. Since 1961, the institute has investigated virtually every major public policy issue in Alaska, including the effects of natural resource development, the fiscal policies of state and local governments, the transportation and energy requirements of developing regions, and the effects of change on Alaska’s Native people and on the quality of life in Alaska. ISER is affiliated with the College of Business and Public Policy. Faculty from the college and other parts of the university take part in ISER research projects. ISER also forms research partnerships with other universities, Native organizations, school districts, and community groups. ISER faculty also teach, and ISER provides opportunities for student involvement through internships and research assistantships.

Justice Center
(907) 786-1810
http://justice.uaa.alaska.edu
ayjustice@uaa.alaska.edu
The Justice Center conducts research in the justice field and provides higher education in justice studies. Through its work, the center promotes understanding of the justice system throughout rural and urban Alaska.

The Justice program offers courses in the areas of crime, delinquency, paralegal studies, and police, judicial and correctional policy and administration. Within the Justice program, the center also offers a paralegal certificate approved by the American Bar Association. The center also participates in an interdisciplinary graduate program with the UAA Department of Public Administration through which students can earn a Master of Public Administration with an emphasis in criminal justice.

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 also 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 Unit, a program under the aegis of the Bureau of Justice Statistics. The Statistical Analysis Unit collects data, conducts analyses and makes the results of national research on justice issues available to the Alaska community. For more information, visit their website at http://justice.uaa.alaska.edu.

The Justice Center products include books, papers, reports to public agencies and video educational programs. 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 conferences and a quarterly publication, the Alaska Justice Forum, permit the exchange of ideas in the justice field.

North Pacific Fisheries Observer Training Center (OTC)
(907) 257-2770
www.uaa.alaska.edu/ctc/otc

The OTC provides training for marine mammal observers and groundfish, crab, and scallop observers. Working in conjunction with the University of Alaska Fairbanks, the National Marine Fisheries Service and the Alaska Department of Fish and Game, the OTC trains observers in sampling requirements; fish, shellfish, seabird and marine mammal identification; and safety at sea. Fishery observers live and work onboard commercial fishing vessels in the Bering Sea and the Gulf of Alaska. Observers collect information critical to the management and conservation of Alaska’s marine resources.

Psychological Services Center (PSC)
(907) 786-1795
http://psych.uaa.alaska.edu/services

In the Psychological Services Center (PSC), therapy is provided in a confidential atmosphere sensitive to culture and ethnicity. Individual, family and child therapy is offered. People are seen for reasons from the exploration of one’s potential to concerns such as anxiety, depression, stress, loss, test anxiety and relationship difficulties. Services are available at affordable, low fees. The PSC is the training clinic for graduate students in the MS Clinical Psychology Program and the Joint Doctoral Program in Clinical Community Psychology with a Rural Indigenous Emphasis. The PSC clinicians are supervised by licensed practitioners.

Because this is a training clinic that is closed on weekends, holidays and school breaks, the PSC is generally not a good match for people who have severe crises. For an appointment or information, please call 786-1795.

University of Alaska Center for Economic Development (CED)
(907) 786-5444
www.ced.uaa.alaska.edu

The University of Alaska Center for Economic Development is one of 52 University Centers designated by the U.S. Department of Commerce, Economic Development Administration (EDA). In this role, the center leverages the resources of the University of Alaska system to improve the local economy and economic development capacity of the service area, which includes the entire state of Alaska.

The center provides technical assistance to public and private sector organizations. The ways in which the center engages in economic development are broad and flexible, according to the needs of the university, its partners and the communities served. Technical assistance is used to provide information, data and know-how in evaluating, shaping and implementing specific projects and programs that promote economic development, with a focus on economically distressed regions, as defined by EDA. Current areas of emphasis include:

- Providing technical assistance (business planning, feasibility studies, market analysis) involving staff, students and faculty in a variety of ways
- Promoting entrepreneurial and economic development capacity-building through the delivery of training, workshops, and educational courses
- Serving as the bridge between the university and organizations engaged in economic development, such as the Alaska Regional Development Organizations, Native organizations, the Denali Commission and state of Alaska. Each of these partners brings opportunities, problems, solutions and funding to the partnership.
Student Involvement
Student Development
Student Life & Leadership
Union of Students (USUAA)
Student Union & Commuter
Student Programs
KRUA 88.1 FM
Media Board
The Northern Light
Student Lecture Series
& Conferences
Honor Societies
Seawolf Speech & Debate Team
Alaska Native Oratory Society
Arts
Athletics
WOLFcard
Food Service
Bookstore
General Support Services
Information & Technology Services
Campus Housing & Residence Life
Health & Wellness
Alcohol Policies
Lost & Found
Outdoor Life
Pets on Campus
Safety
Smoke-Free Environment
Wildlife on Campus
Student Involvement

The Anchorage campus at the University of Alaska Anchorage is a growing urban and residential campus with a diverse student body that reflects the state’s population. Students come to UAA from Alaska’s towns, cities and rural communities, from all 50 states and U.S. territories, and over 31 countries. Our community embraces the cultures, ethnicities, politics, experiences and goals of a diverse group of people, united by respect for others and commitment to education.

The university and its academic departments sponsor colloquia and speakers and produce a range of publications that create a rich and stimulating intellectual environment for undergraduate and graduate students. Student- and university-sponsored lecture series include the Alaska Quarterly Review, The Last Frontier Theatre Conference, Kachemak Bay Writers’ Conference, the Complex Systems Lecture Series, and the Bartlett Lecture Series.

Student Development

(907) 786-1214
www.uaa.alaska.edu/studentdevelopment

The dean of students, the staff and faculty in the Division of Student Development, and the student leaders welcome all students to investigate the array of resources and activities available to them. This chapter provides an overview of university- and student-sponsored programs and services. The UAA Fact Finder/Student Handbook provides more detailed information important to student life and the campus community.

Student Life and Leadership

(907) 786-1215
www.uaa.alaska.edu/studentlifeandleadership

Student Life and Leadership provides students with social, cultural, academic, leadership and recreational opportunities. Programs include Student Activities, Student Leadership, Concert Board, Bartlett Lecture Series, Student Showcase, The Northern Light student newspaper, KRUA 88.1 FM student radio station, USUAA, clubs and Greek Life.

Student Activities

(907) 786-1219
www.uaa.alaska.edu/studentlifeandleadership/activities

A variety of events and programs are offered by Student Activities, from the Banff Festival of Mountain Films to Student Union Gallery exhibits, renowned speakers to Noon Music, and Family Movie Nights to nationally touring musicians and comedians. These programs are funded by ticket sales and the Student Life Fee.

Student Leadership

(907) 786-1371
www.uaa.alaska.edu/studentleadership

Student leadership opportunities promote learning and development in students by encouraging social responsibility through governance and community service, appreciation of diverse cultures and viewpoints, and by working individually or collaboratively for common goals. These opportunities reinforce and complement academic learning. Student Life and Leadership advises student organizations and coordinates leadership training for student leaders involved with student government, clubs, Greek organizations, and other leadership positions. Student Life and Leadership coordinates graduation-related programs, such as co-curricular transcripts, Student Commencement Speaker Committee, and Student Leadership Honors.

Union of Students (USUAA)

(907) 786-1205
www.uaa.alaska.edu/unionofstudents

USUAA is UAA’s student government, charged with representing approximately 15,000 students per semester on the Anchorage campus. The USUAA Assembly is in charge of allocating student government fees, coordinating activities, representing students’ views to the chancellor, lobbying the University of Alaska Board of Regents and state legislators, and pursuing the academic concerns of students. Each student who pays the student government fee is a member of USUAA and is entitled to the services it provides. USUAA comprises a legislative assembly and five organizations: Board of Global Information and Activities, Club Council, Concert Board, Election Board and Media Board.

Club Council

(907) 786-1385
www.uaa.alaska.edu/clubs

Club Council supports over 80 registered student clubs and organizations, and is made up of one delegate from each. Student clubs and organizations provide all students with opportunities to get involved in activities and programs that promote and support various interests, sports, religions, cultures, academic programs, careers and lifestyles.

Concert Board

(907) 786-1210
http://concert.uaa.alaska.edu

The Concert Board presents major entertainment events, including the A Cappella Festivella and nationally known comedians and musicians. All shows are produced by UAA students, and the board is funded by a fee paid by students on the Anchorage campus taking 3 or more credits.

Student Union and Commuter Student Programs

(907) 786-1204
www.uaa.alaska.edu/studentlifeandleadership

The Student Union building is the hub of co-curricular activities and programs. Housed in the Student Union are the offices of USUAA, Club Council and Greek Council, New Student Orientation, and the office of the Dean of Students. Services in the Student Union include group and quiet study lounges, open computer lab, game room, arts gallery, Subway restaurant, Corner Cafe and ATM machine. The Information Desk provides general information, UAA Tix.com entertainment tickets, outdoor rental equipment, lost and found, and snack items for sale.

KRUA 88.1 FM

(907) 786-6800
http://krua.uaa.alaska.edu

Managed by student employees with the help of approximately 30 volunteers, KRUA broadcasts daily from 7 a.m. to 1 a.m. with an alternative format including reggae, rap, jazz, ska, blues and local music, along with news, sports and public affairs shows. Training is provided to volunteers and no broadcast experience is required.

Media Board

(907) 786-1215
www.uaa.alaska.edu/studentlifeandleadership/studentmedia

The Media Board’s purpose is to assist student media in the effective and professional conduct of their operations and to advocate for their interests and well-being. The Media Board hires student media managers and approves media policies and budgets.
The Northern Light
(907) 786-1513
www.thenorthernlight.org
The student newspaper employs up to 25 students each semester. Students gain experience in writing, editing, layout and graphics, photography, advertising, and management. The staff publishes 26 weekly issues during the fall and spring semesters, three issues in the summer, and an up-to-date online edition.

Student Lecture Series and Conferences

Student Showcase
(907) 786-1215
www.uaa.alaska.edu/studentlifeandleadership/showcase
This annual academic conference recognizes student excellence in all disciplines. Showcase is a forum for students to present coursework they've completed in a professional conference setting. The students' work is evaluated by faculty and community members, awards are given, and selected works are published in the annual Student Showcase Journal.

Bartlett Lecture Series
(907) 786-1215
The Bartlett Lecture Series was established in 1970 in the memory of Bob Bartlett, one of the first two Alaska senators sent to Washington, D.C., following statehood. The Bartlett Lecture Series promotes a clearer vision of individual freedom and of the public good. Individuals of national and world renown present lectures on topics of national and international importance, helping to put problems of Alaska and its people into the context of broad philosophic and cultural, as well as social and economic, issues. The Bartlett Lecture Committee is comprised of students, faculty and staff who work with their counterparts at the UAF and UAS campuses to bring speakers of national caliber and relevance to each campus.

Pacific Rim Literary Conference
(907) 786-4355
http://english.uaa.alaska.edu/programs.htm
This conference is organized by the Department of English and members of Sigma Tau Delta, the English honor society. What began as a small, student-run project has grown to be a major event sponsored by grants and many UAA departments, including Canadian Studies, Women's Studies and the UAA Bookstore. Students plan the event, including writing grant proposals, inviting speakers and selecting papers.

Honor Societies

Many of UAA's academic departments sponsor nationally affiliated honor societies, which serve both to recognize student achievement and to serve the community. Contact Club Council or specific academic departments for more information. Contact the Office of the Dean of Students for information about the national Honor Society of Phi Kappa Phi, which is a university-wide honor society.

Seawolf Speech and Debate Team
(907) 786-4390
http://forensic.uaa.alaska.edu
The Seawolf Speech and Debate Team, founded in 1982, is the only intercollegiate forensics program in Alaska. Housed in the Department of Communication, this faculty-run, co-curricular program helps students achieve educational goals while developing communication skills through competitive experiences in individual speaking events and debate. The program has earned an average of 100 awards each year while representing UAA, the UA system and the state of Alaska in intercollegiate competition against students from across the U.S. and around the world.

Alaska Native Oratory Society
(907) 786-6148
www.uaa.alaska.edu/native/aknos
The society's mission is to provide a public forum in which Alaska Native issues can be openly discussed, articulated by speakers who are personally involved with the issues and wish to speak out to others in a manner that is informed and compelling. The society sponsors a competition in dramatic declamation, oratory, storytelling and Native language, which offers cash prizes.

Arts

Fine and Performing Arts Facilities
The fine and performing arts programs are housed in a 94,000-square-foot building, which includes studio, laboratory, performance, office, and rehearsal spaces. Included in the Fine Arts Building are studios for drawing, painting, sculpture, 3-D and 2-D design, ceramics, printmaking and photography.

Theatre facilities include a 175-230-seat thrust/arena mainstage; the Jerry Harper Studio Theatre, a 99-seat studio theatre; and complete shop facilities for scenery, costume design and construction.

Music facilities in the Fine Arts Building include a 200-seat recital hall, a 75-seat rehearsal room, faculty studios, a music library and listening room, a piano lab, an electronic music studio and practice rooms. All rooms are sound-isolated, acoustically treated and feature electronic performance and teaching equipment.

Wendy Williamson Memorial Auditorium and Lecture Hall
(907) 786-6815
Built in 1972, the Williamson Auditorium provides UAA and the Anchorage community with a venue for lectures, performances, arts events and community gatherings. The auditorium seats 912 patrons and features plays, music festivals and speakers from around the world.

Campus Art Galleries

Kimura Gallery
(907) 786-1783
www.uaa.alaska.edu/sll/activities
The Kimura Gallery, located in the Fine Arts Building, was named to honor Sam Kimura, a professor of photography, in 1996. He was instrumental in developing the Art program at UAA and achieved international notoriety for his photographs. The gallery not only serves as a pedagogical space for art students, but it also provides a venue for the university and Anchorage communities to experience a wide range of challenging art. As an educational space, it exposes students to innovative artwork that is not local in nature, but international and national in scope whenever possible. The gallery is funded and managed by the Department of Art.

Student Union Gallery
(907) 786-1219
www.uaa.alaska.edu/sll/activities
The Student Union Gallery's primary mission is to provide art exhibit space for UAA students. The gallery sponsors a variety of art exhibits that have included Bachelor of Fine Arts theses shows, UAA student invitational and juried exhibits, student group exhibits and theme shows including students and community members. The gallery is managed by Student Activities and funded by student fees.

Athletics

(907) 786-1230
www.goseawolves.com
athletics@uaa.alaska.edu
UAA's highly visible athletic teams compete in 11 NCAA sports: men's ice hockey, men's and women's basketball, men's and women's skiing, men's and women's cross country, women's gymnastics, women's indoor and outdoor track and field, and women's volleyball. The Seawolves compete at the Division II level (with the exception of Division I hockey and gymnastics) and are members of the Western Collegiate Hockey Association, the Great Northwest Athletic Conference (basketball, volleyball, cross country, and track), the Mountain Pacific Sports
Federation (gymnastics) and the Rocky Mountain Intercollegiate Ski Association.

Over the years, the Seawolves have produced multiple national champions in skiing and gymnastics as well as several NCAA Tournament bids in other sports.

- In 2009 the Seawolves women’s basketball team made history when they posted the best record (31-4) in school history and advanced to the NCAA Division II Semifinals for the second year in a row.
- Three runners raced to All-American finishes at the NCAA Division II Cross Country Championships as the Seawolf women’s and men’s squads placed ninth and 11th, respectively. Both placings marked the best national finishes in the history of the UAA cross-country programs.
- The Seawolves were golden in their silver anniversary season, capping a midseason turnaround with the gymnastic program’s first-ever league title when they captured the 2009 Mountain Pacific Sports Federation Championships in Colorado Springs, Colo.
- The 2009 track and field season ended with a record-breaking five All-American honors at the NCAA Championships, 16 new school records, and three new GNAC records.
- After being predicted to finish 7th in Ski Racing Magazine’s annual preseason NCAA coaches’ poll, UAA completed the skiing year with a record-breaking fourth-place performance at Nationals, producing seven All-Americans.

UAA sports receive national television exposure thanks to the annual Carrs/Safeway Great Alaska Shootout basketball tournament, held at the Sullivan Arena. The Nye Frontier Classic is one of the top preseason college hockey tournaments in the country, and the Seawolf volleyball team hosts one of the top Division II programs every September in the UAA Invitational.

The Seawolves train and compete in some of Alaska’s top facilities, including the Sullivan Arena for hockey and the Shootout, and the Wells Fargo Sports Complex for volleyball, gymnastics and regular-season basketball. UAA’s alpine skiers take advantage of nearby Mount Alyeska, a world-class slope, while the nordic skiers and cross-country runners use Anchorage’s intricate trail system to train in a recreational paradise.

Intramural Sports and the Wells Fargo Sports Complex
(907) 786-1233
www.goseawolves.com

UAA’s Intramural Sports Program in the Wells Fargo Sports Complex allows students to enhance their educational experiences through sports activities and special events. The Intramural Department serves as a means of improving the quality of life, which allows all participants, regardless of degree of skill, an opportunity to develop new friendships, group loyalty, sportsmanship and the respect for all opponents and officials. The Wells Fargo Sports Complex also serves as a sports recreation center for students with a pool, gymnasium, fitness center, dance studio and ice rink.

WOLFCARD
(907) 786-4695
www.uaa.alaska.edu/wolfcard

The UAA WOLFCARD serves students as their official ID, as a U-Pass to provide free transportation on municipal buses, and as a debit card for on-campus food and services. Visit the WOLFCARD website for complete information.

The WOLFCARD may also be used at a select number of off-campus restaurants. See www.mywolfbucks.com for more information.

Food Service
(907) 751-7246

A variety of food services and menu options are provided throughout campus. Food service provider NANA Management Sodexho has several campus dining areas:

- Bear Necessities, a convenience store in the housing Commons building
- Coffee stand offers breakfast and lunch near the ConocoPhillips Integrated Sciences Building
- Creekside Eatery, a cafeteria in the housing Commons building
- Cuddy Marketplace, a food court in Lucy Cuddy Hall
- Daily Grind, a coffee cart in the dining room of Lucy Cuddy Hall
- Mein Bowl in the Student Union
- Starbucks in the UAA/APU Consortium Library, a comfortable café
- Subway in the Student Union
- UAA Perk, a coffee stand in the University Center
- Union Station, a coffee stand in the Student Union

The Lucy Cuddy Dining Room, located in Cuddy Hall, is a nice dining restaurant that is open seasonally to the public. The Culinary Arts & Hospitality students produce and serve affordable gourmet meals. For reservations, call (907) 786-1122.

Bookstore
(907) 786-1151
www.uaa.alaska.edu/bookstore

Student Union and University Center Locations

The mission of the UAA Bookstore is to contribute to the academic excellence of the university by providing for the sale of books and other educational materials to students and members of the university community. The Bookstore stocks required and recommended textbooks, course materials, study aids, technical manuals, reference books, fiction, nonfiction, faculty authors, children's and Alaskan books. In addition, the Bookstore hosts many special events throughout the year to provide additional learning opportunities to the university community and the general public. These opportunities allow students to interact with faculty and world-renowned authors in informal settings.

Tech Zone

The Academic Source for Technology
(907) 786-4760
www.uaa.alaska.edu/bookstore

The UAA Tech Zone is the Apple™ authorized campus store and carries a great selection of Apple™ computers, iPods™, and the new iPad™. Academic discounts are available on computer software for both PCs and Macs. The store also carries PDAs, calculators, clickers for classroom use and computer accessories.

General Support Services
(907) 786-6860
www.uaa.alaska.edu/gss

UAA General Support Services, located beneath the Bookstore on the main campus, offers a large assortment of services to students.

Copy, Printing and Graphics
(907) 786-6860

Students have access to document and graphics services for their personal or class projects at great savings.

Mail Services
(907) 786-6860

Complete outbound mail services are available to students. All outbound carriers are available, i.e., USPS, FEDEX, and UPS.

Parking Services
(907) 786-1119
www.uaa.alaska.edu/parking

UAA Parking Services offers many options for commuters who drive to campus, providing over 4,500 parking spaces and covered parking in two multi-deck garages. Parking permits are required for all vehicles on the UAA campus. Over 4,500 parking spaces are available in the UAA parking lots. Parking permits are available for purchase through the Parking Services Office or online at the UAA website.
campus during the hours of enforcement, 7:30 a.m. to 7:30 p.m. Monday through Thursday. Daily and hourly permits can be obtained from any of eight drive-through Pay ‘n’ Park machines on campus, at the Bookstore, or at the Parking Services office. Visit www.thepermitemptystore.com to order annual or semester permits and update vehicle information. Current rules and regulations can be obtained at the Parking Services website at www.uaa.alaska.edu/parking/upass.cfm. Students, staff and faculty may also ride the People Mover bus free of charge using the U-Pass program. For more information, visit www.uaa.alaska.edu/parking/upass.cfm. Parking for Individuals Experiencing Disabilities Individuals experiencing disabilities will find designated parking spaces available in each lot on the UAA campus. These parking spaces display distinctive blue-and-white logos. The appropriate handicap permit issued by the state of Alaska Department of Motor Vehicles must be displayed, along with a valid UAA parking permit or Pay ‘n’ Park receipt, to legally park in these designated spaces. All other motorists will be ticketed. Illegally parked vehicles may be impounded at owner expense.

Information and Technology Services (907) 786-4646 http://technology.uaa.alaska.edu
The IT Services Department provides local campus network, computing, telephone, audiovisual and online curriculum services to the UAA community. IT Services is committed to providing students, staff and faculty with a variety of important and useful technology-related services. A brief summary of services is provided below.

Campus Open-Access Computer Labs http://technology.uaa.alaska.edu/computer/Labs
IT maintains computer stations across campus that provide Internet and e-mail access, laser printing, and a variety of popular software applications on both PC and Macintosh platforms. All university employees and registered UAA students are encouraged to use these facilities. Lab consultants are available to assist with basic equipment/software operation and campus resources.

Customer Support http://technology.uaa.alaska.edu/computer/OnSite callcenter@uaa.alaska.edu
The IT Call Center serves as the point of contact for all technology-related services. Technicians can assist students in the following areas: telephone services, desktop services, data network and computing services, Internet access, e-mail services, appropriate computing use policies, software licensing, basic software/hardware troubleshooting and online curriculum.

Distance Education www.uaa.alaska.edu/distanceeducation
The Distance Education site is the primary web source for information about distance learning and associated technologies. Many UAA instructors use this resource and place course materials online. From this web location, students, prospective students, faculty and the community can learn about UAA’s distance education courses, Blackboard®, support services and faculty training workshops. (See Chapter 8, Educational Delivery Methods and Nontraditional Credit, for further information.)

E-mail Services http://technology.uaa.alaska.edu
E-mail accounts are available to all students, staff and faculty. Visit the website for more information.

UAA uses e-mail to communicate with students on many important matters. (See Chapter 5, Student Freedoms, Rights and Responsibilities, for more details.)

Telephone Services http://technology.uaa.alaska.edu/telephone
IT operates UAA’s telephone utility. Students living in university residence halls receive local telephone service and voicemail services through this system. Students can purchase prepaid long-distance calling cards from several locations on campus.

Training Services
IT offers a variety of general interest computer and network-related short courses open to both students and employees. Courses are held in the University Center (UC) computer lab.

Web Hosting Service http://technology.uaa.alaska.edu/computer/WebHosting
Students have access to a web-hosting environment at UAA for creation and support of personal webpages and content. Student content placed into these webpages must conform to UAA’s appropriate use guidelines and information resources policy. Students should contact the IT Call Center or visit the website for further information on this service.

Campus Housing and Residence Life (907) 751-7200 (Housing) www.uaa.alaska.edu/housing (907) 751-7444 (Residence Life) www.uaa.alaska.edu/residencelife
University Housing and Dining Services and the Department of Residence Life provide students with a living and learning environment that supports the academic experience. (See Chapter 6, Advising and Academic Support, for further information.) Programs and activities provide the framework for active participation in each community. Residence Life offers educational workshops on college survival skills, roommate relationships, alcohol and drug awareness, awareness of global diversity, career planning, and personal safety.

Four types of furnished suites are available: single private bedroom; two-person suite with single bedrooms; four-person suite with single bedrooms; and four-person suite with double bedrooms. Both traditional and condominium-style apartments are also available in the Main Apartment and Templewood complexes.

Academic Theme Housing
Alyeska Community in West Hall provides a supportive environment for science and engineering majors, particularly Alaska Native and rural students. This program helps students develop close ties with others of similar backgrounds and interests as they adjust to campus life together.
- First-Year Experience Hall is a comprehensive program in North Hall designed exclusively for first-year college students under the age of 20 who have completed 20 or fewer college credits. Individuals participating in this program will also enroll in GUID A150, a 3-credit academic course focusing on college survival skills, taught in North Hall. The hall creates a supportive living and learning environment through social events, leadership opportunities, study groups, tutoring, community service opportunities, academic and living skills workshops, discussion groups, and peer support and mentoring.
- First-Year Focus Community in West Hall is for first-year college students under the age of 20 who have completed 20 or fewer college credits. Residents will experience a close-knit community enhanced through programming, peer support and mentoring.
Honors Community is located on the fourth floor of East Hall and promotes interaction between the academic and residential communities on campus. These students also take part in the Honors Program.

Nightingale Community is a specialized living arrangement that eases the transition for nursing and pre-nursing students to campus living in Anchorage. The students living in the residence halls will get the benefits of on-site nursing-content learning aids; dedicated living room space for study; social, cultural and academic interactions; and mentors and tutors in pre-nursing and nursing courses.

Aviation Community is designed for aviation majors or students planning to pursue a career in aviation. The Aviation Department, in conjunction with Residence Life, works to provide peer academic mentoring, social and educational programming, and networking with individuals in the aviation profession.

Teaching and Learning Community is for education majors or students exploring careers in teaching. Bringing students together through social and academic events, this community provides students opportunities to develop relationships with peers and engage with faculty and other professionals in the field of education.

Health and Wellness

Student Health and Counseling Center
(907) 786-4040
www.uaa.alaska.edu/studenthealth

The Student Health and Counseling Center (SHCC) provides educational, preventive, diagnostic and treatment services to eligible students. It is staffed by advanced nurse practitioners who specialize in family, adult and mental health. The primary health care benefits available onsite by paying the student health fee include free routing office visits, reduced cost for procedure visits and reduced cost for laboratory and radiology services. Limited pharmacy items are also available at reduced cost. Services include family planning, immunization, travel health screening, community referrals and program-required physicals.

Advanced psychiatric nurse practitioners and master’s-level counselors provide mental health counseling using a brief therapy model. Additionally, the advanced nurse practitioners are able to offer medication management to students in need. The nurse practitioners and counselors act as client advocates when assisting individuals in dealing with stressful life events, depression, anxiety, sexual and physical abuse, alcohol and drug dependency, situational crises, and other life issues. There is no charge for mental health intake assessments.

Counseling Services
(907) 786-6158

Student Development counselors provide assistance with concerns affecting academic success, such as stress, situational crises, alcohol and other drug issues, and life changes. Other services include sexual assault counseling support; referrals to community agencies, including sexual orientation resource referrals; and educational workshops on responding to personal life issues. These counseling services are provided at no charge to UAA students.

Psychological Services Center
(907) 786-1795

The center offers low-cost therapy and counseling to families, couples and individuals of all ages for a variety of problems. Clinical psychology students in the last phase of study for the master’s degree see patients under the supervision of licensed psychologists from the Psychology Department faculty. Services are available to the campus community. A fee schedule is based on each individual’s ability to pay.

Insurance

Student Health Insurance
(907) 786-4049
www.uaa.alaska.edu/studenthealth/insurance.cfm

Health insurance is mandatory for international students on student visas. Contact the Office of Admissions for specific requirements. A group student health insurance plan is available for purchase to enrolled UAA students who are eligible for SHCC services. For an additional premium, dependents and major medical expenses may be covered. Students can obtain more information through the Student Health and Counseling Center.

Accident and Travel Insurance
(907) 474-5278
www.alaska.edu/swrisk

Supplemental accident insurance for field trips, fieldwork, laboratory, practica, internships and special UAA events is available for purchase. Depending on departmental policy, either the student or the department assumes the cost of this insurance. This insurance is in excess of other insurance covering the student and is made available to students through the Statewide Risk Management Office. It is the student’s responsibility to contact departments for further information.

Alcohol Policies

The university is concerned about ways in which alcohol use and abuse affect the primary academic mission of the institution, its overall atmosphere and the personal well-being of the university community. The university has the duty to exercise the degree of care that a reasonable person would to ensure that private and public events are conducted in accordance with state law. Whether a person drinks alcoholic beverages is a personal decision, but individuals are held personally accountable for their actions.

Campus Alcohol Policy

The primary objectives of UAA’s policies and procedures on alcoholic beverages are to ensure responsible behavior and attitudes among all members of the university community, to educate the university community concerning the use and effects of alcoholic beverages in order to promote responsible decision-making and to help individuals experiencing difficulties associated with the use of alcohol. The chancellor or the vice chancellor for Student Affairs has the authority to approve events where alcoholic beverages may be served to individuals of legal age with positive identification. Approval to serve alcoholic beverages may be granted on designated premises for private university-sanctioned events.

The sale of alcoholic beverages at university-sanctioned events on campus is not permissible and is not approved by the chancellor. Personal consumption, possession or display of beer, wine or other alcoholic beverages is prohibited in university public places. The possession of kegs and other large quantities of alcoholic beverages will only be allowed by special permission of the chancellor. Any person who exhibits offensive behavior, misconduct, excessive noise or creates a public disturbance on property owned or supervised by the university will be subject to disciplinary and/or legal action. (See Chapter 5, Student Rights, Freedoms, and Responsibilities, for further information.)

Residence Life Alcohol Policy

The alcohol policy for the UAA residence halls and apartments permits those residents who are 21 years of age or older to possess and consume limited quantities of alcoholic beverages in accordance with Residence Life policies. All other restrictions on personal alcohol consumption outlined above and in the Student Code of Conduct apply to resident students and their guests. The Residence Life policy is subject to annual review by the university administration and the Residence Hall Association.
**UAA Residential Community Wellness Initiative**
The Department of Residence Life and University Housing/Dining/Conference Services (UHDCS) provide healthy and academically supportive living environments for students. The following communities are designated as Substance Free Housing:
- Alyeska Community
- First-Year Experience Hall
- First-Year Focus Community

Substance Free Housing prohibits residents and their guests from possessing or consuming alcohol, smoking tobacco products, using or possessing drugs or other intoxicants, and possessing drug paraphernalia. All residents, including those 21 years of age and older, living in a designated Substance Free Housing community must adhere to the Substance Free Housing expectations. The Department of Residence Life has a strongly enforced expectation that all residents and their guests comply with all federal, state and university regulations related to the use or possession of alcohol and other drugs.

All residence halls and apartments are non-smoking. Smoking of tobacco products must be done 50 feet away from buildings.

**Drug and Alcohol Counseling Resources**
[www.uaa.alaska.edu/students/alcoholdrugs.cfm](www.uaa.alaska.edu/students/alcoholdrugs.cfm)
Additional university information and policies, health risks, counseling resources and state of Alaska laws and penalties pertaining to alcohol and other drugs can be found in the Drug Free Schools statement, which is available online or in hard copy from the Dean of Students Office. The National Institute on Drug Abuse Hotline (1-800-662-HELP) is an information and referral line that directs callers to treatment centers in the local community. Alcoholics Anonymous provides free services for individuals with alcohol problems at (907) 272-2312.

**Lost and Found**
(907) 786-1204 (Student Union)
(907) 786-1120 (University Police)
Two centralized lost-and-found property storage areas are maintained on campus. The University Police accepts wallets, keys and items that are valued at $250 or more.

To check for a lost item, contact the University Police Department in the Eugene Short Hall, at (907) 786-1120. The Student Union Information Desk accepts all other lost items. To recover found property, contact the Student Union Information Desk.

**Outdoor Life**
UAA is surrounded by mountains, lakes, trails and rivers. Anchorage offers extensive multi-use trails for walking, biking and skiing, which are groomed in the winter. Within a half-hour drive the wilderness of Alaska offers hiking, camping, kayaking, skiing and fishing. Students may rent outdoor equipment from the Student Union.

UAA housing residents have access to a wide variety of outdoor adventure programs operated through the Recreation & Activities Office. Recreation & Activities offers adventures including rock and ice climbing, whitewater rafting, canoeing, sea kayaking, hiking, nordic and alpine skiing, snowboarding and backpacking. During the academic breaks (holiday, Thanksgiving, and spring break) Recreation & Activities offers extended trips in amazing locations.

Recreation and Activities provides specialized equipment and instruction for all trips. Participants do not need experience to participate. All instructors hold certifications in numerous disciplines, including medical, climbing, skiing and rafting.

**Pets on Campus**
Anyone wishing to bring pets onto campus must first contact the University Police Department. Pets are not permitted in any of the campus buildings without prior permission. Any animals outside the buildings must be on a leash, in a cage or under some form of restraint. Students experiencing disabilities need to contact Disability Support Services for the approval process to bring service animals into classrooms and residence halls and apartments.

**Safety**
[www.uaa.alaska.edu/students/campussafety.cfm](www.uaa.alaska.edu/students/campussafety.cfm)

**Automobile Insurance**
Under Alaska law, all owners and drivers of vehicles must maintain adequate insurance coverage. Students are responsible for arranging their own auto insurance. Student vehicles are not covered under UAA’s auto insurance plan. Personal property insurance is also the responsibility of each student.

**Emergencies and First Aid**
(907) 786-1120
Emergency messages may be transmitted and first aid treatment received by contacting the University Police Department in the Eugene Short Hall. Please report unsafe conditions and all on-campus injuries to the University Police Department. Emergency assistance is available through the Anchorage Police Department by dialing 8-911 from an on-campus phone.

**Safety Escorts**
(907) 784-1147
[www.uaa.alaska.edu/parking/callteam](www.uaa.alaska.edu/parking/callteam)
The UAA Call Team provides safety escorts for students, faculty and staff to any UAA campus location when desired.

**Speed Limit**
Unless otherwise posted, the campus speed limit is 20 miles per hour. Radar and marked patrol cars are used to ensure safety and compliance. Uniform traffic citations are issued for moving violations and may be paid in district court in downtown Anchorage.

**University Police**
(907) 786-1120
[www.uaa.alaska.edu/upd](www.uaa.alaska.edu/upd)
The University Police Department is on duty 24 hours a day, seven days a week, to provide safe access to the campus, to prevent disruptive behavior and to offer a variety of services to the community. The department employs dispatchers and uniformed police officers to accomplish these goals.

Students, staff, faculty and visitors should contact the University Police Department to report all crimes, suspicious circumstances, and emergencies on campus, as well as to seek help with the following:
- Safety escorts
- Accident reports
- Room unlocks
- Suspicious people
- Criminal reports
- Disturbances

The University Police Department can be contacted by calling (907) 786-1120 from an off-campus phone or by dialing 6-1120 from an on-campus phone.

In the event of an emergency, the department can also be contacted by using one of the 13 exterior emergency call boxes or by picking up any elevator phone, either of which will automatically route the call to the University Police Department.

**Smoke-Free Environment**
Smoking is not permitted in university facilities. All UAA facilities (Anchorage, Kenai Peninsula College, Kodiak College and Mat-Su College) are covered by this policy. Coverage includes facilities owned,
 leased, or rented by the university or under control of the university, as well as all university vehicles. Violation of the smoke-free environment policy by staff, faculty or students is subject to disciplinary action. Campus buildings are posted with NO SMOKING signs, notifying all visitors of the smoke-free policy.

**Wildlife on Campus**

The main campus of UAA is situated next to a greenbelt and several small lakes. Sightings of moose, coyotes and black bears are not uncommon. People must remember that wild animals are dangerous and unpredictable. Maintain a safe distance from all wildlife and notify University Police of their presence. Feeding or harassment of any wildlife is a violation of the University Student Code of Conduct and state law. Officers will enforce these statutes and policies.
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 who 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 MAU 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 P05.10.050 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;
   c. during the past two years, the student has registered as a resident in an educational institution in another state; 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.

3. Notwithstanding provisions of this chapter, the residency of a student who first registered at the university, or was recruited based upon and was promised application of a former policy which was then in effect prior to the effective date of the adoption of this policy, shall be determined under the regents’ policy in effect at the time the student registered or received such promise from an authorized representative of the university, if that is to the student’s benefit.

Nonresident Tuition Surcharge

Board of Regents’ Policy P05.10.050

Any person who does not qualify as an Alaska resident under P05.10.025, 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. Students qualifying under this exemption must move to and remain domiciled in the state of Alaska during their course of study;
3. Members of the National Guard, 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’s, bachelor’s, master’s or doctor’s 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.

Western Undergraduate Exchange (WUE)

UAA participates in the WUE program of the Western Interstate Commission for Higher Education (WICHE) and other western states. 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 (plus other fees that are paid by all students). WUE students do not pay the higher nonresident student 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 Management. Alaska residents may obtain information about WUE programs in the states from either of the following addresses:

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

WICHE Student Exchange Program
3035 Center Green Drive, Suite 200
Boulder, CO 80301-2204
Phone: (303) 497-0210
http://wue.wiche.edu
Tuition Summary

Tuition Cost

Preparatory and Lower Division: Undergraduate  
(Course Numbers 050 - 299)  
Resident $147 per credit hour  
*Nonresident $500 per credit hour

Upper Division: Undergraduate  
(Course Numbers 300 - 499)  
Resident $170 per credit hour  
*Nonresident $523 per credit hour

Professional Development  
(Course Numbers 500 - 599)  
Tuition costs vary

Graduate  
(Course Numbers 600 - 699)  
Resident $338 per credit hour  
*Nonresident $691 per credit hour

* Nonresident students are assessed nonresident fees on all academic credits including self-support, except 500-599 level credits.

* Nonresident students who restrict their enrollment to no more than 4 credits each semester are charged resident tuition.

Fees

In addition to tuition, any course may use materials, supplies or services which necessitate an additional fee. Fees may also be charged for administrative and/or instructional services. All resident and nonresident 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.

Fees are charges students must pay either in addition to or in place of tuition.

Administrative Fee ........................................... Varies
Admission Fee (nonrefundable)  
- Undergraduate Certificate ........................................... $40
- Associate's Degree ........................................... $40
- Baccalaureate Degree ........................................... $50
- Graduate Certificate ........................................... $60
- Graduate Degree ........................................... $60
Audit Fee ........................................... Varies
Catalog ........................................... $10
Continuing Education Unit (CEU) ........................................... Varies
Continuous Registration Fee  
(Graduate students) ........................................... $338
Credit-by-Examination Fee ........................................... $40 per credit
Distance Fee ........................................... Varies
Graduation Application Fee ........................................... $25
Laboratory, Material, Special and Other Fees ........................................... Varies
Language Credit-by-Placement Fee ........................................... $20 per course
Late Payment Fees ........................................... $125 - 175
Noncredit Course Fee ........................................... Varies
Parking Fee ........................................... Varies
- (optional, nonrefundable, per semester or annual)
Placement Test Fee ........................................... Varies
Self-Support Fee ........................................... Varies
Student Life Fee (for 6+ credits) ........................................... $20 per credit hour  
(max $240 per semester)
Student Organization Fees (for 3+ credits) ........................................... Varies
- Concert Board Fee ........................................... $10 per semester  
(fall and spring semesters)
- Student Government Fee ........................................... $1 per credit  
(max $12 per semester)
- Student Media Fee ........................................... $11 per semester
Student Transportation Fee ........................................... $10 per semester  
(for 3+ credits)

Technology Fee ........................................... $5 per credit  
(max $60 per semester)
Transcript Fee (per copy) ........................................... Varies
Two Percent Network Charge ........................................... 2%

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 Chapter 12, Graduate Programs, for information).

Credit-by-Examination Fee

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

Distance Fee

A distance fee is charged for each distance education course. The fee amount varies.

Laboratory, Material, Special and Other Fees

A fee is sometimes charged in addition to tuition. The semester class listing identifies courses for which fees are charged and their purpose: lab fee, special fee or materials fee. Fee amounts vary.

Special fees are assessed to pay for travel, equipment or facilities out of the ordinary. The typical fees listed above normally cover university charges for course registration. Some courses, however, have extraordinary expenses associated with them, and in such cases the university may charge additional fees in amounts that approximate the added instructional or laboratory costs. If other costs are required for the course, they will be listed in the semester class listing.

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

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 semester class listing as special fees.

Parking Fee

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 or from the UAA Parking Office any time throughout the semester. The UAA Parking Office is located in the
UAA Campus Bookstore basement. Permit fees are nonrefundable. For further details, call the Parking Office at (907) 786-1119, or visit www.uaa.alaska.edu/parking.

**Placement Test Fee**
Testing fee 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 policy applies.

**Student Life Fee**
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 center.

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 for information about an athletics/sports complex fee, and contact Student Activities in the Student Union building regarding a student activity fee. Note: Summer student life fees are listed in the class listing.

**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 the student government, 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.

**Student Transportation Fee**
Students registered in 3 or more credits are assessed $10 to support campus shuttle service, U-Pass People Mover program (citywide bus pass), bicycle racks, trail/sidewalk maintenance, and Call Team walking escorts.

*Note: The Aviation Technology Center, King Career Center, University Center and Wenderly Middle School are considered Anchorage on-campus facilities for purposes of the student life fee, student organization fee and student transportation fee assessments.*

**Technology Fee**
A fee to provide up-to-date 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.

**Two Percent Network Charge**
The network charge covers rapidly rising costs, especially in the maintenance and enhancement of the universitywide infrastructure.

The 2 percent 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.

**Financial Obligations**
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 state of Alaska Permanent Fund dividends for payment of past due accounts.

UAA uses the UAA-assigned e-mail address to communicate with students on many important matters, including financial matters. (Please refer to Chapter 5, Student Freedoms, Rights, and Responsibilities, for more details.)

**Payment Procedure**
All tuition, fees and other charges for the semester must be paid by the applicable deadline or at the time of registration. Payment may be made in cash, by check, VISA or MasterCard. Students requiring a payment plan may enroll with Tuition Management Services (800-722-4867). Refer to www.uaa.alaska.edu/budfin/ar/tuition.cfm for the available payment plan options.

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.

**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.

If there is a refund due to the student and the tuition was paid by credit card, the credit card account will be credited. If tuition was paid by cash or check, a refund check will be mailed to the student's address of record. Refunds will not be issued for amounts of less than $5. A charge of $18.50 is assessed for all checks reissued due to a stop-payment request by the student.

**Canceled Classes**
If UAA cancels a class, students may add another class of equal cost at no additional tuition charge. If a replacement class is not added, a 100 percent refund of tuition and course fees is automatically processed. Refund processing dates are listed in the current 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.
Regular Tuition, Credit Courses (full semester)

- One hundred percent of both the tuition and course fees are automatically refunded when official drop/withdrawal activity is completed prior to the second Friday of the semester.
- No refund is issued for a drop/withdrawal made on or after the second Friday of the semester.
- For less-than-semester-length courses, a student must drop before 5 p.m. on the second day of class to receive a refund.

Please refer to the current semester’s class listing for additional information.

Senior Citizen Tuition Waiver

Regular tuition shall be waived for Alaska residents who are otherwise age eligible to receive full Social Security retirement benefits, and who register on a space-available basis; that is, when courses can accommodate such students in addition to other enrolled students. Individuals who were eligible for senior citizen tuition waivers on Sept. 21, 2005, under the previous policy shall continue to be eligible for the waiver. Use of senior citizen waivers is governed accordingly:

- Senior citizens must pay all additional course fees. To waive tuition, senior citizens must register and present a completed tuition waiver with proof of age during the late registration period.
- Registration using a senior citizen tuition waiver for payment is permitted only during the add/drop period and must be completed by the add deadline.
- Senior citizens may elect to register before the add/drop period; however, they must pay full tuition and fees (use of senior citizen tuition waiver will not be accepted). Senior citizens electing to register and pay tuition are subject to all payment deadlines. Refunds will NOT be available to senior citizens who drop courses and then re-register in the same courses using a tuition waiver during the add/drop period.
- The student government fee and student media fee are waived for senior citizens. The student life fees and student transportation fee are mandatory for all students taking 3 or more credits on the Anchorage campus.

Office of Student Financial Assistance

(907) 786-1480
www.uaa.alaska.edu/financialaid

The Office of Student Financial Assistance assists students and prospective students in applying for state and federal aid programs. State and federal governments, the university, and many private organizations offer grants, scholarships, loans and employment opportunities to students who demonstrate need for such assistance. Each student’s financial situation is carefully assessed, taking into consideration family size, assets, income and estimated costs of attending college. Types and amount of financial aid vary according to state and federal guidelines, student needs and availability of funds.

Financial Aid Application Procedures

Interested students should contact the Office of Student Financial Assistance for information and applications. Students should submit applications at least six months before the beginning of the semester for which they are applying. For the upcoming fall semester, the Office of Student Financial Assistance should have received completed applications and required additional forms by June 1 at the latest. Applications received after this date will be considered if funds are available. Specific procedures are as follows:

1. New students must first apply for formal admission to UAA through the Office of Admissions by the appropriate deadline.
2. All interested students must complete a Free Application for Federal Student Aid (FAFSA) and submit the application to the Department of Education. List UAA's Title IV code on FAFSA (011462). We recommend you apply online at www.fafsa.gov. It is faster and more accurate.

3. Students who wish to apply for a scholarship may complete an online application available in UAOnline at www.uaonline.alaska.edu.
4. Students who wish to apply for Bureau of Indian Affairs grants or scholarships should contact the BIA or their Native regional corporation for applications.

Financial Aid Eligibility

To be considered for financial aid, a student must:

1. Have a high school diploma or its equivalent.
2. Be accepted for admission with no conditions.
3. Demonstrate financial need for federal assistance as determined by the federal Student Aid Report (SAR).
4. Meet satisfactory academic progress as defined by Student Financial Aid regulations. The policy is available online at www.uaa.alaska.edu/financialaid.

Federal Verification

The U.S. Department of Education selects approximately 30 percent of financial aid applications for the verification process. The Office of Student Financial Assistance verifies information on selected applications prior to students receiving financial aid awards. Copies of the following documents may be requested:

- Income tax returns
- Verification of household size
- Child support payments
- Statements of untaxed income
- Verification of number of family members in college
- If military, a copy of the December 31 Leave and Earning Statement for the appropriate year.

Students selected for verification must submit the requested documents if applying for federal financial aid. If documentation is not received, federal financial aid cannot be awarded.

Satisfactory Academic Progress

To remain in good standing for federal assistance, students must earn a minimum of 75 percent of all credits attempted in the University of Alaska system as well as maintain a GPA above the standards required for good academic standing.

Satisfactory Academic Progress Policy

www.uaa.alaska.edu/financialaid/policies.cfm

In order to receive financial aid from any of the federal aid programs, the state of Alaska loan programs or from institutional funds, a student must be fully admitted to an eligible degree or certificate program. In addition, the student must maintain satisfactory academic progress toward his/her educational goal. A complete copy of the Satisfactory Academic Progress Policy may be obtained online or from the One-Stop counter at the University Center.

Financial Aid Appeal Policy

www.uaa.alaska.edu/financialaid/policies.cfm

Students 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. Please see the guidelines for financial aid appeal policy on the web.

Return of Federal Financial Aid Policy

www.uaa.alaska.edu/financialaid/policies.cfm

The Higher Education Amendments of 1998 changed the formula for calculating the amount of aid a student and school can retain when the student totally withdraws from all classes. Students who withdraw from all classes prior to completing more than 60 percent of an enrollment term will have their eligibility for aid 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 Title IV aid received. The school and/or the student must return the remaining 70 percent. The Office of Student Financial Assistance encourages you to read this policy carefully. If you are thinking about withdrawing from all classes prior to completing 60 percent of the semester, you should contact the Office of Student Financial Assistance to see how your withdrawal will affect your financial aid.

**Types of Financial Aid**

**Grants**

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

**Bureau of Indian Affairs (BIA)**

The Bureau of Indian Affairs 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 Native regional corporation.

**Federal Pell Grant**

The Federal Pell Grant makes funds available to eligible students with financial need. To be eligible for a Pell Grant, students must be working toward their first baccalaureate degree.

**Federal Supplemental Educational Opportunity Grant (FSEOG)**

The Federal Supplemental Educational Opportunity Grant program is similar to the Pell Grant program and can provide additional assistance to students with financial need and who received a Pell. Only undergraduates working towards their first baccalaureate degrees are eligible.

**University of Alaska Grant (UAG)**

The UAG provides assistance to needy Alaska residents in the first 60 credits of their academic program. It is not available to students who have already earned an associate’s degree or higher.

**Loans**

**Emergency Loan Fund (ELF)**

Thirty-day loans are available when school is in session to assist students with books. 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 Financial Aid Disbursement approval.

**Federal Direct Stafford Loan Program**

The Stafford Loan Program enables students to borrow directly from the federal Department of Education after they have qualified by completing the Free Application for Federal Student Aid (FAFSA). Any undergraduate or graduate student enrolled at least half-time may apply for a Stafford Student Loan. This requires a Master Promissory Note (MPN) that can be completed online. Links to the MPN are available on the Financial Aid website.

1. Federal Subsidized Stafford Student Loan: Dependent and independent students who have qualified using the FAFSA and determined to have need according to the federal methodology can borrow up to:
   - $3,500 as a first-year undergraduate student,
   - $4,500 as a second-year undergraduate student and for students in a baccalaureate degree,
   - $5,500 as a third-, fourth- and fifth-year undergraduate student, and
   - $8,500 as a graduate student.

   The subsidized Stafford loan means the federal government pays the interest while the student is attending post-secondary education at least half-time and for six months after graduation or after the student has left the post-secondary educational experience.

2. Federal Unsubsidized Stafford Student Loan: This loan is considered a non-need based loan. Students are responsible for paying the interest on this loan immediately from the time the unsubsidized loan is disbursed. Students who lack sufficient financial need to qualify for all or part of the subsidized loan can borrow the difference in unsubsidized Stafford loans. Dependent undergraduate students may borrow up to an additional $2,000 beyond the limits of the subsidized amounts. Independent freshmen and sophomore undergraduate students can borrow up to $6,000 annually additionally. Independent juniors and seniors can borrow up to an additional $7,000. Graduate students can borrow up to an additional $12,000 annually.

3. Aggregate Maximums: Dependent students can borrow up to $31,000 cumulative of which no more than $23,000 can be subsidized. Independent undergraduates can borrow up to $57,500 of which no more than $23,000 can be subsidized. The graduate maximums include any amounts borrowed as an undergraduate.

**Federal Direct PLUS Loan**

Parents can borrow for their dependent student’s educational costs. Parents can borrow up to the cost of education attendance minus any other financial aid for which the student is eligible. UAA requires student applicants to submit the FAFSA to determine eligibility of their parents’ PLUS loan. The interest on the PLUS loan begins to incur with the parental signature on the promissory note. Payments usually begin 60 days after the loan is fully disbursed.

Graduate students may also borrow on their own behalf under the PLUS program. The limit is cost of education minus any other estimated financial assistance.

**Scholarships**

www.uaa.alaska.edu/scholarships

Scholarships are usually awarded for academic achievement or talent. Students interested in applying for scholarships may stop by the Office of Student Financial Assistance or visit the website to view scholarship listings and obtain applications.

**Federal Work-Study Program**

www.uaa.alaska.edu/financialaid/federal-work-study.cfm

The Office of Student Financial Assistance awards work-study to eligible students. Work-study is based on financial need, which is calculated from the information provided on the Free Application for Federal Financial Aid (FAFSA). The student accepts work-study by securing a job on campus. All positions are posted on the www.UAK/‌jobs.com website. The student will choose the job that interests him/her and contacts the department that has posted the vacancy to apply for the position.

**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 more information, refer to the UAA Student Employment Guidelines and Procedures online at www.uaa.alaska.edu/‌students/guidelines.cfm
Career Services Center (CSC)
(907) 786-4513
Hot line (907) 786-4545
www.uaa.alaska.edu/careerservices

Students seeking employment off campus can find opportunities through the Career Services Center (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.

Human Resource Services (HRS)
(907) 786-4608
www.uakjobs.com

HRS advertises full-time, part-time, regular, term and temporary positions at UAA. A listing of temporary student positions is also available at this office.

Applicants needing reasonable accommodations to participate in the application or interview process should contact the recruitment manager in HRS.

Graduate Assistantships

Minimum qualifications for graduate assistantships are a baccalaureate degree from a college or university of recognized standing with a grade point average 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 waivers may also be available based on full-time (9 credits) attendance. Graduate assistantships are awarded in spring for the upcoming academic year. For additional information and applications, contact the appropriate dean’s office.

Veterans Assistance
(907) 786-1480
www.uaa.alaska.edu/financialaid/vets.cfm

The University of Alaska Anchorage is approved to provide training to veterans, service members and eligible dependents of veterans whose death or permanent and total disability is service connected. Department of Veterans Affairs (DVA) benefits approved for UAA include the Post 9-11 G.I. Bill, Montgomery G.I. Bill, Veterans Educational Assistance Program, Dependents Educational Assistance Program and Vocational Rehabilitation. Qualified persons who plan to use the Department of Veterans Affairs educational benefits must contact the UAA Veterans Affairs Office in the Office of Student Financial Assistance, preferably 60 to 90 days before the term begins. They can provide necessary forms and current benefit information.

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 VA, along with information regarding students’ enrollment, grades, and academic progress.

Adds, Drops and Other Changes

Veteran students must inform the Veterans Affairs Office whenever they add or drop courses, withdraw from the university, change address or dependents, or make other status changes. Students who drop courses or withdraw may be required to reimburse the DVA.

Admission to UAA

All veteran students receiving DVA benefits must be officially admitted to a degree program. Contact the Office of Admissions for information on requirements.

Satisfactory Academic Progress

Veteran students must maintain satisfactory academic progress according to university policy while they are receiving benefits. Failure to do so is reported to the DVA and may end educational benefits.

Transcripts From Previous Colleges or Universities

Veteran 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. The Department of Veterans Affairs may withhold benefits until this requirement is satisfied.

Veteran 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. The Department of Veterans Affairs may withhold benefits until this requirement is satisfied.
Student Freedoms, Rights & Responsibilities

- Freedom of Expression
- Freedom of Access
- Freedom of Association
- Freedom From Unreasonable Search & Seizure
- Student Participation in Institutional Government
- University Student Educational Records Policy (FERPA)
- Academic Rights of Students
- Academic Honesty
- Student Code of Conduct
- University Student Judicial Review Procedure
- Sex Offenses Policy
- Student Dispute/Complaint Resolution Process
- Academic Dispute Resolution Procedure
- Communications via E-mail
- Computer Use & Software
- Copyright Policy
- Copyright & Intellectual Property
Student Freedoms, Rights and Responsibilities

The role of UAA is to encourage people of all ages to develop their skills and talents differently 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.

Violations of the Student Code of Conduct regulations are handled through the Dean of Students Office. Violations of federal, state, and/or local laws make a student subject to civil and/or criminal action in addition to disciplinary action by the university. Each student is responsible for knowing UAA policies, procedures, and deadlines. Policies and regulations may be found in the UAA Catalog, the Fact Finder/Student Handbook and in the Dean of Students Office, located in the Student Union, Room 204. Students may also obtain a copy of University of Alaska Board of Regents' Policies and University Regulations online at www.alaska.edu/bor/policy-regulations.

Freedom of Expression

The rights of free speech and peaceable assembly are fundamental to the democratic process. The university supports the rights of students of the university community to express their views and opinions on actions or ideas, to associate freely with others and to assemble peacefully.

Whether expressing themselves as individuals or in organized groups, members of the university community are expected to conduct themselves responsibly, according to law, and to respect the basic educational goals of the university. Accordingly, the university insists that free expression not violate the rights of others. Disruption of the educational processes and functions of the university, or violation of law, would constitute such a violation.

Freedom of Access

Within the limits of its resources, the University of Alaska Anchorage shall be open to all applicants who are qualified according to current enrollment and admission requirements. The University of Alaska Anchorage does not discriminate on the basis of race, color, religion, national origin, sex, age, veteran status, physical or mental disability, marital status, pregnancy, or parenthood in any of its policies, practices, or procedures. This includes, but is not limited to, admissions, employment, financial aid, and educational services, programs and activities.

Freedom of Association

Students are free to associate to promote their common interests. They have the right to seek through official procedures establishment of organizations, so long as they are not in conflict with the educational purposes of the university. Students have the right to affiliate with officially registered campus organizations of their choice, within the membership requirements of those organizations.

Freedom From Unreasonable Search and Seizure

Students shall be free from unreasonable search and/or seizure regarding their person and their personal property. If a situation should occur in which a student is arrested by university police officers, that student has the right to remain silent, the right to be free of coercion and the right to be advised of these rights.

Student Participation in Institutional Government

Students shall be free, individually and collectively, to express their views on issues of institutional policy and on matters of general interest to the student body. The student body shall have clearly defined means to participate in the formulation and application of institutional policy affecting academic and student affairs.

University Student Educational Records Policy (FERPA)

The Family Educational Rights and Privacy Act (FERPA) of 1974, as amended, was designed to protect the privacy of education records, to establish the right of students to inspect and review their education records, and to provide guidelines for the correction of inaccurate or misleading data through informal and formal hearings.

FERPA affords students certain rights with respect to their education records. They are:

1. The right to inspect and review the student’s education records within 45 days of the day the school receives a request for access. Students should submit a written (letter or fax) request to the Office of the Registrar that identifies the record(s) they wish to inspect. The registrar will make arrangements for access and notify the student of the time and place where records may be inspected. If the records are not maintained by the Office of the Registrar, registrar-designated staff will refer the student to the appropriate personnel or office to access the record.

2. The right to request the amendment of a record that they believe is inaccurate or misleading. Students may ask the university to amend the student’s education records if he/she believes they are inaccurate or misleading. If the university decides not to amend the record as requested by the student, the university will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. If the university denies the amendment request after the hearing, the student is given the right to insert a statement in the education record.

3. The right to consent to disclosures of personally identifiable information contained in the student’s education records, except to the extent that FERPA authorizes disclosure without consent. UAA may release, without consent, certain directory information. No one outside the university shall have access to, nor will the university disclose any other information from a student’s educational record, without the written consent of the student, except to university officials with legitimate educational interests, to officials of other institutions in which a student seeks to enroll, to persons in compliance with a judicial order, and to persons in an emergency in order to protect the health or safety of the student or other persons, or as otherwise permitted under FERPA.

A university official with legitimate educational interests is a person employed by the university as an administrator, supervisor, instructor or administrative staff member; a person or company with whom the institution has contracted to perform a special task (such as an auditor
or attorney); a member of the Board of Regents; a governmental entity or any other entity with which a student is placed as part of his or her education; or a student serving on an official committee (such as a judicial or academic review committee or scholarship committee), or assisting another university official in performing his or her tasks. A university official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibilities.

The following information is designated as directory information by UAA:

- Names of students
- Dates of attendance at UAA
- Program/major field(s) of study
- Degrees and certificates received including dates
- Participation in officially recognized university activities
- Academic and co-curricular awards, honors, and scholarships received and dates received
- Weight and height of students on athletic teams
- Students’ electronic mail addresses
- Hometown city and state

In addition, UAA is required by federal law (The Solomon Amendment) to provide student directory information (name, address, telephone listing, date and place of birth, level of education, academic major, degrees received, the educational institution in which the student most recently was enrolled) to United States Military Recruiting and Reserve Officer Training Corps personnel upon their request unless the student has submitted a non-disclosure request according to UAA procedures.

Students may inform the Office of the Registrar that he/she does not give permission for the university to release his/her directory information or by going to UAOnline to the Change Confidentiality/Directory Hold Option and changing the security setting for their records. The requests for nondisclosure are valid until a subsequent written request to release directory information is received or the setting in UAOnline is changed. By placing a directory hold on their account, students should understand that they will only be able to discuss their account or perform university business, including logging in and other technology assistance, with UA staff or faculty in person after showing picture ID. They will not be eligible for enrollment or degree verification, and will not appear in the published chancellor’s and dean’s lists, the commencement program or any other university publication.

Students have 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 20202-5920**

A complete copy of the UAA procedures on the application of FERPA, including procedures for challenging the content of one’s records, is available in Enrollment Management. Links to the University of Alaska Board of Regents’ Policy and University Regulation (09.04.00) regarding education records are at www.alaska.edu/studentservices/ferpa/.

**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 the proper completion of their academic program, for familiarity with all requirements of the university catalog, and for maintaining an acceptable grade 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 which requires that students take credit only for ideas and efforts that are their own. Cheating, plagiarism and other forms of academic dishonesty are defined as the submission of materials or assignments, exams or other academic work that is based on sources prohibited by the faculty member. Substantial portions of academic work that a student has submitted for a course may not be resubmitted for credit in another course without the knowledge and advance permission of the instructor. Academic dishonesty is further defined below in the Student Code of Conduct. In addition to any adverse academic action, which may result from engaging in academically dishonest behavior, the university specifically reserves the right to address and sanction the conduct involved through the student judicial review procedures outlined in the UAA Fact Finder/Student Handbook.

**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. Conduct that unreasonably interferes with the learning environment or that violates the rights of others is prohibited by the standards and guidelines collectively described as the Student Code of Conduct (the Code). 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 by the university.

Violations of the Code, which occur on property owned or controlled by the university, or at activities authorized by the university, are subject to university judicial review and disciplinary action by the university. Student behavior which, were it to occur on property owned or controlled by the university or at activities authorized by the university, would constitute a Code violation is subject to disciplinary action when the university determines that the behavior would likely have an adverse impact on the health or safety of members of the university community, regardless of where the behavior occurs.

Students who are charged with violations of local, state or federal laws may be subject to disciplinary action by the university if the offenses are also violations of the Code. University judicial procedures and disciplinary actions are independent of and may precede, follow or take place simultaneously with criminal proceedings. University actions will not be subject to challenge on the grounds that criminal charges involving the same incident have been dismissed or reduced.

A student who has been charged with a violation of the Code and refuses to participate in the judicial process, or fails to complete disciplinary sanctions as assigned by the university, may be prohibited from re-enrolling in courses until the charges or sanctions are resolved to the satisfaction of the university.

Disciplinary action may be initiated by the university and disciplinary sanctions imposed against any student or student organization found responsible for committing, attempting to commit or intentionally assisting in the commission of any of the following categories of conduct prohibited by the Code.

The examples provided in this section of actions constituting forms of conduct prohibited by the Code are not intended to define prohibited conduct in exhaustive terms, but rather to set forth examples to serve as guidelines for acceptable and unacceptable behavior. (R09.02.020)

1. Cheating, plagiarism or other forms of academic dishonesty:
   a. using material sources not authorized by the faculty member during an examination or assignment;
   b. utilizing devices that are not authorized by the faculty member during an examination or assignment;
c. providing assistance to another student or receiving assistance from another student during an examination or assignment in a manner not authorized by the faculty member;
d. presenting as their own the ideas or works of another person without proper acknowledgment of sources;
e. knowingly permitting their works to be submitted by another person without the faculty member’s permission;
f. acting as a substitute or utilizing a substitute in any examination or assignment;
g. fabricating data in support of laboratory or field work;
h. possessing, buying, selling, obtaining or using a copy of any material intended to be used as an instrument of examination or in an assignment in advance of its administration;
i. altering grade records of their own or another student’s work; or
j. offering a monetary payment or other remuneration in exchange for a grade.

2. Forgery, falsification, alteration or misuse of documents, funds or property:
a. forgery, falsification, or alteration of records or deliberate misrepresentation of facts on university forms and documents or to any university official or before a university judicial hearing board;
b. misuse or unauthorized use of university identification cards, keys, funds, property, equipment, supplies or resources;
c. falsely representing oneself as an agent of the university, incurring debts or entering into contracts on behalf of the university; or
d. trespassing or unauthorized entry into, unauthorized presence on, or use of property which is owned or controlled by the university.

3. Damage or destruction of property:
a. damage or destruction to property owned or controlled by the university; or
b. damage or destruction of property not owned or controlled by the university if the action constitutes a violation of the Code, e.g.,
   1) the action occurred during an event authorized by the university;
   2) the student was a representative of the university, such as an athlete, and the action occurred while traveling to or from an event authorized by the university; or
   3) the property not owned or controlled by the university was located on university property.

4. Theft of property or services:
a. theft or unauthorized possession or removal of university property or the property of any university member or guest that is located on property owned or controlled by the university; or
b. theft or unauthorized use of university services or unauthorized presence at university activities without appropriate payment for admission.

5. Harassment:
a. physical or verbal abuse;
b. sexual harassment;
c. intimidation; or
d. other conduct, including hazing, which unreasonably interferes with or creates a hostile or offensive learning, living or working environment.

6. Endangerment, assault or infliction of physical harm:
a. physical assault;
b. sexual misconduct and assault;
c. terrorist threats;
d. hazing, coercion, or other activity that endangers or threatens the health or safety of any person, including oneself; or
e. conduct which causes personal injury.

7. Disruptive or obstructive actions:
a. obstructing or disrupting teaching, research, administration, disciplinary proceedings or other activities authorized by the university;
b. interfering with the freedom of movement of any member or guest of the university to enter, use or leave any university facility, service or activity; or
c. taunting or physically harassing wildlife or otherwise creating an unsafe or hazardous environment involving wildlife on property owned or controlled by the university.

8. Misuse of firearms, explosives, weapons, dangerous devices or dangerous chemicals:
a. unauthorized use, possession or sale of these items on property owned or controlled by the university, except as expressly permitted by law, Regents’ Policy, University Regulation, or UAA rules and procedures.

9. Failure to comply with university directives:
a. failure to comply with the directions of law enforcement officers or university officials acting in the performance of their duties;
b. failure to identify oneself to university officials when requested; or
c. failure to comply with disciplinary sanctions imposed by the university.

10. Misuse of alcohol or other intoxicants or drugs:
a. use, possession, manufacture, distribution or being under the influence of alcoholic beverages on property owned or controlled by the university or at activities authorized by the university, except as expressly permitted by law, Regents’ Policy, University Regulation or UAA rules and procedures; or
b. use, possession, manufacture, distribution, or being under the influence of any narcotic, controlled substance or intoxicant on property owned or controlled by the university or at activities authorized by the university, except as expressly permitted by law, Regents’ Policy, University Regulation or UAA rules and procedures.

11. Violation of Regents’ Policy, university regulation, or UAA rules and procedures.

12. Any other actions that result in unreasonable interference with the learning environment or the rights of others.

University Student Judicial Review Procedure
www.uaa.alaska.edu/deanofstudents/StudentJudicialServices

A judicial 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 University Student Judicial Review Procedures can be found in the UAA Fact Finder/Student Handbook and at www.uaa.alaska.edu/studentaffairs/Fact-Finder.cfm.

Sex Offenses Policy
www.uaa.alaska.edu/studentaffairs/Fact-Finder.cfm

It is the policy of UAA that the sexual assault of one member of the academic community by another will not be tolerated. This policy applies to all members of the campus community, students, faculty and staff. A complete copy of the Sex Offenses Policy can be found in the UAA Fact Finder/Student Handbook.

Student Dispute/Complaint Resolution Process
www.uaa.alaska.edu/studentaffairs/Fact-Finder.cfm

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 affect them. The process used will depend on the nature of the complaint. A complete copy of the Student Dispute/Complaint Resolution Process can be found in the UAA Fact Finder/Student Handbook.
**Academic Dispute Resolution Procedure**

[www.uaa.alaska.edu/studentaffairs/Fact-Finder.cfm](www.uaa.alaska.edu/studentaffairs/Fact-Finder.cfm)

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 09.03.02 and its University Regulation on Resolution of Disputes Regarding Academic Decisions or Actions. Appropriate issues for the procedure include such things as considerations of alleged grading error or arbitrary and capricious grading for a final grade assignment. 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. A complete copy of the Academic Dispute Resolution Procedure can be found in the UAA Fact Finder/Student Handbook.

**Communications via E-mail**

UAA uses e-mail to communicate with students on many important matters. The university automatically assigns each student an official UAA 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. Students are responsible for knowing and, when appropriate, acting on the contents of all university communications sent to their official UAA e-mail accounts. To receive university communication at a different e-mail address, students may forward e-mail from their assigned UAA accounts to any valid third party e-mail address of their choice that accepts forwarded e-mail. Go to UAA's Identity Manager ([http://username.uaa.alaska.edu](http://username.uaa.alaska.edu)), log in and set your forwarding e-mail address under the “Change Other Account Attributes” link. Contact the UAA IT Call Center for assistance at (907) 786-4646 or toll free (877) 633-3888 or by e-mail at callcenter@uaa.alaska.edu if you need assistance.

**Computer Use and Software Copyright Policy**

[http://technology.uaa.alaska.edu](http://technology.uaa.alaska.edu)

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 ITS website: [http://technology.uaa.alaska.edu/admin/PoliciesAndProcedures](http://technology.uaa.alaska.edu/admin/PoliciesAndProcedures).

**Copyright and Intellectual Property**

[http://info.alaska.edu/active/level2/copyright.html](http://info.alaska.edu/active/level2/copyright.html)

The University of Alaska provides a network and computing infrastructure to promote the basic missions of the university in learning, research, and service by facilitating communication, collaboration and access to information resources. Users of this infrastructure must be mindful of and respect ownership of intellectual property and copyrighted information to which this infrastructure can provide access.

Copyright and intellectual property rights may attach to files of any media type including software, texts, databases, images, video, music and other audio files. Abuse of computing or network technologies to copy or distribute materials in violation of copyright, license or intellectual property rights undermines the free exchange of ideas and access to information resources central to the university's mission and is expressly forbidden by university policy and regulation.

The University of Alaska aggressively investigates specific claims of such abuse including abuses using personally owned computers connected to the university's network. Verified abuses may lead to immediate suspension of access to university networks and/or computing resources, subject violators to possible university disciplinary action, and expose them to fines, other civil penalties, and criminal prosecution by copyright owners.
Academic Support
Advising & Testing Center
AHAINA Student Programs
Career Services Center (CSC)
College Preparatory & Development Studies (CPDS)
Disability Support Services (DSS)
Learning Communities
Learning Resources Center (LRC)
Library Support
Native Student Services (NSS)
Office of Undergraduate Research & Scholarship (OURS)
Pre-Professional Health Careers Advising
Student Support Services (SSS)
Testing & Assessment
TRIO Programs
Tutoring & Labs
Advising & Academic Support

Academic Support

Academic Advising
Academic advising assists students in developing and monitoring academic plans consistent with educational, career and life goals.

Admitted students with declared majors are assigned faculty advisors within the academic department offering the major. Students admitted as undeclared baccalaureate students and those admitted to the Associate of Arts general program are assigned to the Advising and Testing Center. Academic advising is handled differently by each college/school. The following list provides a contact number for the advising coordinator of each unit.

College/School Advising
College of Arts and Sciences .................................. (907) 786-1357
College of Business and Public Policy .................................. (907) 786-4100
College of Education .................................. (907) 786-4401
College of Health and Social Welfare .................................. (907) 786-4405
School of Nursing .................................. (907) 786-4561
Community & Technical College .................................. (907) 786-6480
School of Engineering .................................. (907) 786-1900
University Honors College .................................. (907) 786-1057

Advising is also available at the community campuses:
Kodiak College, Student Services .................................. (907) 486-1214
Mat-Su College, Student Services .................................. (907) 745-9762
Kenai Peninsula College .................................. toll free (877) 262-0330
Anchorage Extension Site .................................. (907) 786-6421
Kachemak Bay Campus .................................. (907) 235-7743
Kenai River Campus .................................. (907) 262-0330
Resurrection Bay Extension Site .................................. (907) 224-2285

Advising and Testing Center
(907) 786-4500
www.uaa.alaska.edu/advising-testing
ayfront@uaa.alaska.edu

The Advising and Testing Center is staffed with professional advisors to assist students with a wide range of academic planning activities. Advising services focus on degree-seeking students with undeclared majors, Associate of Arts degree students and students who are non-degree-seeking. Academic advisors assess students’ readiness for college level courses, guide students in course selection and help students explore UAA majors and related careers. Advisors also connect students with campus resources designed to promote student success and engagement with UAA. Regular contact with academic advisors during all phases of the college career will likely enhance the college experience and help students attain their educational goals in a timely manner.

AHAINA Student Programs
(907) 786-4070
www.uaa.alaska.edu/multicultural

AHAINA is an acronym for African-American, Hispanic, Asian, International and Native American. AHAINA’s motto is “Goals, Grades and Graduation.” AHAINA Student Programs is located in Rasmuson Hall (RH), Room 106. We provide resources, academic assistance and intervention to students of diverse ethnicities. Our objective is to assist AHAINA students in successfully achieving their academic goals. This is accomplished by providing services that promote academic achievement, affirm cultural differences and enhance student retention. Our Peer Mentor program aids new AHAINA students in keeping up with the demands of college academics while getting acclimated to college life.

Peer mentors are UAA students whose experiences along with specialized training provide a support network of information and resources for new students. Other services include academic success workshops and seminars, cultural programs, tuition waivers, computer lab, study area, scholarship/internship information and academic recognition programs.

Career Services Center (CSC)
(907) 786-4513
www.uaa.alaska.edu/careerservices

The CSC provides a number of excellent career-related services and resources. The center houses over 1,000 career-related books in its lending library, covering subjects such as how to write a resume, interviewing skills, where jobs can be found and how to prepare for your career. Students and alumni can register online to review hundreds of current job and career opportunities, post their resumes and establish an online credential file for employers to review. Other resources include a mentor program, videos, college catalogs and a variety of literature and handouts to assist students in a career field or job search. CSC also provides individual and group career advising, as well as academic internship programs, A Day in the Life Program, a videotaped mock interview program, resume assistance, workshops and campus and community presentations. The center also hosts many well-known local and national employers who visit the campus for recruiting.

College Preparatory & Developmental Studies (CPDS)
(907) 786-6856

This department offers academic support to all UAA students through specific courses, programs, labs and tutoring. Students who need to improve their ESL, mathematics, reading, writing and study skills can take a UAA-approved placement test through the Advising and Testing Center (786-4500), meet with a placement advisor to discuss their test results and determine which courses and/or programs can help them be successful in reaching their academic and personal goals.

Disability Support Services (DSS)
(907) 786-4530
www.uaa.alaska.edu/dss

DSS coordinates academic support services for students who experience disabilities. To access support services, students should contact DSS and provide current disability documentation. Services include, but are not limited to, American Sign Language interpreters, note-taking assistance, testing accommodations, ergonomic furniture, textbooks in alternate formats (e.g., large print, audio, e-text, etc.) and access to adaptive technology. DSS also serves as a resource for the community, facilitating workshops and awareness-building events and maintaining an extensive lending library.

Learning Communities

Alaska Native Science and Engineering Program (ANSEP)
(907) 786-1853
http://ansep.uaa.alaska.edu

ANSEP is a comprehensive suite of outreach, recruitment, retention and placement strategies designed to help students fulfill their potential in college; sustain their interest in science, technology, engineering and mathematics (STEM); and develop an interest in graduate study.

ANSEP focuses on undergraduates who have shown an interest or aptitude for mathematics and science fields in high school, when they entered college or during their college career. The students form an
academic learning community, many living together on campus in the Alyeska Community and co-enrolling in classes, so that wherever possible they are part of a shared experience.

**Alaska Natives into Psychology (ANPsych)**
(907) 786-6131
ANPsych’s mission is to increase the number of Alaska Natives and American Indian psychologists, and other mental health professionals, working in the field and to support Native communities in achieving their goals, and building on wellness in their villages. The program provides financial, academic and social support to students who wish to continue their education at the baccalaureate and graduate levels. Graduate and undergraduate psychology students have the opportunity to receive funding. Academic and social support is also available. ANPsych graduate students conduct “Talking Circles” and provide tutoring for psychology undergraduate students.

**Recruitment and Retention of Alaska Natives into Nursing (RRANN) Program**
(907) 786-6978
(877) 891-4321 toll-free
http://nursing.uaa.alaska.edu/rrann
The UAA School of Nursing was awarded a grant from the Department of Health and Human Services, Division of Nursing, to recruit and assist Alaska Native and American Indian students in their nursing education endeavors. RRANN and UAA are committed to increasing the number of Alaska Natives and American Indians graduating with an Associate of Applied Science or Bachelor of Science degree from UAA. The RRANN program is dedicated to encouraging personal growth within an academic setting that recognizes individual strengths and cultural diversity. Students are encouraged to live together in the Nightingale Nursing Community in West Hall.

**Smart Start Program**
(907) 786-6856
Smart Start offers a 13-credit, semester-length program to strengthen basic mathematics, reading, writing and study skills. Participants meet 8:30 a.m. to 12:30 p.m. Monday through Friday in the same classroom, where they meet with their teachers and tutors. Students receive individualized attention and tutoring services both inside and outside the classroom.

Interested students must take a UAA-approved placement test and speak to a College Preparatory & Developmental Studies placement advisor (786-6856) to see if Smart Start is right for them. For information on available placement testing times and locations, call the Advising and Testing Center at 786-4500. Smart Start is offered during the fall semesters at Kodiak College. Call (907) 486-1253 for information about Smart Start at Kodiak College.

**Teaching and Learning Community**
(907) 786-6401
The mission of the College 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 and communities. By promoting a vibrant, on-campus community of learners, the college facilitates an engaging environment that connects students to each other, faculty and the UAA community at large. Education students residing on campus may choose to live in the Teaching and Learning Community Wing in East Hall surrounded by peers who are also exploring careers in education. This residential community supports the academic and social success of students through special events, tutoring, study groups and volunteer opportunities.

**University Honors College**
(907) 786-1086
www.uaa.alaska.edu/honors
The University Honors College provides its students with an intense intellectual experience, and offers them opportunities to develop an integrative perspective that extends beyond the confines of individual majors and disciplines. The college offers interdisciplinary courses, academic advising and mentoring, leadership and scholarship opportunities, smaller classes and guided individual research, community involvement, and interaction with Honors peers committed to academic excellence. (See Chapter 10, Undergraduate Programs, for further information.) Honors students may live in the Honors Community in East Hall.

**Learning Resources Center (LRC)**
(907) 786-6828
www.uaa.alaska.edu/ctc/lrc
The LRC offers a friendly place for students to read, study, access course materials or get extra help for a class. The LRC houses a large quiet study area, an open area that is available for individuals and small work groups, a language laboratory, a mathematics laboratory, a reading/writing center, an open-access computer laboratory, and audio-visual study areas. The course reserve area maintains a collection of textbooks and supplemental course materials for student use. The LRC provides laser printers, copy machines, laminating equipment and document binding equipment to assist students.

**Library Support**

**The Consortium Library**
(907) 786-1848
http://consortiumlibrary.org
The Consortium Library serves the students, faculty and staff of the University of Alaska Anchorage and Alaska Pacific University with a recently expanded and remodeled facility. It is the major research library for Southcentral Alaska. The Consortium Library’s website provides access to a growing list of databases, indexes, full-text articles, ebooks and ejournals. The website also provides access to the library’s catalog that lists the holdings for the Consortium Library as well as the Anchorage Public Library, UAA Career Services, Alaska Resources Library and Information Services (ARLIS), the UAA community campus libraries in Kodiak, Mat-Su, Kenai, Homer and Valdez, and the Anchorage Museum. Requests for interlibrary loans and for reference services can be made online. On the library’s website there are online tutorials and a research help section. Refworks, a software tool for managing bibliographies and citations, is available to all students, faculty and staff.

The library’s onsite collection includes more than 820,450 volumes, 590,000 microform units, subscriptions to 4,880 journals and an extensive sheet music collection. The library is a selective depository for federal and state documents. It houses special collections about Alaska and the Arctic including archives and manuscripts. The library’s Health Sciences Information Services (HSIS) is located on the second floor with collections supporting nursing and allied health. Consortium Library faculty teach two courses for credit (LS A101 and LS A211) on how to conduct library research.

**Native Student Services (NSS)**
(907) 786-4000
(866) 786-4804 toll-free
http://nss.uaa.alaska.edu
The NSS mission is to improve the retention and success of Alaska Native and Native American students in achieving their educational goals.

NSS provides educational/vocational planning, advising, career counseling, financial aid resources and guidance, scholarship and internship information, study group space, peer mentoring, leadership opportunities, community and cultural programming, educational outreach, community partnerships, campus orientation, student tours, school visits, and summer internships among other services.

NSS has a Peer Mentoring program that is designed to increase new student retention, academic success, and personal adjustment to UAA through a volunteer full-circle mentoring approach.
Office of Undergraduate Research and Scholarship (OURS)
(907) 786-1086
www.uaa.alaska.edu/ours
OURS fosters undergraduate research opportunities and presentation, encourages the integration of teaching and research across the campus, and links students both to local faculty and the global community of scholars.

OURS offers a variety of programs including colloquia, featured speakers and presenters. Every spring, the office hosts the Undergraduate Research and Discovery Symposium, highlighting the work of UAA undergraduates and their faculty mentors. The office also offers several award competitions to support undergraduate research and creative/artistic projects in all disciplines, including Undergraduate Research Awards, Discovery Grants, the Discovery Award, the Consortium Library Prize, sponsored travel to the Student Conference on United States Affairs, and the Parasca Science Award.

Pre-Professional Health Careers Advising
(907) 786-1747
http://biomed.uaa.alaska.edu
UAA students interested in the health professions can complete prerequisite courses required for admission into medical, dental, veterinary, pharmacy, physician assistant, physical therapy and other professional programs. Many academic departments support pre-health career majors, including Biological Sciences, Chemistry, and Psychology. Alaska residents interested in medicine can apply to the Washington, Wyoming, Alaska, Montana and Idaho (WWAMI) Program, which is affiliated with the University of Washington School of Medicine. MEDEX Northwest is a source of physician assistant training for qualified Alaskans.

Pre-health professions students are encouraged to meet with the pre-health professions advisor to discuss prerequisites, course schedules, admissions examinations and other topics relevant to the successful progression into a professional program.

Premedical students maintain the PreMed Club, which sponsors seminars, tours, mock interviews, trial MCATs and other activities that prepare participants for success in undergraduate work and the medical school application process. The Alaska WWAMI Program and the UAA Office of Undergraduate Research and Scholarship sponsor an annual PreMed Summit, a program designed for anyone interested in a career in medicine, especially undergraduate and high school students, but also counselors, advisors and parents.

Student Support Services (SSS)
(907) 786-1380
www.uaa.alaska.edu/sss
Student Support Services (SSS) is an academic support program of the U.S. Department of Education (TRIO) that is hosted by UAA. SSS seeks to supplement student success by providing academic support services (tutoring assistance, persistence workshops, academic mentoring) to 160 eligible students per year. Students eligible for SSS services come from families earning a lower wage (by federal standards), and/or are the first in their families (first generation) to pursue a baccalaureate degree, or experience a doctor-diagnosed disability.

Testing and Assessment
(907) 786-4500
www.uaa.alaska.edu/advising-testing/assessment
The assessment program supports many of the testing needs of the university and also serves the community as a testing site for national tests, which are used for admission, earning college credit and professional certification.

Placement testing is offered for admission purposes, general advising and for placement in English and preparatory mathematics classes. There is a fee for placement testing. Data from placement tests are used to improve student advising and retention. Other assessments are available to help people with career and life planning. Testing services, such as proctoring correspondence and other examinations, are also available. (See Chapter 8, Educational Delivery Methods and Nontraditional Credit, for more information.)

TRIO Programs
www.uaa.alaska.edu/trio
The TRIO programs are funded by the U.S. Department of Education and sponsored by UAA. The TRIO mission is to increase the rate at which low-income and potential first-generation college youth and adults prepare for and enter programs of postsecondary education.

Educational Opportunity Center (EOC)
(907) 274-5522
The EOC program provides information and assistance to adults who wish to pursue a postsecondary education. Services provided by the EOC include career planning, educational advising, college and technical school selection, school admission assistance, financial aid advising and application assistance, and federal student loan default rehabilitation.

Educational Talent Search Program (ETS)
(907) 274-1513
The ETS program serves sixth- through 12th-grade students in eight schools in the Anchorage School District. ETS prepares students to successfully complete high school and enroll in college or a technical school. Services include educational advising, career exploration, study skills, tutoring, college planning, college tours and more.

Upward Bound (UB)
(907) 274-1513
The Upward Bound program serves ninth- through 12th-grade students in three high schools in the Anchorage School District. UB, like ETS, prepares students to complete high school, but the program emphasizes academic preparation in science, math, language and literature, as well as the services listed above for ETS. UB students attend a six-week, highly challenging academic summer program on the UAA campus. Students who have graduated from secondary school and intend to enroll in college in the fall may participate in a Summer Bridging component, where they enroll and earn credit in college courses designed to aid their transition to college.
### Tutoring and Labs

<table>
<thead>
<tr>
<th>Title</th>
<th>Services</th>
<th>Eligible Students</th>
<th>Location</th>
<th>Cost</th>
<th>Resources Available</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Computer Assisted Writing Lab (CAWL)</strong> 786-6828</td>
<td>Online tutoring for written assignments via SLED</td>
<td>All students, PRPE &amp; ESL given priority</td>
<td>Sally Monserud Hall (SMH) Room 119</td>
<td>None</td>
<td>Computer lab</td>
</tr>
<tr>
<td><strong>Educational Opportunity Center (EOC) 274-5522</strong></td>
<td>Tutorial assistance</td>
<td>Low-income, first-generation college students</td>
<td>500 L Street, Suite 501 (will be moving to 4500 Diplomacy, Suite 118 in October, 2009)</td>
<td>None</td>
<td>Computer lab</td>
</tr>
<tr>
<td><strong>Live Homework Help</strong></td>
<td>Online tutoring for basic college courses in math, sciences, social sciences, and English</td>
<td>All students in basic introductory courses</td>
<td>Online at <a href="http://sled.alaska.edu/homework.html">http://sled.alaska.edu/homework.html</a></td>
<td>No cost to student. It is part of SLED, Alaska's Virtual Library program.</td>
<td>Service is available 1-9pm, seven days per week.</td>
</tr>
<tr>
<td><strong>Learning Resources Center (LRC) 786-6828</strong></td>
<td>CAWL, Math Guided Studies Lab, language lab, open use computer lab. Coordinates athletic and individual tutoring. Preparatory and ESL tutoring</td>
<td>All students</td>
<td>Sally Monserud Hall (SMH)</td>
<td>No cost to students for most services. Private tutoring costs vary.</td>
<td>Tutoring, computer labs, instructional materials</td>
</tr>
<tr>
<td><strong>Mathematics Guided Studies Lab 786-6828</strong></td>
<td>Tutoring for MATH A054, A055, or A105. Testing for Guided Studies Mathematics students</td>
<td>All students in MATH courses</td>
<td>Sally Monserud Hall (SMH) Room 120</td>
<td>None</td>
<td>Computers, mathematics tutorial materials, My Math Lab software</td>
</tr>
<tr>
<td><strong>Mathematical Sciences Math Lab 786-1744 Mathematical Sciences Department</strong></td>
<td>Tutoring for preparatory and lower division math courses and lower division statistics courses</td>
<td>All students enrolled in on-campus MATH or STAT courses who have paid lab fee</td>
<td>Social Sciences Building (SSB) Room 156</td>
<td>Lab fee</td>
<td>Computers, mathematical and statistical software</td>
</tr>
<tr>
<td><strong>The Writing Center 786-6918</strong></td>
<td>Tutoring on written assignments</td>
<td>PRPE and ESL students</td>
<td>Sally Monserud Hall (SMH) Room 118</td>
<td>Lab fee</td>
<td>Computers, style guides, dictionaries</td>
</tr>
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Academic Standards & Regulations

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Special Students
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Catalog Year
Age Limit of Credits
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Class Standing
Academic Petition
Registration
Course Performance
Course Completion
Academic Standing
Program Completion
Exception to University Policy for Records & Registration
Admissions
(907) 786-1480
www.uaa.alaska.edu/admissions
All students intending to register for one or more courses must apply for admission. Applications for admission are available online at www.uaa.alaska.edu/admissions or from the Office of Admissions.

UAA offers five admission options for students:
- Occupational endorsements provide specialized knowledge and skills needed in specific employment sectors.
- Certificate and associate’s degree programs emphasize technical or job-related skills in demand in the workplace and/or can be used as preparation for a bachelor’s program.
- Baccalaureate and post-baccalaureate degree programs provide a comprehensive general education along with scholarship in a major specialty.
- Graduate and post-graduate programs prepare students for deep inquiry within a chosen field of mastery or for career advancement.
- General interest and non-degree-seeking options offer students the opportunity to take classes for either personal or professional interests.

General Admission Information
This chapter covers university admission requirements that apply to all undergraduate certificate, degree and non-degree-seeking students. Individual certificate and degree programs may have additional requirements. See Chapter 10, Undergraduate Programs, for specific program requirements. See Chapter 11, Post-Baccalaureate Certificate Programs, and Chapter 12, Graduate Programs, for admission requirements that apply to post-baccalaureate and graduate programs and students.

Home School Applicants
High school transcripts will be accepted from applicants attending home schools registered with the state of Alaska or affiliated with a diploma-granting educational organization whose accreditation is recognized by the U.S. Department of Education. Applications for admission for other home school graduates will be reviewed if the home school graduate:
- Takes the Ability to Benefit test offered at a UAA campus testing center; or
- Takes and submits a score for the General Educational Development (GED) test; or
- Achieves and submits an official SAT combined score of 1210 or an ACT composite score of 27; or
- Submits to the Office of Admissions an official SAT or ACT test score, home school transcripts, a three-page essay on postsecondary educational goals and a letter requesting admission to a specific certificate or degree program.

Transcripts and Test Scores
Associate’s or baccalaureate degree-seeking students, and students seeking undergraduate certificates of 30 credits or more must submit transcripts (and in some cases test scores) documenting their academic history and readiness for the desired level of study. Students seeking occupational endorsement certificates and non-degree-seeking students are not required to submit transcripts or test scores except as required for placement in certain courses or programs.

All required transcripts and test scores must be official documents submitted directly from the issuing high school, college, university or testing agency to the Office of Admissions. Students may hand carry documents only if they are in original sealed envelopes from issuing institutions. The university cannot accept student copies of transcripts or test scores.

Transcripts from private high schools are recognized in the same manner as transcripts from state-supported high schools. 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. Otherwise, the student must complete the Ability to Benefit process for admission or the home school applicant process.

Certificate- and degree-seeking students who have attended institutions outside the United States or Canada may be required to submit an official statement of educational equivalency from a recommended international credentials evaluation service. A list of evaluation services may be obtained from the Office of Admissions. Fees depend upon the agency performing the evaluation. The evaluation service will require a separate transcript and copy of the English translation. Students are expected to provide records in English for transfer credit evaluation.

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.

Ability to Benefit
Advising and Testing Center
(907) 786-4500
www.uaa.alaska.edu/advising-testing/assessment
Certificate- and degree-seeking students who are at least 18 years old but have not earned a high school diploma, GED or at least 30 college-level semester credits, must demonstrate that they have the ability to benefit from higher education by achieving federally determined scores on an approved test administered by the Advising and Testing Center.

After taking the examination, students must meet with an advisor to review the test results and determine an appropriate entry level of instruction. The advisor must sign and return the Ability to Benefit Form to the Office of Admissions before admission can be completed. Interested individuals should contact the advising center at their local campus for schedules and appointments.

Advising Requirements
All students should meet with a faculty or academic advisor prior to each semester’s registration. Advising helps students clarify their goals, make suitable course selections and understand academic expectations. New certificate- and degree-seeking students are directed to an appropriate advisor as part of the admission process. Some students may be required to meet with an advisor prior to registration. (See Chapter 6, Advising and Academic Support, for further information.)

University Admission Requirements
Undergraduate Programs
There are three levels of undergraduate admission:
- Admission to occupational endorsement certificates
- Admission to undergraduate certificates or associate’s degrees
• Admission to baccalaureate and post-baccalaureate degrees.

Admission to Occupational Endorsement Certificates
To qualify for admission to an occupational endorsement certificate program a student must either:
1. Have earned a high school diploma, GED, or at least 30 college-level semester credits; or
2. Be 18 years of age or older and have participated in UAA's Ability to Benefit process as described in this chapter.

Some occupational endorsement programs have additional admission requirements, selective admission criteria or limited space. (See Chapter 10, Undergraduate Programs, for specific information.)

Occupational endorsement certificate-seeking students must submit a UAA application for admission indicating their intended educational program and their level of academic preparation.

Additional admission requirements will depend on the intended program.

Admission to Undergraduate Certificate and Associate's Degree Programs
To qualify for admission to certificate or associate's degree programs a student must either:
1. Have earned a high school diploma, GED, or at least 30 college-level semester credits; or
2. Be 18 years of age or older and have participated in UAA's Ability to Benefit process as described in this chapter.

Some associate's degree programs have additional admission requirements, selective admission criteria or limited space. (See Chapter 10, Undergraduate Programs, for specific information.)

Freshmen (Students with fewer than 30 college-level semester credits)
Freshmen who have not earned a high school diploma or GED are not eligible for admission to bachelor's degree programs. They may apply to certificate and associate's degree programs only, and must complete the Ability to Benefit process as described in this chapter.

Transfer Students (Undergraduates with at least 30 college-level semester credits)
Undergraduate certificate- and degree-seeking applicants with 30 or more college-level semester credits must submit official transcripts from all regionally accredited colleges and universities and all institutions attended outside the United States. (Exception: Students do not need to request transcripts from any University of Alaska campus.)

Students who wish to transfer college-level course work from institutions outside the United States or Canada must submit official transcripts and English translations as well as an official statement of educational equivalency from a recommended international credentials evaluation service. A list of evaluation services may be obtained from the Office of Admissions. Fees depend upon the agency performing the evaluation. The evaluation service will require a separate transcript and copy of the English translation.

Admission to Baccalaureate Programs
To qualify for admission to baccalaureate programs, a student must satisfy at least one of the following:
1. Graduation from high school with a GPA of at least 2.50, and completion of either the SAT, ACT or an approved test; or
2. Successful completion of the GED, and completion of either the SAT, ACT or an approved test; or
3. Completion of at least 30 college-level semester credits with a GPA of at least 2.00 and a high school diploma, GED or completion of UAA's Ability to Benefit process as described in this chapter; or
4. Completion of at least 60 college-level semester credits with a GPA of at least 2.00.

Students in the following categories may be admitted to certain baccalaureate programs with advising as a requirement:
• High school graduates with a GPA of 2.00 through 2.49; or
• Transfer students with a collegiate GPA of 1.75 through 1.99.

Additional criteria apply to students who have been removed from baccalaureate degree-seeking status at UAA. See the Reinstatement policy under the Academic Standing section of this chapter.

Some baccalaureate programs have additional or more selective admission requirements. See Chapter 10, Undergraduate Programs, for specific program details and information.

Freshmen (Students with fewer than 30 college-level semester credits)
Baccalaureate degree-seeking freshmen with fewer than 30 college-level semester credits must submit:
1. Final official high school transcripts showing graduation date or official GED scores. Students still attending high school must submit both a partial transcript at the time of application and a final transcript after graduation that confirms the graduation date.
2. Official copies of ACT, SAT or approved test scores. (Test scores posted on official high school transcripts are acceptable.)
3. Official transcripts from all regionally accredited colleges and universities and all institutions attended outside the United States. (Exception: Students do not need to request transcripts from any University of Alaska campus.)

Freshmen who have not earned a high school diploma or GED are not eligible for admission to bachelor's degree programs. They may apply to certificate and associate's degree programs only, and must complete the Ability to Benefit process as described in this chapter.

Transfer Students (Undergraduates with at least 30 college-level semester credits)
Undergraduate baccalaureate degree-seeking applicants with 30 or more college-level semester credits must submit official transcripts from all regionally accredited colleges and universities and all institutions attended outside the United States. (Exception: Students do not need to request transcripts from any University of Alaska campus.)

Students who wish to transfer college-level coursework from institutions outside the United States or Canada must submit official transcripts and English translations as well as an official statement of educational equivalency from a recommended international credentials evaluation service. A list of evaluation services may be obtained from the Office of Admissions. Fees depend upon the agency performing the evaluation. The evaluation service will require a separate transcript and copy of the English translation.

Related Undergraduate Admission Policies
Catalog Year
Students who wish to earn an undergraduate certificate or degree must meet the requirements specified in the catalog in effect at the time of admission to the certificate or degree program, or the
catalog in effect at the time of graduation. Certificate and associate's degree students have five years to complete their certificate or degree requirements under the terms of the catalog in effect at the time of admission. Baccalaureate students have seven years. Students who take longer to complete their programs must reapply for admission and meet the catalog admission and graduation requirements in effect at the time of readmission or graduation.

Each student's catalog year is established when the student is first admitted into a certificate or degree program as a major or pre-major. A student's catalog year is adjusted if the student formally postpones admission (see the Postponed Admission in this chapter) or executes a change of major (see Change of Major or Degree in this chapter).

Change of Major or Degree

Once formally admitted and in attendance, students may request a change of major or degree program to another program through the change of major/degree process. Students admitted initially in undeclared or pre-major status may also declare a major or degree program through this process. Students must meet the specific admission requirements of the desired program and must be formally accepted by signature of the dean or department chair. No fee is required with a change of major or degree to the same level (baccalaureate to baccalaureate or certificate/associate's to certificate/associate's).

Students who change their major or degree program must meet the catalog requirements in effect at the time of the change or the catalog in effect at the time of graduation. Exception: Students who change from pre-major to full major must meet the catalog requirements in effect at the time of initial admission to the pre-major or the catalog in effect at the time of graduation.

Change of Admission Level

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

To change from a baccalaureate level program to a certificate/associate's level program, a student must complete and submit a Change of Major Form as described above. Changes from baccalaureate to certificate/associate's programs will be processed for the next available term. This type of change of major will also cancel out the previous active bachelor's program. If a student later decides to complete a bachelor's program, he or she will need to reapply for admission to a bachelor's program and pay applicable admission fees.

Concurrent Degrees

Students may pursue concurrent degrees as long as they have formally applied and been accepted to each program. For more information, see Chapter 10, Undergraduate Programs.

Pre-majors or Undeclared

Students applying to programs with selective admission criteria or limited space may initially be admitted to a pre-major or undeclared status. Admission to pre-major or undeclared 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 process. Such changes will not affect a student's degree requirements or catalog year.

Students admitted to undeclared status must satisfy all requirements for formal admission to the major and then complete the Change of Major process. A change of major from undeclared status to an official degree or certificate program will initiate a new catalog year. Students who change their major must meet the catalog requirements in effect at the time of the change of major or the catalog in effect at the time of graduation.

Transfer Evaluations

Transfer evaluations will be completed for all undergraduate certificate and degree-seeking students who have attended other regionally accredited colleges and universities. Once the student has been admitted to a certificate or degree program, transcripts will be evaluated. Only transcripts from regionally accredited institutions declared at the time of admission are considered for transfer evaluation. Students may view most courses that have been previously evaluated by UAA by visiting the transfer credit resource website at www.uaonline.alaska.edu. For more information, see Transfer Credits in this chapter.

International Undergraduate Students

Office of Admissions

www.uaa.alaska.edu/iss
(907) 786-1573
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 Nonimmigrant F-1 Student Status, must meet university and degree program admission requirements and submit the following:

1. Official Test of English as a Foreign Language (TOEFL) or International English Language Testing System (IELTS) scores, sealed by the issuing agency. Alternative documentation of English proficiency, such as previous study in a U.S. institution or alternate test scores may be considered on a case-by-case basis. International students from English-speaking countries should contact the Office of Admissions to request a waiver of the test score requirement.

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.

4. Official English translations and international credential evaluations of foreign transcripts, when required.

5. Students transferring from other institutions in the United States 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 website at www.uaa.alaska.edu/iss for details and forms.

Application and Admission Status for Undergraduate Certificate- and Degree-Seeking Students

Terms and 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.

Departmental Review

An application flagged for departmental review is one awaiting departmental recommendation for admission.
Postponed Application

Students who have not yet attended since applying for admission may postpone their application by notifying the Office of Admissions. Students who attend the semester for which they applied but do not complete the application process until a subsequent semester will be admitted to the semester for which they originally applied. Please note: This may impact a student’s eligibility to receive financial aid.

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, applications that are still incomplete and not postponed may be withdrawn.

Admission Status

Complete Admission

All required documents have been received and all admission standards met. This includes attending the semester for which the student is admitted.

Incomplete Admission

In-progress transcripts have been received, but final high school or college transcripts are still missing. All admissions still incomplete at the end of the semester will be withdrawn. Please note: Financial aid will not be released on an incomplete admission.

Provisional Admission

University admission requirements have been met, but the student still needs to complete one or more department-specified provisions.

Postponed Admission

Students may postpone their admission for up to one year by notifying the Office of Admissions prior to the end of the semester for which they originally applied. Students may not postpone their admission if they attend during the semester for which they applied.

Withdrawn After Admission

Admission will be withdrawn when students do not attend classes during, or postpone their admission by the end of, their admission semester. To reactivate an application that has been withdrawn, a student may submit a Postponement Request Form within one year or reapply for admission.

Returning Students – No Attendance Outside the UA System

Undergraduate certificate and degree-seeking students who have had a break in their UAA attendance but have not attended another institution outside the UA system and who wish to retain their original admission catalog may update their admission status. Individual departments reserve the right to refuse students readmission to their programs.

Returning Students – With Attendance Outside the UA System

Undergraduate certificate and degree-seeking students who attend another institution outside the University of Alaska system following their UAA admission must reapply for admission unless one or more of the following criteria have been met:

- Prior department approval via petition to take classes at another institution(s).
- Enrollment at outside institution was concurrent with UAA enrollment.
- Enrollment at outside institution occurred during summer semester.

- Enrollment was in correspondence courses.
- Student participated in a national or international student exchange.
- Student is participating in the Servicemembers Opportunity Colleges (SOC)-approved military programs.
- Outside institution was unaccredited at time of attendance.
- Outside institution was Community College of the Air Force or Excelsior (formerly Regents) College.

Master’s Degree Programs, Graduate Certificates and Post-Baccalaureate Certificates

For admission requirements for master’s degree and graduate certificate programs, see Chapter 12, Graduate Programs. For admission requirements for post-baccalaureate certificate programs, see Chapter 11, Post-Baccalaureate Certificate Programs.

General Interest and Non-Degree-Seeking Options

Students who wish to take classes for general interest or personal/professional development and who do not wish to earn a certificate or degree from UAA may apply for admission as non-degree-seeking students.

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 still must meet placement requirements and prerequisites for individual courses. Students with little or no previous college experience are strongly encouraged to complete a UAA-approved placement test and meet with an academic advisor to determine appropriate entry levels of instruction. Students who wish to register for graduate courses may be required to obtain the department chair’s or faculty member’s signature, and are strongly advised to contact the department at the earliest opportunity.

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

1. Have earned a high school diploma or GED; or
2. Be at least 18 years of age; or
3. Have completed UAA’s secondary school student Enrollment process as described in this chapter.

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 the individual programs.

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.

International Students, Non-Degree-Seeking

Office of Admissions (907) 786-1480

Non-degree-seeking students do not qualify to receive a Form I-20 Certificate of Eligibility for Nonimmigrant (F-1) Student Status. Those with certain other types of visas including B-1 or B-2 visitor visas, F-2 visas and those on the visa waiver program are prohibited from studying in a full course of study. Contact the international student advisor in the Office of Admissions for further details.

Secondary School Students

Secondary school students are those who are in the ninth, 10th, 11th, or 12th grade and have not already earned their high school diplomas or completed a GED. For more information, see the Secondary School Student Enrollment Policy in this chapter.
**Related Non-Degree-Seeking Admission Policies**

**Transfer Credits**
Non-degree-seeking students are not eligible to have transfer credits evaluated. Transferring credit is an option for certificate- and degree-seeking students only. Students who wish to get an unofficial estimation of how their credits might transfer may visit the University of Alaska’s transfer credit resource site at www.uaonline.alaska.edu.

**Change of Major or Degree**
No majors or degrees are offered in the general interest and non-degree-seeking options. Students initially admitted as non-degree-seeking who later decide to pursue UAA certificates or degrees must submit a new application and all required documents and meet admission requirements for the corresponding certificate or degree program and level.

**Academic Planning**
Proper academic planning allows students to complete their chosen course, program or degree successfully and efficiently. Students are advised to consider their personal circumstances (e.g., job schedules, financial aid, family situations, childcare) as well as short (one to two semesters), medium (one to two years), and long-term educational goals when planning their academic programs. The UAA Advising and Testing Center offers general academic advising, career counseling, personal development and testing and assessment services as well as orientations and special workshops for all UAA students. Each academic program has clearly defined student outcomes that describe the knowledge, skills and capabilities that students acquire in the program.

**Program Selection**
A student’s selection of a program of study is usually based upon academic interests, vocational objectives and personal goals. UAA offers more than 180 different programs at the certificate, two-year, four-year, and master’s degree levels. Students are strongly advised to contact the department to confer with a faculty advisor about academic programs that interest them. While all programs have differences, students generally must complete:

- Admission requirements, which are set by the individual program. For example, a program may require prior coursework, specific entrance examination scores, or particular job-related competencies.
- General University Requirements (GURs), General Education Requirements (GERs) and college requirements, which establish policies that must be followed but which allow students to select from a restricted offering of courses.
- Specific program requirements, which vary according to the program. Programs may also call for specific GUR, GER or prerequisite courses to fulfill specific program needs. The program may also be divided into two or more categories, often as follows:
  - Core courses that are required of every student in the program.
  - Program selective courses (sometimes called options, tracks, concentrations, emphases, or specialties) that allow students to pursue their own interests within the program.
  - Elective courses, which can be taken from a number of departments (depending upon the program) to fill the remaining credits in the degree or program. Additionally, in a number of programs, students also have the option to complete a minor field of study.

Because requirements vary greatly among certificate and degree programs, students are strongly encouraged to meet with faculty advisors prior to entering a program or declaring a major, both to ensure that they understand the program requirements prior to registering for classes and to enable proper academic planning.

**Course Selection**
Proper course selection is essential to the efficient completion of a program and must take into account the specific requirements for the major, the offerings available each year, the timing of offerings within each semester and the order in which courses must be completed.

Within each program, faculty advisors can then make available to students both the program’s course rotation schedule (which shows the planned course offerings within a program) and program plan (which shows on a semester-by-semester basis how students might typically make their way through a program in light of specific prerequisites and requirements). After students have met with a faculty advisor and developed an academic plan detailing which courses they must take for their program and the order in which they must be taken based upon the program requirements, students are prepared to select their courses each semester and to plan for coming semesters.

While general academic advising is available through the UAA Advising and Testing Center and specific program advising is available through the departments, the planning, selection, registration and completion of courses, programs, and degrees are ultimately the responsibility of the student.

**Registration**
Students may attend classes in a course offered at UAA only after they have properly completed the registration process for that course. They register either in person, via proxy or via UAOnline. (See Registration in this chapter for details and deadlines). Students select courses that meet their educational needs and that fit into their semester schedule. Registration in multiple sections of the same course is not allowed.

UAA reserves the right to drop/withdraw a student from any or all sections for which they have multiple registrations. This administrative drop may be done at any time without prior or subsequent notice to the student.

**Course Placement**
Appropriate course placement is an essential component of academic success. Students are encouraged to meet with academic advisors within their academic department prior to registration to discuss educational goals, placement scores and course prerequisites for appropriate course selection.

If registering for the first time in English or mathematics courses, students must show evidence of appropriate placement. For mathematics course placement purposes, ACT and SAT scores are valid for two years from the date taken. UAA-approved placement test scores are valid for one year for mathematics. Students may be required to provide proof of their placement scores on the first day of class. Refer to this catalog and the online class schedule for specific course prerequisites and placement score requirements.

English and mathematics placement tests are administered through the UAA Advising and Testing Center. Contact the center for information on available placement tests and how to access student guides with sample questions. English and mathematics placement tests are also administered at the Chugiak-Eagle River campus, military sites, extended campus sites and community campuses.

**English Course Placement**
English (ENGL), English as a Second Language (ESL), and Preparatory English (PRPE) courses require appropriate placement scores for course registration. Test scores reflect national norms and are subject to change. Students who have not earned appropriate scores on the ACT English or SAT Critical Reading tests are required to take a UAA-approved English placement test prior to enrolling in any English composition or Preparatory English courses.
A student who has earned an appropriate ACT English or SAT Critical Reading score is eligible to enroll in the following English courses:

<table>
<thead>
<tr>
<th>English Course</th>
<th>English Score</th>
<th>Critical Reading Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL A111</td>
<td>22-29</td>
<td>530-619</td>
</tr>
<tr>
<td>ENGL A211*</td>
<td>30+</td>
<td>620+</td>
</tr>
<tr>
<td>ENGL A212*</td>
<td>30+</td>
<td>620+</td>
</tr>
<tr>
<td>ENGL A213*</td>
<td>30+</td>
<td>620+</td>
</tr>
<tr>
<td>ENGL A214*</td>
<td>30+</td>
<td>620+</td>
</tr>
</tbody>
</table>

* If a student has earned 30+ on the ACT English test or 620+ on the SAT Critical Reading test, ENGL A111 is waived as a prerequisite to higher-level composition courses. With the appropriate score, a student may enroll directly in ENGL A211, A212, A213 or A214. A student choosing this option is required to choose an additional 3 credits from the General Education Requirements (GER) Written Communications Skills list, for a total of six credits. Call the English Department at 786-4355 for questions on test scoring.

Mathematics Course Placement

Mathematics placement testing is available through Advising and Testing (786-4500). A student who has completed the course prerequisites is eligible to enroll in MATH courses. A student who has not completed the course prerequisites but has completed courses with similar content and has earned an appropriate ACT, SAT or UAA-approved placement test score is eligible to enroll in the following Mathematics courses:

<table>
<thead>
<tr>
<th>Mathematics Course</th>
<th>ACT Math Score</th>
<th>SAT Math Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH A055</td>
<td>400-479</td>
<td></td>
</tr>
<tr>
<td>MATH A105</td>
<td>18-21</td>
<td>480-519</td>
</tr>
<tr>
<td>MATH A107</td>
<td>22-25</td>
<td>520-589</td>
</tr>
<tr>
<td>MATH A200</td>
<td>26**</td>
<td>590**</td>
</tr>
</tbody>
</table>

** Must also take a trigonometry or precalculus course before enrolling in MATH A200.

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.

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 department designator, a campus designator, and a three-digit course number. The designator commonly abbreviates the name of the discipline or department (for example, ENGL for English). In general, the first numeral of the three-digit course number indicates the year in which the course is ordinarily taken. For example, ENGL A111 is ordinarily taken by first-year students, and ENGL A313 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. 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 transcripted certificates or associate’s, 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 course content. Students are expected to demonstrate learning skills commensurate with the appropriate course level, and to meet, prior to registration, 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’s 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's 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's 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.

**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 postgraduate 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, even by petition, and may not be delivered simultaneously (stacked) with credit courses of similar content.

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
-99 thesis

**Prerequisites**

Students are expected to meet prerequisites for all courses prior to registering. Prerequisites are listed with the course description and indicate the preparation and/or background necessary to undertake academic study. 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 into Banner that will allow the student to register. A faculty member may withdraw students who enroll without either prerequisites or faculty permission.

**Corequisites**

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

**Repeatable Courses**

Some courses, such as special topics, may be taken more than once for additional credit. Only those courses for which repeatability for additional credit is explicitly noted 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 credits and chronologically last grade earned are applied toward graduation requirements, prerequisite fulfillment and cumulative UAA GPA calculation.

The credit/no credit grading option cannot be selected when courses are to be 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 grade point average 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, 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 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.

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:
  1) approve the course of study;
  2) approve the credentials of other faculty involved;
  3) see that the material is presented in full and in a timely manner;
  4) evaluate student's progress in achieving student outcomes;
  5) generate course grade and see that the grades are turned in to the Office of the Registrar; and
  6) 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.

**Independent Study**
An independent study course consists of topics or problems chosen by the student with the approval of the department concerned, with the 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 which 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:
  1) approve the course of study;
  2) approve the credentials of other faculty involved;
  3) see that the material is presented in full and in a timely manner;
  4) evaluate student's progress in achieving student outcomes;
  5) generate course grade and see that the grades are turned in to the Office of the Registrar; and
  6) 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.

**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 if a class is being offered in stacked format.

**Cross-Listed 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 “cross-listed.” Students may enroll in cross-listed courses under the discipline and prefix of their choice. Catalog descriptions of these courses include the phrase “Cross-listed with.” The class information on UAOnline indicates if a class is being offered in cross-listed format.

**Internship**
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.

Internships may be arranged either through the student’s academic department or through the UAA Career Service Center. (See Chapter 6, Advising and Academic Support, for further information.) Registration deadlines follow independent study and directed study dates.
**Academic Standards & Regulations**

**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 & 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. For more information about these background checks and the crimes that bar an individual from being associated in any manner with a covered facility, see www.hss.state.ak.us/dph/CL/bgcheck/default.htm. 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.

**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 Chapter 12, Graduate Programs, 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 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. An advisor in the Advising and Counseling Center must approve overload requests for non-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's degree and 120 for a baccalaureate degree. To complete an associate's 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. Many degrees require more than the minimum number of credits.

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

**Special Students**
Additional policies apply to the following categories of students:
Secondary School Student Enrollment Policy
The University of Alaska Anchorage welcomes all students who meet the admissions requirements for certificate-, degree-, or non-degree-seeking status set forth in this catalog. The following policy applies to all applicants who are in the ninth, 10th, 11th or 12th grades and have not already earned their high school diplomas or GEDs.

Secondary School Student Admission and Registration Procedures
In order to promote academic success and to facilitate a smooth transition to postsecondary education, the following procedures have been established.

Application Process
www.uaonline.alaska.edu
Secondary school applicants may be admitted on a semester-by-semester basis to non-degree-seeking status only. Applications for admission to UAA are available online, at the University Center One-Stop, or at the community campuses.

Registration Process
To complete the registration process, secondary students must:
1. Pick up secondary student registration forms online, at University Center One-Stop, or at the community campuses; and
2. Obtain signed approvals on the Secondary School Student Signature Form from the local area school district designate. The designees will assess the student's social and academic maturity and readiness for success and safety in the courses requested. If the student is home-schooled, the home school organization director will serve as the local area school district designate;
3. Obtain signed approval of the course instructor on the Secondary School Student Signature Form for registration in a course. The course instructor’s approval is based on the instructor’s judgment that the student meets factors 1 through 4 in the University Determination section of this policy. Course instructors may require copies of high school transcripts and SAT, ACT or an approved test to determine appropriate course placement;
4. Complete a Secondary School Student and Parent/Guardian Statement of Understanding. This needs to be signed by the student and parent/guardian;
5. Complete a Proxy for Registration Form if someone other than the student is processing the request. This needs to be signed by the student and parent/guardian;
6. Submit forms named in Nos. 2 through 5 to the UAA Office of the Registrar or community campus director for review and final approval. The campus designee will review the student packet for completeness and assess the student’s social and academic maturity and readiness for success and safety in the courses requested;
7. Upon approval, students will be registered manually. Priority is given to degree-seeking students. Enrollment guidelines for qualified secondary school students are as follows:
   A. Enrollment during early registration may not exceed 7 credits per semester;
   B. Beginning the first day of class, students may increase enrollment up to 19 credits;
   C. Prerequisites for the courses requested must be met;
   D. Courses must be at the 200 level or lower (exceptions must be approved by the course instructor, department chair, and dean, director or designee);
8. Pay all tuition, course and student fees;
9. Adhere to UAA policies and procedures found in the catalog and student handbook;
10. Attain a grade of at least C (2.00 on a 4.00 scale) from each UAA course to receive permission to register for future semesters; and
11. Meet other program requirements established for secondary school students at the community campuses.

Student and Parent/Guardian Agreement
The registration process at UAA requires all secondary school student applicants and their parents/guardians to complete a Secondary School Student and Parent/Guardian Statement of Understanding. Signing the agreement signifies understanding of, and agreement with/to all of the following:
1. University work is much more rigorous and much less guided than secondary education coursework;
2. The courses taken will establish an official transcript that will follow the student throughout the student's college and/or university career;
3. Adult themes and diverse perspectives are essential to university materials and discourse;
4. A secondary school student who registers in university courses is responsible for maintaining at least a C (2.00 on a 4.00 scale) cumulative high school grade point average in order to register for college-level credit;
5. 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;
6. 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. The parent or legal guardian of a UAA-approved secondary school student under the age of 13 may monitor the classroom from the corridor serving the classroom if not registered for the course. Failure by the parent or legal guardian to directly supervise the student who is a child will result in the university administratively withdrawing the minor student from the class using the published withdrawal guidelines and refund schedules. A complete copy of the Guidelines and Procedures for Children and Minors on Campus can be found in the UAA Fact Finder/Student Handbook;
7. 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 and any registration- or payment-related deadlines.

A permanent university disciplinary record is established for all students who are found responsible for violating the Code of Conduct.

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, the legal or intellectual ability or the 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, in the judgment of the faculty member, the student:
   A. possesses the intellectual and academic resources to participate meaningfully on an equal footing with other students;
   B. has the emotional maturity to absorb and appreciate the significance of material covered in the course,
C. has the potential to behave appropriately so as to not disrupt the class or distract the faculty member or other students in the course.

D. is independent and will not require undue care, attention, or monitoring by the faculty member, and

E. possesses the physical ability to perform physical functions in the course without undue risk;

3. 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

4. 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. Contact the Office of the Registrar at the University Center One-Stop, specific academic programs or community campuses for information regarding the availability of these special programs.

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. (See the Admissions section of this chapter for more information.)

International Students
International students with permanent residency or immigrant visas may be admitted to either degree-seeking programs or non-degree-seeking options. Those with certain other types of visas, including B-1 or B-2 visitor visas, F-2 visas and those on the visa waiver program are prohibited from studying in a full course of study. Contact the international student advisor in the Office of Admissions for further details.

Senior Citizens
Alaska residents who are senior citizens may qualify for tuition and special fee consideration. (See Chapter 4, Tuition, Fees, and Financial Aid, for further information.)

Veterans, Service Members and Eligible Dependents of Veterans
Individuals in this category may qualify for tuition and special fee consideration. (See Chapter 4, Tuition, Fees, and Financial Aid, for further information.)

Non-High School Graduates
Individuals 18 and over who do not have a high school diploma or GED may still enroll in classes. See the Admissions section of this catalog for information.

Non-Degree-Seeking Students
Individuals in this category are not currently seeking a UAA certificate or degree. See the Admissions section of this catalog for information.

Residency
See Chapter 4, Tuition, Fees, and Financial Aid, for information.

Resident Credit
Resident credit at UAA is credit that is earned in formal classroom instruction, correspondence study, 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.

In general, credit earned at Prince William Sound Community College (PWSCC), UAF or UAS is not considered resident credit at UAA. However, if a program is delivered collaboratively with PWSCC, UAF and/or UAS, collaborative program credit from each participating institution is counted towards fulfillment of residency requirements.

Transfer credit, advanced placement credit, credit for prior learning, 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.

Fifteen resident credits are required to graduate with an associate's degree, and 30 resident credits are required to graduate with a baccalaureate degree. Students should refer to program descriptions in the catalog for additional requirements.

Catalog Year
Certificates and Associate's Degrees
Each student's catalog year is established when the student is first admitted into a certificate or degree program as a major or pre-major. A student's catalog year is adjusted if the student formally postpones admission (see Postponed Admission in this chapter) or executes a change of major (See Change of Major or Degree in this chapter).

Students may elect to graduate under the requirements of the catalog in effect at the time of formal acceptance to a certificate or associate's degree program or the catalog in effect at the time of graduation.

If the requirements for a certificate or associate's degree as specified in the entry-level 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 current admission and graduation requirements in effect at the time of readmission or graduation.

Baccalaureate Degrees
Students may elect to graduate under the requirements of the catalog in effect at the time of formal acceptance to a baccalaureate degree program or the catalog in effect at the time of graduation. 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 as specified in the entry-level catalog are not met within seven years of formal acceptance into the program, admission expires and the student must reapply for admission and meet the current admission and graduation requirements in effect at the time of readmission or graduation.

Age Limit of Credits
There is no universitywide 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.

Credit Requirements
Transfer credit equivalents vary among semester, unit and quarter universities. Courses that differ from equivalent UAA courses by less than one 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 request an Academic Petition from the academic advisor. Refer to the Certificate of Admission for academic advisor contact information. It is ultimately the responsibility of student to ensure that they complete the total number of credits required for their degrees.
**Transfer Credits**

Where possible, transfer credit is equated with UAA courses by matching the content, level of instruction, course activities and student outcomes. Only course work that clearly and demonstrably satisfies the intent of a UAA General Education Requirement 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 is completed after a student has been admitted as a certificate- or degree-seeking student.

**Criteria for Acceptance of Transfer Credit**

1. Transfer credits from United States institutions are accepted only if those institutions are accredited by 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 (100 to 499) 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 Chapter 12, Graduate Programs.

4. Students who plan to transfer credits from outside the United States must provide an official statement of educational equivalence from a recommended credential evaluation service. Contact the international student advisor in the Office of Admissions for details.

5. Transfer credits are not included in the student’s UAA grade point average (GPA) computation, except to determine eligibility for graduation with honors.

6. Challenge examinations and credit by examinations posted on another university’s transcript will not be considered for transfer credit (see National Credit by Examination in Chapter 8, Educational Delivery Methods and Nontraditional Credit, for information).

7. UAF and/or UAS resident credit posted on an official transcript is transferred to UAA subject to applicability toward degree requirements.

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 to the specific UAA academic departments for the courses to be reviewed (such as English Department for English 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 at the originating institution.

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

The General Education Requirements (GER) for baccalaureate degrees from the University of Alaska system are required by university regulation to have a common core of course work totaling a minimum of 34 credits. These include:

<table>
<thead>
<tr>
<th>Category</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written Communication Skills</td>
<td>6 credits minimum</td>
</tr>
<tr>
<td>Oral Communication Skills</td>
<td>3 credits minimum</td>
</tr>
<tr>
<td>Humanities/Social Sciences/Fine Arts</td>
<td>15 credits minimum</td>
</tr>
<tr>
<td>At least 3 credits in the arts</td>
<td></td>
</tr>
<tr>
<td>At least 3 credits in the general humanities</td>
<td></td>
</tr>
<tr>
<td>At least 6 credits in the social sciences</td>
<td></td>
</tr>
<tr>
<td>from two different disciplines</td>
<td></td>
</tr>
</tbody>
</table>

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 towards 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 the 34 credits for their 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 which meet the GER categories at that institution and which can thus be guaranteed to transfer as described above. Students who have received a baccalaureate degree from UAS or UAF will be considered as having met UAA’s General Education Requirements.

**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. Undergraduate degree-seeking students are classified as follows:

- **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.

**Academic Petition**

Deviations from academic policies or requirements must be approved by academic petition. Petition forms may be obtained from the school or college or from the Office of the Registrar.

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. Petitioned courses, other than those from UAF or UAS, must meet transfer credit criteria for acceptance prior to final approval.

Final authority to deny or approve petitions pertaining to school or college requirements rest with the dean or director of the school or college. Petitions pertaining to GERs 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 cannot be petitioned to meet a GER.

**Registration**

Registration is the process of signing up and paying for classes for a particular semester. Students may attend classes in a course offered at UAA only after they have properly completed the registration process for that course. Class offerings, dates, times, deadlines and other important registration details specific to each semester are published in that semester’s class listing. Not every course listed in this catalog is offered each semester.
Students may register in person or use the UAOnline web registration system during the dates published in that semester’s class listing. 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.

For fall and spring semesters, a two-week add/drop period begins on the first day of the semester. Registration for semester-length courses 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.

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 at www.uaa.alaska.edu/records/calendar.cfm for specific deadlines.

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 or auditing courses may affect eligibility for current and future financial aid. Students receiving financial aid should check with the UAA Office of Financial Assistance and Information before dropping or auditing a course. (See Chapter 4, Tuition, Fees and Financial Aid, for further information.)

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.

Official Communication
All communication related to registration and enrollment activities will occur through the official UAA-assigned email. Students should be careful to keep this account clear and review the correspondence received there regularly.

Registration by Proxy
Students unable to register in person may have a proxy register for them if they provide the proxy with a signed Registration by Proxy Form. This form is available online or from the University Center One-Stop. The proxy must follow the policies and calendar governing registration. Proxy registrations are not accepted without written permission from the student.

Facsimile (Fax) Transmission
Documents sent via fax are held to the same dates and deadlines and are processed after original documents. Documents received after 5 p.m. are considered as being received by the following business day. Faxes are not guaranteed nor will they be confirmed. Students and departments are encouraged to retain the record of transmission.

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 does not discriminate on the basis of this information.

Change of Name
A student’s name on official records at UAA must be the student’s full legal name. A Change of Name Form may be processed through the Office of the Registrar and must be supported by legal documentation, i.e., Social Security card, driver’s license or a court order. UAA employees (past or present) must present their Social Security card.

Change of Address
Currently enrolled students may update their address through UAOnline or by completing the appropriate form. Official notification of change of address is necessary for accurate mailing of correspondence, transcripts and information about graduation requirements.

Social Security Number
The University of Alaska has established student identification numbers and moved away from the practice of using Social Security numbers as default ID numbers. 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 will be included on official transcripts for identification matching purposes.

Registration Changes
It is the responsibility of the student to become familiar with UAA policies, procedures and deadlines. Refer to the academic calendar at www.uaa.alaska.edu/records/calendar.cfm for specific deadlines. Add, drop, withdrawal, credit/no credit and audit deadlines for trimester courses and courses other than full semester-length will be prorated according to the length of the class. Students are expected to register only for course sections which they plan to attend and to complete all courses for which they register. (See the Table for Add/Drop, Withdrawal, Credit/No Credit and Audit in this chapter for more information.)

Faculty Signature
Some course descriptions include instructor permission as a prerequisite. Students must obtain the permission of the faculty member instructing the course section or their designee before registering.

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.

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. Audit-to-credit changes are not allowed after the second week of the semester. During weeks three through 12 of the semester, credit-to-audit changes require faculty signature. Credit-to-audit changes are not allowed after week 12 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.

Continuous Registration
Continuous registration is expected of graduate students. (See Chapter 12, Graduate Programs, for further information.)

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 may not be notified, so it is advisable to check their schedules regularly.
Course Performance
Successful performance in individual courses contributes to overall satisfaction with the educational experience at UAA and ultimately will provide for successful completion of a course of study or degree.

Faculty members design course activities that assist students to acquire, comprehend, and apply knowledge and skills in a variety of subject areas. The course syllabus is designed to provide information about the structure of the course and methods of determining successful course completion.

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.

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 an official university absence as described below may be appealed under the Academic Dispute Resolution Procedure. (See Chapter 5, Student Freedoms, Rights and Responsibilities, for more information.)

Official University Absences
Students participating in official intercollegiate activities on behalf of UAA, including but not limited to competition in athletics, forensics 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.

Student-Initiated Drop or Withdrawal
Students may drop a class according to the information found in the online class listing 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 last deadline for dropping a class, students may withdraw from the class through the 12th week of class (for fall and spring semesters), prorated for trimester courses or courses other than the full 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 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 which a student must meet include all catalog pre- or co-requisites for the course, as well as other registration restrictions, and attendance requirements established for the class. Faculty may initiate a withdrawal for a student in audit status for a class according to criteria for audit status distributed in the class syllabus.

Faculty are not obligated to initiate drops 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.

Participation and Preparation
Preparation for a class begins by having the necessary prerequisites for the class and obtaining appropriate advising and counseling regarding enrollment in a class. Active participation in the class necessitates a willingness to prepare for classes by reading materials assigned for the class in either print or electronic format, participating in classroom discussion and asking questions of the instructor about material presented. Participation includes a willingness to evaluate the class in a constructive manner at the completion of the course.

Course Materials
Having access to the materials assigned for the course improves success in a course. Therefore, it is the student’s responsibility to have available all the materials, books, and notes for the course.

If materials are in an electronic format, students are responsible for accessing them through personal computers or in the computer labs on campus.

Assignments and Testing
Students should be aware of specific assignments, the scope of the assignments, due dates, grading criteria and the application of the assignment to the course grade. Students should clarify these points with the faculty member prior to submitting the assignment for grading.

Students should be aware of testing policies as written in the course syllabus. Students are responsible for arranging alternate testing times and accommodations with faculty members, if they are allowed these options, prior to the test date. This includes needs for Disability Support Services and absences on the day of the examination for illness or family issues. Students should clarify how to address alternate testing with the individual faculty member prior to the first examination.

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, policies within the course, and procedures that govern the delivery of the course.

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.

Course Completion
Grading
The grades that appear on a student’s transcript are as follows:

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 GPAs.
- 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
The following registration activity deadlines pertain to traditional semester-length courses (15 weeks). Any course which is not either full term first eight weeks, second eight weeks or trimester, falls under miscellaneous. Students must complete business in person before 5 p.m. of the deadline day or by 11:59 p.m. online.

### ADD/DROP, WITHDRAWAL, CREDIT/NO CREDIT, AND AUDIT (Traditional semester-length courses):

<table>
<thead>
<tr>
<th>Desired Change</th>
<th>Week 1 of Semester</th>
<th>Week 2 of Semester</th>
<th>After Week 2 of Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADD CLASSES OR LATE REGISTER</td>
<td>Faculty signature required if course closed.</td>
<td>Faculty signature required.</td>
<td>Not permitted.</td>
</tr>
<tr>
<td>Desired Change</td>
<td>Begin 7th calendar day of Semester through Week 2 of Semester DROP</td>
<td>Weeks 3 through 12 of Semester WITHDRAWAL</td>
<td>After Week 12 of Semester</td>
</tr>
<tr>
<td>FACULTY INITIATED DROP OR WITHDRAWAL (OPTIONAL)</td>
<td>Form filed by faculty member with the Office of the Registrar. Course will not appear on student transcript.</td>
<td>Form filed by faculty member with the Office of the Registrar. Course will appear on student transcript with a grade of “W.”</td>
<td>Not permitted.</td>
</tr>
<tr>
<td>Desired Change</td>
<td>Weeks 1 through 2 of Semester DROP</td>
<td>Weeks 3 through 12 of Semester WITHDRAWAL</td>
<td>After Week 12 of Semester</td>
</tr>
<tr>
<td>DROP OR WITHDRAW</td>
<td>No faculty signature required. Course will not appear on student's transcript. Students are not permitted to drop or withdraw from a course after it has ended.</td>
<td>No faculty signature required. Form filed with the Office of the Registrar. Courses will appear on student's transcript with a grade of “W.”</td>
<td>Not permitted.</td>
</tr>
<tr>
<td>Desired Change</td>
<td>Weeks 1 through 2 of Semester DROP</td>
<td>Beginning Week 3 of Semester WITHDRAWAL</td>
<td>Beginning of Final Exam Week</td>
</tr>
<tr>
<td>TOTAL WITHDRAWAL FROM UNIVERSITY</td>
<td>No faculty signature required. Form filed with the Office of the Registrar. Courses will not appear on student's transcript.</td>
<td>No faculty signature required. Form filed with the Office of the Registrar. Courses will appear on student's transcript with a grade of “W.”</td>
<td>Students are not permitted to drop or withdraw from a course after it has ended.</td>
</tr>
</tbody>
</table>

Please go to [www.uaa.alaska.edu/records/calendar.cfm](http://www.uaa.alaska.edu/records/calendar.cfm) for specific dates.
**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.

- CR Indicates credit received for course
- NC Indicates no credit received for course
- DF Deferred indicates course requirements cannot be completed by end of semester. It is to be used for courses which 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 course work 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.
- P Indicates passing work
- NB Indicates there is insufficient progress or attendance for evaluation to occur
- NP Indicates work that is not passing (no credit received)

**Other Designations**

These designations do not carry grade points and are not used to calculate GPAs.

- AU Audit; indicates enrollment for information only; no credit received.
- W Indicates withdrawal from 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’s 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 students later change 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/NC). Students are awarded credit for the course if their final grade is P or C or higher. A grade of CR is entered on the student’s transcript.

For performance comparison only, a grade of CR (credit) 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 submitting the necessary paperwork to 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 project (such as thesis, project, research courses, internships, etc.) typically requires more than a 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 timeframe 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 if there is insufficient student progress and/or attendance for evaluation to occur. No credit is awarded, nor is NB calculated in the GPA. 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. A course receiving a NB grade will not be evaluated as a retaken course for academic record purposes. 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/NC) 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. However, P/NC 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 (See Chapter 5, Student Freedoms, Rights, and Responsibilities, for further information).
Grade Point Average Computation (UAA GPA)
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 Hrs) 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 points and for the second would be two points. 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.

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

Academic Standing

Good Standing
Undergraduate students are in good standing when they have a UAA cumulative 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’s, 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
Continued on 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. Those students’ admission status will be changed to non-degree-seeking. Students who have lost certificate or undergraduate 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 policy below).

Reinstatement
Students who have lost certificate or undergraduate degree-seeking status may continue to attend UAA as non-degree-seeking students. After completing a minimum of 12 credits at UAA and/or another regionally accredited post-secondary institution in 100-level or higher courses with a GPA of 2.00 or higher, students may apply for reinstatement to UAA. If approved, reinstated students must then reapply for admission to a certificate or undergraduate degree program. A reinstated student whose UAA cumulative GPA is less than 2.00 (C) will begin the semester on probation. Application for Reinstatement Forms are available from University Center One-Stop.

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/Degree Form and process to request re-admission or admission to a new program. Forms are available online or from the University Center One-Stop.

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 appearing in the UAA Dean’s List and the Chancellor’s List will be released unless a student places a directory hold on their records.

Dean’s List
To be eligible for 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, 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 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, temporary grades of I (incomplete) or DF (deferred) will prevent a student from being eligible for the Chancellor's List.

Program Completion

Graduation Application

UAA issues diplomas three times a year: in January after the fall semester, in May after the spring semester, and in September after the summer session. 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 online and pay the required fee to the Office of the Registrar.

Application for Graduation deadlines are July 1 for summer graduation, November 1 for fall graduation and March 1 for spring graduation. If the student meets all requirements by the end of the semester, the certificate or degree is awarded after completion of the semester. Students are held responsible for meeting all academic regulations and degree/certificate requirements.

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

Students who apply for graduation and who do not complete their degree/certificate requirements by the end of the semester in which they have been approved to graduate, but are within six credits of completion, will have their application request changed to the following semester by the Office of the Registrar. 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's and baccalaureate degree-seeking students must first earn a cumulative GPA of 3.50 or higher in all college work attempted at UAA. A transfer student who is earning an associate's 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 the students' entire academic history. All grades and credits earned will be included in determining eligibility to graduate with honors (Ds, Fs, retaken courses, courses lost in academic bankruptcy, etc.). In addition, a student transferring coursework and grades from an international institution must have a minimum of 70 percent of their coursework submitted with letter grades to be eligible to graduate with honors.

Honors are awarded to associate's 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 for summer and fall and who anticipate completion in spring semester during an academic year are invited to participate in the annual commencement ceremonies in May.

Exception to University Policy for Records and Registration

A student, or person with legal authority to act on behalf of a student, may petition for an exception to university policy for records and registration. Petitions are not automatically granted, but will be considered in light of the criteria set out below and individual circumstances, as demonstrated in the documentation provided.

1. The petitioner must submit for review a signed petition and consent to release of information form, which is provided for this purpose. The form and petition must be submitted to the University of Alaska Anchorage Office of the Registrar, University Center, P.O. Box 141629, Anchorage, AK 99514-1629.

2. Only petitions submitted by the student or by a person with legal authority to act on behalf of the student will be considered.

3. A petition for exception must be received no later than one year following the semester in which the course was offered. Petitions that are not received within this time frame may not be considered.

4. Decisions will be made solely on supporting documentation provided.

5. A petition 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 an exception request.

6. Granting of an exception to policy for withdrawal or dropping of courses does not necessarily mean a refund of tuition. Refund requests are forwarded to the Petition for Refund Committee for further review. Refunds for self-support classes are generally not allowed.

7. Student fees are mandated by the Board of Regents and cannot be petitioned for refund.

8. Petitions will be reviewed periodically and the number of petitions being reviewed will determine the time for response. A minimum of six to eight weeks should be allowed for review.

9. Appeals of an adverse decision must be in writing, must state the basis for the appeal, and must be received by the registrar within 10 working days of the day the decision is mailed or otherwise distributed to the student. Appeals should be based on new information not available at the time of the original review, not simply because the student disagrees with the decision reached. Appeals may be faxed, delivered in person, or mailed to: University of Alaska Anchorage Office of the Registrar, University Center, P.O. Box 141629, Anchorage, AK 99514-1629.

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 Fact Finder/Student Handbook and at www.uaa.alaska.edu/studentaffairs/Fact-Finder.cfm.
Educational Delivery Methods & Nontraditional Credit

Educational Media Services (eMedia)
Distance Education Gateway
Military Programs
Nontraditional Credit
Educational Media Services (eMedia)
(907) 786-4496
Toll free (888) 553-2760
Fax (907) 786-1008
www.uaa.alaska.edu/facultytechnologycenter
ayftp@uaa.alaska.edu

Educational Media Services supports both distance learning and technology-enhanced learning for the UAA campus community. EMedia’s mission is to stimulate learning in and facilitate the use of technology in the pursuit of teaching and learning at UAA.

EMedia supports the specific needs of instructors involved in teaching with technology at UAA. UAA has particular interest in expanding the use of technology-enhanced courses to better meet the changing needs of today’s students. This includes both distance-delivered courses as well as traditional face-to-face courses that use technology as part of the course.

EMedia is located in the Faculty Technology Center on the second floor of the Consortium Library, Suite 215.

Distance Education Services
(907) 786-4646, Option 3
Toll Free (877) 633-3888, Option 3
Fax (907) 786-6000
Student Support: www.uaa.alaska.edu/distanceeducation

Distance Education Services offers courses that are convenient for college students with busy schedules. Distance education courses often provide flexibility and access for students who live in geographically remote areas and are unable to attend classes on campus. Students must possess high motivation and self-discipline in order to successfully complete distance courses.

Distance courses may apply toward UAA degree programs in the same way as on-campus courses. No distinction is made on a student’s transcripts between distance and on-campus courses. Most distance courses are delivered along the same semester timeline as on-campus courses.

Every UAA distance education course requires that you have a computer and a reliable Internet connection. Some courses have audio or eLive conferencing components, so it is important to check the technological requirements of a distance course before registering. All courses have a computer component to them.

Many different technologies are used to deliver distance education. Most courses use a combination of the following:

- Audio conferencing
- Elive conferencing
- Streaming media
- Web-based instruction

Proctoring Services
(907) 786-4500

Most distance learning students are required to contact an approved proctor at an assigned location before taking required course examinations. Individuals who are enrolled in non-UAA distance learning courses can arrange for proctoring services through the Advising and Testing Center, which meets the standard set by the National College Testing Association for test proctoring services. The proctor fee is $30 and covers up to three hours of testing. For more information on proctor services, please call the Advising and Testing Center at (907) 786-4500.

Distance Education Gateway
www.alaska.edu/distance

The Distance Education Gateway provides access to current course information for distance-delivered classes throughout the University of Alaska system. Contact information is available for each of the university campuses to assist in registering for a course.

The University of Alaska is committed to making education available to the distributed population of the state by extending its reach to students through the diverse offering of distance-delivered courses supported by the various UA campuses around the state.

Military Programs

The University of Alaska Anchorage 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 Reserves personnel, spouses, dependents, and DOD civilian personnel.

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

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

Courses at Elmendorf are offered at:
Elmendorf Air Force Base
3 FSS/DPE 4109 Ballard Avenue, Suite 107
Elmendorf AFB, Alaska 99506
(907) 753-0204

Courses at Fort Richardson are offered at:
Fort Richardson
Building 7, Chilkoot Avenue
Ft. Richardson Army Post, Alaska 99505
(907) 428-1228

Nontraditional Credit

Nontraditional credit evaluations are available for accepted degree-seeking UAA students. Documenting military or occupational training, taking local or national examinations, are some of the methods used. The specific processes are listed below.

Language Credit by Placement

An accepted, degree-seeking UAA student who has completed in residence a Department of Languages UAA catalog course (A102-A302) with a grade of B or better is eligible to receive credit for the two immediately preceding courses, if any, up to a total of 8 credits. In order to receive credit, the student must complete the appropriate form from the Office of the Registrar and pay an administrative fee.

Certified Experience Credit

This program allows crediting of certified, but not accredited, institution-sponsored learning. With documentation, the university may award elective credit or specific course credit.
National/state/local certificates: Persons who have met certain standards and/or passed certain tests may be awarded academic credit. Credit agreements are currently in effect for the following:

- Alaska State Troopers
- Anchorage Police Department
- Apprenticeship Technologies
- Certified Dental Assistant (CDA) by Dental Assisting National Board Examination (DANB)
- Certified Professional Legal Secretary (CPLS) Examination
- Certified Professional Secretary (CPS) Examination
- Child Development Certificate
- Federal Aviation Administration
- Federal Wildland Fire Management Training Program
- Firefighter Certifications (IFSAC)
- Industrial Firefighter Certifications
- National Council Licensure Examination (NCLEX)
- National Occupational Competency Testing Institute (NOCTI) Examination
- NWCG Certifications
- Protection Engineers and Fire Protection Systems
- Southcentral Foundation Dental Assisting Training Program
- State of Alaska EMT/Paramedics
- State of Alaska Firefighter Certifications
- U.S. Department of Labor Bureau of Apprenticeship and Training

Business or industry credit: Recommendations for business or industry credit equivalents are found in the American Council on Education's Business or Industry Credit: Recommendations for Business or Industry Guide.

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 or the Advising and Testing Center. 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, DANTES, 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 which 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.
10. Students may not request local credit by examination for an audited course until the following academic year.

Military Credit

Up to 8 elective credits may be awarded to students who have completed one calendar year of active duty military service.

In addition, 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.

No more than 15 semester credits may be applied toward an associate's degree and no more than 30 semester credits may be applied toward a baccalaureate degree. Exceptions are granted only to students enrolled in the SOC programs.

The Servicemembers Opportunity Colleges (SOCAD and SOCOAST) program allows active-duty personnel to finish approved associate's and baccalaureate degree programs without losing credits as they transfer during their military careers.

Eligibility for entrance to these programs requires 3 semester credits to be completed in residence at UAA for the associate's program and 6 semester credits in residence at UAA for the baccalaureate program. These credits must be 100-level or above with grade(s) of C or higher.

To graduate from these programs, the residency requirement is 3 semester credits for the two-year programs and 24 semester credits for the four-year program and an overall GPA of 2.00.

To have your military credits evaluated for acceptance to UAA, please visit www.uaa.alaska.edu/admissions/forms.cfm. Find the section titled "Transfer & Credit Evaluation" and click on the link titled "Military Training Evaluation Request." This form gives specific instructions on all the necessary documentation UAA requires to complete an evaluation of your military service credits. You must complete the request form and submit it to Enrollment Management.

National Credit by Examination

UAA awards credit for satisfactory performance on most national examinations. In most cases, passing scores and credits awarded for the following national examinations are based on the most current American Council on Education recommendations or department-approved scores.

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

Advanced Placement Program (AP®)

UAA awards credit for satisfactory performance for scores of 3, 4, or 5, depending on the individual test on College Board Advanced Placement Examinations. These examinations are normally completed by students during their senior year in high school. A student may receive credit for more than one Advanced Placement examination.

A list of Advanced Placement examinations showing the current equivalency to UAA courses, the number of credits awarded, and the minimum required scores for each examination may be found at www.uaa.alaska.edu/records/ice/advancedplacement.cfm.

College-Level Examination Program (CLEP)

An official CLEP transcript must be submitted to the Office of Admissions.

Examinations may not be repeated for a minimum of six months. The list of CLEP examinations showing the current equivalency to UAA courses,
the number of credits awarded, and the UAA minimum required scores for each examination may be found at www.uaa.alaska.edu/admissions/forms.cfm.

Credit awarded for CLEP 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.

**DANTES/USAFI Examinations**
Credit may be awarded for successful completion of the Defense Activity for Nontraditional Education Support (DANTES) examinations. Credit awarded for 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. An official copy of the DANTES/USAFI transcript must be submitted to the Office of Admissions (www.uaa.alaska.edu/admissions/forms.cfm).

**Excelsior College Examination**
Credit may be awarded for successful completion of the Excelsior College Examination. Credit awarded for Excelsior 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. An official copy of the student's examination scores must be sent to the Office of Admissions (www.uaa.alaska.edu/admissions/forms.cfm).

**International Baccalaureate**
UAA awards credit for satisfactory performance (a score of 5 or higher), on the International Baccalaureate Higher Level Examinations. An official copy of the student's higher level examination scores must be sent to the Office of Admissions.

**National Occupational Competency Testing Institute (NOCTI) Examination**
(907) 786-6400
NOCTI tests may be used to document competency in various occupational fields (e.g., electronic communication, welding, diesel mechanic) as an option for students who want to enter certain Community & Technical College (CTC) degree programs. Successful completion of the NOCTI test may result in awarding students up to 30 semester credits toward the technical competency requirement of the applicable AAS degree. Completion of the technical competency requirements is accomplished as prescribed by the applicable CTC department. A fee is charged. Applicants may call for further information.
Academic Preparation

College Preparatory & Developmental Studies (CPDS)
(907) 786-6856
www.uaa.alaska.edu/ctc/cpds

The mission of the department is to help underprepared, linguistically diverse and nontraditional students develop the academic and language skills necessary to pursue successfully their lifelong learning goals. The department offers composition, English-as-a-second-language (ESL), mathematics, reading and study skills courses that prepare students for courses to meet their General Education Requirements (GERs) and for further study. The department uses placement and retention advising, tutoring and a developmental teaching philosophy to help students succeed.

For more information about CPDS, see the Community & Technical College section of Chapter 10, Undergraduate Programs.

Professional Development & Continuing Education

College of Education

Professional and Continuing Education (PACE)
(907) 786-1933
http://coe.uaa.alaska.edu/pace
pace@uaa.alaska.edu

Quality professional learning enriches the knowledge and skills of educators and improves the educational experiences of all students. Therefore, the office of Professional and Continuing Education 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.

Community & Technical College

Workforce and Professional Education (WPE)
(907) 694-3313
www.uaa.alaska.edu/ctc/eagleriver

WPE matches business and individual needs with appropriate CTC resources to deliver high-quality, short-term education and training for professionals in career and technical fields. Programs can be custom-developed for requesting organizations and can include regular credit, noncredit and continuing education unit (CEU) courses.

Centers and Institutes Offerings

In addition to the college-specific professional development and continuing education courses, several centers and institutes at the university offer courses related to their foci and missions. Curriculum for such courses is approved by the university. Schedules depend on the demand and availability of qualified faculty. They are arranged through the respective center or institute. Some centers and institutes focus on training and are discussed in Chapter 2, Centers and Institutes.

Tech Prep Program

(907) 786-6464
www.uaa.alaska.edu/ctc/programs/techprep/index.cfm

Tech Prep is a partnership between UAA, secondary school districts, Alaska Vocational Technical Center, Job Corps and other educational institutions. It recognizes technical and related academic preparation and, where possible, work-based learning in a specific career field.

Tech Prep involves a sequential course of study without duplication of coursework that will lead a student to a certificate, credential, apprenticeship, associate's degree or baccalaureate degree.

Tech Prep offers secondary school students and other individuals in a technical field of study an opportunity to receive lower-division college credit towards a UAA certificate or undergraduate degree. Students may receive UAA credit by successfully completing specific courses that have been approved for articulation by UAA. Courses must meet UAA curriculum standards to be approved for Tech Prep. Motivated, able learners will greatly benefit from this outcomes-based program.

General Information

Credits

Most students receiving Tech Prep credit are concurrently registered in a course at the partnership institution and in UAA.

UAA credit received through Tech Prep will be considered resident credit and will be included in the student’s UAA grade point average (GPA).

If Tech Prep is delivered collaboratively with UAF and/or UAS, credit from each participating institution will be counted toward fulfillment for residence requirements.

There is no limit on the total number of UAA credits a student may receive through Tech Prep. However, there may be limits to the number of those credits that may apply to a specific degree. Where possible, Tech Prep courses are articulated to UAA lower division (100- or 200-level) requirements for specific programs. In some cases, courses may be articulated to UAA lower division elective credit.

Nontraditional Transfer Credits (Nonconcurrence)

Students who did not take advantage of Tech Prep while attending the partnership institution may apply for nontraditional transfer credit up to two years after completing the partnership course, providing the courses were articulated and approved at the time of completion. To be considered for nontraditional transfer credit, students must first apply and be accepted as a certificate or degree-seeking student at UAA, complete the Tech Prep Request for Nontraditional Transfer Credit Form, provide UAA with an official partnership transcript reflecting course completion and final grades received in the articulated course, receive a grade of C or higher in the partnership course, and pay an administrative fee.

Not all Tech Prep courses are approved for nontraditional transfer credit, and UAA reserves the right to reject the application or to require an examination before awarding nontraditional transfer credit. Credit awarded through the nontraditional transfer credit process will not be reflected as resident credit and will not be included in the student’s GPA calculation.
Curriculum
Academic Programs
General University Requirements
for Undergraduate Certificates & Associate’s Degree Programs
Associate of Applied Science Degree Requirements
Multiple Associate’s Degrees or Concurrent Majors
Double Majors for AAS Programs
Baccalaureate Degrees Concurrent Baccalaureate Programs
Second Baccalaureate Degree Interdisciplinary Baccalaureate Degree
Undergraduate Program Descriptions
Undergraduate Programs

The Curriculum

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 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 Chapter 6, Advising and Academic Support, 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, and completion of program requirements.

Academic Programs

Certificates and Occupational Endorsements

The university offers two types of certificates at the undergraduate level:

- 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.

- Occupational endorsements are certificates requiring 29 or fewer credits to complete. These certificates provide the specialized knowledge and skills needed in specific employment sectors.

Both of these certificate types are noted on transcripts. Coursework used to complete each type may also apply to associate's and baccalaureate degrees that the student may pursue.

Associate's Degrees

The University of Alaska Anchorage offers two types of associate’s 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 of this chapter.

- 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 degrees are designed to provide a foundation for a specific related baccalaureate degree. Students in AAS degree 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, are organized programs of study that consist of a minimum of 120 credits. In addition to providing extensive preparation in a specific knowledge area, the content and activities found in the baccalaureate degree promote in students the abilities to reason, research and analyze, and to form, support and communicate ideas and opinions.

Baccalaureate degrees are offered at UAA in over 50 major study areas.

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 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.

Regional Studies

Regional studies programs offer students opportunities to develop the academic insight, knowledge and technical skills needed to deal effectively with the far-reaching challenges of contemporary global society. At UAA, regional studies are informed by national developments, international contexts and comparative studies, and their aim is to prepare students to become educated world citizens by providing courses which draw upon the insights of many academic disciplines and by recognizing the cultural diversity that exists within the North Pacific region.

Post-Baccalaureate and Graduate Programs

Post-baccalaureate and graduate certificates and degrees are described in Chapters 11 and 12.

General University Requirements for Undergraduate Certificates and Associate's Degree Programs

General University Requirements have been established for all certificate and associate's degree programs at UAA.

General University Requirements for Undergraduate Certificates

1. Students must be admitted to the program and must complete the certificate program requirements listed in the program section of this chapter.
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 for an undergraduate certificate.

5. Students may elect to complete under the requirements of the catalog in effect at the time of formal acceptance to a certificate program or the catalog in effect at the time of graduation.

6. If the requirements for a certificate 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.

7. Students may earn more than one certificate by completing all requirements for each additional program.

8. Undergraduate certificates that share a common core must differ by at least 6 credits.

General University Requirements for Occupational Endorsement Certificates

1. Students must be admitted to the program and must complete the certificate program requirements listed in the program section of this chapter.

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. Students may elect to complete under the requirements of the catalog in effect at the time of formal acceptance to a certificate program or the catalog in effect at the time of graduation.

6. If the requirements for a certificate 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.

7. Students may earn more than one certificate by completing all requirements for each additional program.

8. Occupational endorsement certificates must differ by 3 or more credits.

Note: Not all occupational endorsement certificates are eligible for federal financial aid.

General University Requirements for the Associate of Arts Degree

The following requirements must be met for the Associate of Arts degree:

1. Students must be admitted to the program and must complete the degree requirements listed in the program section of this chapter, under the College of Arts and Sciences.

2. Students must earn a minimum of 60 credits for an AA degree.

3. Students must complete at least 15 credits in residence. 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.

5. Students may elect to graduate under the requirements of the catalog in effect at the time of formal acceptance to an associate degree program or the catalog in effect at the time of graduation.

6. If the requirements for an associate degree 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.

7. Students must complete a minimum of 60 credits at the 100 level or above, including at least 20 credits at the 200 level or above.

8. No more than 15 military credits can be applied to an AA degree.

General University Requirements for Associate of Applied Science Degrees

The following requirements must be met for Associate of Applied Science degrees:

1. Students must be admitted to the degree program and complete the General Course Requirements that follow this section.

2. Students must complete the major degree requirements listed in the program section of this chapter. Each program is listed under its offering college.

3. Students must earn a minimum of 60 credits for an AAS degree.

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's degree programs may require higher GPAs.

6. Students may elect to graduate under the requirements of the catalog in effect at the time of formal acceptance to an associate's degree program or the catalog in effect at the time of graduation.

7. If the requirements for an associate's degree 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.

8. All courses for an AAS degree must be at the 100 level or above.

9. No more than 15 military credits can be applied to an Associate of Applied Science degree.

Associate of Applied Science Degree Requirements

In order to receive an Associate of Applied Science degree, students must be admitted to the program and must satisfy:

1. General University Requirements for Associate of Applied Science Degrees;

2. General Course Requirements for Associate of Applied Science Degrees in oral and written communications (9 credits total, see below).

Advising note for AAS students who plan to pursue a four-year degree: AAS students who intend to pursue a baccalaureate degree should consult a faculty or academic advisor for appropriate course selections.

A. Oral Communication Skills

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM A111</td>
<td>3</td>
</tr>
<tr>
<td>COMM A235</td>
<td>3</td>
</tr>
<tr>
<td>COMM A237</td>
<td>3</td>
</tr>
<tr>
<td>COMM A241</td>
<td>3</td>
</tr>
</tbody>
</table>

B. Written Communication Skills

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL A111</td>
<td>3</td>
</tr>
<tr>
<td>CİOS A260A</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A211</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A212</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A213</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A214</td>
<td>3</td>
</tr>
</tbody>
</table>

2. General Course Requirements in designated disciplines. Choose humanities*, math, natural sciences or social sciences courses from the General Course Requirement Classification List for Associate of Applied Science Degrees (see below.) Courses chosen must be at or above the 100 level.

*Any English course used to satisfy the humanities general requirement must be different from the written communications skills requirement and have a course number higher than ENGL A111.

4. Degree-Specific Requirements

   (See degree programs under each college in this chapter.)
All courses must be at the 100 level or above.

**Total Minimum Credits**

- **Social Sciences**
- **Mathematics and Natural Sciences**
- **Humanities**

The major requirements and measure student performance in those classes. 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 major requirements and measure student performance in those classes.

**General Course Requirement Classification List for Associate of Applied Science 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, natural science, mathematics or social science).

**Humanities**
- Alaska Native Studies
- American Sign Language
- Art
- Chinese
- Communication
- Creative Writing and Literary Arts
- Dance
- English
- French
- German
- History
- Humanities
- Italian
- Japanese
- Korean
- Languages
- Latin
- Liberal Studies Integrated Core
- Linguistics
- Music
- Philosophy
- Political Science (PS A331, A332, and A333 only)
- Russian
- Spanish
- Theatre

*Any English course may be used to satisfy the humanities general requirement, but must be different from the written communications requirement and have a course number higher than ENGL A111.*

**Mathematics and Natural Sciences**
- Anthropology (ANTH A205 only)
- Astronomy
- Biological Sciences
- Chemistry
- Computer Science
- Environmental Studies (ENVI/GEOG A211 only)
- Geography (ENVI/GEOG A211/A211L only)
- 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 (except ENVI/GEOG A211/A211L)
- Guidance
- Health Sciences (HS A220 only)
- Human Services (HUMS A106 only)
- International Studies
- Journalism and Public Communications (JPC A101 only)
- Justice (JUST A110 and JUST A330 only)
- Liberal Studies Social Sciences
- Paralegal Studies (PARL A101 only)
- Political Science
- Psychology
- Social Work (SWK A106 and SWK A243)
- Sociology
- Women's Studies

**Multiple Associate’s Degrees or Concurrent Majors**

The Associate of Arts degree (AA) is intended to provide a broad education. Therefore, it includes no major specialty, and students may earn only one AA degree.

Associate’s 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.)

Students must submit a separate Application for Admission for each degree they expect to receive. Admission forms are available from the Office of Admissions (www.uaa.alaska.edu/admissions/index.cfm).

Students seeking a second associate’s 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 posing of the primary degree. Students seeking both an associate’s 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 must satisfy the catalog requirements in effect at the time of acceptance into the degree program(s) or the catalog requirements in effect at the time of graduation.

**Double Majors for AAS Programs**

The Associate of Applied Science (AAS) degree is intended to provide specialized education. Therefore, it does include a major specialty and students may earn more than one AAS degree.

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 Associate of Applied Science degree program (such as Welding and Automotive Technology).

Students must apply and be accepted into each major program. Students may request a double major at the time of initial admission to UAA or add a major at a later date through the Change of Major degree process. Forms are available from Enrollment Management One-Stop or online at www.uaa.alaska.edu/admissions/forms.cfm. Students must satisfy the General University Requirements, the General Course Requirements, and both sets of major requirements.

Students must satisfy the catalog requirements in effect at the time of acceptance into the major(s), or the catalog requirements in effect at the time of graduation.

A double major is not applicable to the Associate of Arts degree.

**Transfer Students**

Students who have received a baccalaureate degree from another regionally accredited college or university and who want to obtain an associate’s degree from UAA must:

1. Meet program admission requirements;
2. Complete the General University Requirements but not the General Education or General Course Requirements; and
3. Complete the Major Program Requirements.

**Baccalaureate Degrees**

**The Academic Major**

Baccalaureate degree-seeking students select a major discipline which reflects their interests, academic talents and professional goals, and in consultation with academic advisors declare themselves to be majors in the selected discipline. Students select courses within the declared discipline, which in combination with other successfully completed university requirements, lead to a UAA baccalaureate degree. Students may declare a major, a double major, and/or an interdisciplinary major. The requirements for completing specific majors are presented in detail in the section describing the programs offered by each department.

Interdisciplinary majors are described below. Students may declare their majors at any time during their academic careers but should do so before registering for courses for the junior year or applying to participate in off-campus study programs. Some departments have courses that must be passed, or standards that must be met before a student will be accepted as a major. Students are encouraged to think well in advance about possible majors and to speak with faculty about their educational interests.

Students may change their majors after consultation with the relevant departments. Declaration of major is a formal process which requires the appropriate forms and signatures. Students must follow established UAA procedures for declaring a major and for changing a major or degree.

**Baccalaureate Degree Requirements**

To receive a baccalaureate degree from UAA, students must be admitted to the program and must satisfy:

- General University Requirements;
- General Education Requirements;
- School/college requirements, if applicable; and
- Major program requirements.

For General Education Requirements, refer to the General Education Requirements (GER) for Baccalaureate Degrees section of this chapter. For school/college and major program requirements, refer to the appropriate school or college section of this catalog.

**General University Requirements for All Baccalaureate Degrees**

1. **Total Credits:** Students must earn at least 120 credits at the 100 level and above. Some degree programs require completion of additional credits.

2. **Upper Division Credits:** 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. **Resident Credit:** 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. **Minimum GPA:** 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 the catalog in effect at the time of formal acceptance to a baccalaureate degree program or the catalog in effect at the time of graduation.
   b. If the requirements for a baccalaureate degree, as specified in the entry-level catalog, 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 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.

6. **Military Credits:** No more than 30 military credits can be applied to a baccalaureate degree.

**General Education Requirements (GERs) for Baccalaureate Degrees**

**Preamble**

GERs provide students with a common educational experience in order to (1) provide a foundation for further study, and (2) 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 experience in applying his/her education in understanding and responding to the evolving state of knowledge and the world in the 21st century (Tier 3).

**Tier 1: Basic College-Level Skills**

12 credits

The UAA GER begins with basic college-level skills enhancement in written communication, oral communication and quantitative skills:

- Courses in written communication and oral communication develop the critical reading, thinking and communication skills (writing, speaking, and listening) necessary for personal and professional success.
- Courses in quantitative skills foster the analytical and mathematical abilities necessary 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, communication and mathematics provide placement criteria (which may require the completion of preparatory coursework).

**Tier 2: Disciplinary Areas**

22 credits

GERs continue with courses in four required disciplinary areas categorized by course content and academic discipline that are designed to guarantee a breadth of academic experience. These are fine arts, humanities, natural science and social science:

- Courses in the fine arts examine the historical, aesthetic, critical and creative aspects of art.
- Courses in the humanities consider the cultural, historical, literary, aesthetic, ethical and spiritual traditions shaping the contemporary world.
- Courses in natural science present theoretical and descriptive approaches to understanding the natural and physical worlds. Lab courses in the natural sciences emphasize gathering data and analyzing hypotheses according to the scientific method.
- Courses in the social sciences explore insights about individuals, groups and cultures derived from empirical methodologies.

**Tier 3: Integrative Capstone**

3 credits

For baccalaureate students, the GER experience culminates with an integrative capstone, which includes courses from across the university that require students to integrate knowledge of GER basic college-level skills (Tier 1) and/or disciplinary areas (Tier 2) as part of their course design.

Tier 3 (Integrative Capstone) courses may be taken only after the student has completed all Tier 1 (Basic College-Level Skills) requirements.
GER advising note: 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 General Education classifications has a list of approved courses (see the General Education Classification List in this chapter). 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 General Education 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.

General Education Requirements Student Outcomes

After completing the General Education Requirements, UAA students shall be able to:

1. Communicate effectively in a variety of contexts and formats;
2. Reason mathematically, and analyze quantitative and qualitative data competently to reach sound conclusions;
3. Relate knowledge to the historical context in which it developed and the human problems it addresses;
4. Interpret different systems of aesthetic representation and understand their historical and cultural contexts;
5. Investigate the complexity of human institutions and behavior to better understand interpersonal, group and cultural dynamics;
6. Identify ways in which science has advanced the understanding of important natural processes;
7. Locate and use relevant information to make appropriate personal and professional decisions;
8. Adopt critical perspectives for understanding the forces of globalization and diversity; and
9. Integrate knowledge and employ skills gained to synthesize creative thinking, critical judgment and personal experience in a meaningful and coherent manner.

Petitions for General Education and/or General University Requirements

Petitions pertaining to General Education Requirements 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 General Education Requirements (GER) list cannot be petitioned to meet a GER. For more information, see the Academic Petition section in Chapter 7, Academic Standards and Regulations.

General Education Classification List

Courses listed here as satisfying a General Education Requirement are also identified in Chapter 13, Course Descriptions.

Students may elect to graduate under the catalog in effect at the time of formal acceptance to a baccalaureate degree program or the catalog in effect at the time of graduation. However, 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.

Tier 1: Basic College-Level Skills

<table>
<thead>
<tr>
<th>Classification</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral Communication Skills</td>
<td>3</td>
</tr>
<tr>
<td>Quantitative Skills</td>
<td>3</td>
</tr>
<tr>
<td>Written Communication Skills</td>
<td>6</td>
</tr>
</tbody>
</table>

Course completed at UAA or equivalent transfer course must be completed with a grade of "C" or higher. Courses completed at UAA must be selected from the following:

- **Oral Communication courses:**
  - COMM A111 Fundamentals of Oral Communication
  - COMM A235 Small Group Communication
  - COMM A237 Interpersonal Communication
  - COMM A241 Public Speaking

- **Quantitative Skills courses:**
  - MATH A107 College Algebra
  - MATH A108 Trigonometry
  - MATH A109 Precalculus
  - MATH A172 Applied Finite Mathematics
  - MATH A200 Calculus I
  - MATH A201 Calculus II
  - MATH A272 Applied Calculus
  - STAT A252 Elementary Statistics
  - STAT A253 Applied Statistics for the Sciences
  - STAT A307 Probability

- **Written Communication courses:**
  - ENGL A111 Methods of Written Communication
  - ENGL A211 Academic Writing About Literature
  - ENGL A212 Technical Writing
ENGL A213  Writing in the Social & Natural Sciences
ENGL A214  Persuasive Writing
ENGL A311  Advanced Composition
ENGL A312  Advanced Technical Writing
ENGL A414  Research Writing

**Tier 2: Disciplinary Areas**

**Classification**  **Credits**

4. **Fine Arts**
   The fine arts (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. They 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:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AKNS/</td>
<td></td>
</tr>
<tr>
<td>MUS A215*</td>
<td>Music of Alaska Natives and Indigenous Peoples of Northern Regions</td>
</tr>
<tr>
<td>ART A160</td>
<td>Art Appreciation</td>
</tr>
<tr>
<td>ART A261</td>
<td>History of Western Art I</td>
</tr>
<tr>
<td>ART A262</td>
<td>History of Western Art II</td>
</tr>
<tr>
<td>ART A360A</td>
<td>History of Non-Western Art I</td>
</tr>
<tr>
<td>ART A360B</td>
<td>History of Non-Western Art II</td>
</tr>
<tr>
<td>DNCE A170</td>
<td>Dance Appreciation</td>
</tr>
<tr>
<td>MUS A121</td>
<td>Music Appreciation*</td>
</tr>
<tr>
<td>MUS A124*</td>
<td>History of Jazz</td>
</tr>
<tr>
<td>MUS A221*</td>
<td>History of Music I</td>
</tr>
<tr>
<td>MUS A222*</td>
<td>History of Music II</td>
</tr>
<tr>
<td>THR A111</td>
<td>Introduction to the Theatre</td>
</tr>
<tr>
<td>THR A311</td>
<td>Representative Plays I</td>
</tr>
<tr>
<td>THR A312</td>
<td>Representative Plays II</td>
</tr>
<tr>
<td>THR A411</td>
<td>History of the Theatre I</td>
</tr>
<tr>
<td>THR A412</td>
<td>History of the Theatre II</td>
</tr>
</tbody>
</table>

*Note: Music majors must select courses outside the major.*

5. **Humanities**
   (outside the major)

The humanities examine the characteristic of reality, the purpose of human existence, the properties of knowledge and the qualities of sound reasoning, eloquent communication and creative expression. They study the problems of right 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 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 brief written arguments, evaluate their soundness or cogency, and recognize common fallacies. They should also be able to use a formal technique to determine the validity of simple deductive arguments and evaluate the adequacy of evidence according to appropriate inductive standards. Students who complete a skill-oriented humanities course in a language should demonstrate proficiency in listening, speaking and writing.

Courses completed at UAA must be selected from the following **Humanities** courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AKNS A101A</td>
<td>Elementary Central Yup’ik Language I</td>
</tr>
<tr>
<td>AKNS A101B</td>
<td>Elementary Tlingit Language I</td>
</tr>
<tr>
<td>AKNS A101C</td>
<td>Elementary Alaska Native Language I</td>
</tr>
<tr>
<td>AKNS A102A</td>
<td>Elementary Central Yup’ik Language II</td>
</tr>
<tr>
<td>AKNS A102B</td>
<td>Elementary Tlingit Language II</td>
</tr>
<tr>
<td>AKNS A102C</td>
<td>Elementary Alaska Native Language II</td>
</tr>
<tr>
<td>AKNS A201</td>
<td>Alaska Native Perspectives</td>
</tr>
<tr>
<td>ART A261</td>
<td>History of Western Art I</td>
</tr>
<tr>
<td>ART A262</td>
<td>History of Western Art II</td>
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<tr>
<td>ART A360A</td>
<td>History of Non-Western Art I</td>
</tr>
<tr>
<td>ART A360B</td>
<td>History of Non-Western Art II</td>
</tr>
<tr>
<td>ASL A101</td>
<td>Elementary American Sign Language I</td>
</tr>
<tr>
<td>ASL A102</td>
<td>Elementary American Sign Language II</td>
</tr>
<tr>
<td>ASL A201</td>
<td>Intermediate American Sign Language I</td>
</tr>
<tr>
<td>ASL A202</td>
<td>Intermediate American Sign Language II</td>
</tr>
<tr>
<td>CHIN A101</td>
<td>First Year Chinese I</td>
</tr>
<tr>
<td>CHIN A102</td>
<td>First Year Chinese II</td>
</tr>
<tr>
<td>ENGL A121</td>
<td>Introduction to Literature</td>
</tr>
<tr>
<td>ENGL A201</td>
<td>Masterpieces of World Literature I</td>
</tr>
<tr>
<td>ENGL A202</td>
<td>Masterpieces of World Literature II</td>
</tr>
<tr>
<td>ENGL A301</td>
<td>Literature of Britain I</td>
</tr>
<tr>
<td>ENGL A302</td>
<td>Literature of Britain II</td>
</tr>
<tr>
<td>ENGL A305</td>
<td>National Literatures in English</td>
</tr>
<tr>
<td>ENGL A306</td>
<td>Literature of the United States I</td>
</tr>
<tr>
<td>ENGL A307</td>
<td>Literature of the United States II</td>
</tr>
<tr>
<td>ENGL A310</td>
<td>Ancient Literature</td>
</tr>
<tr>
<td>ENGL A383</td>
<td>Film Interpretation</td>
</tr>
<tr>
<td>ENGL A445</td>
<td>Alaska Native Literatures</td>
</tr>
<tr>
<td>FREN A101</td>
<td>Elementary French I</td>
</tr>
<tr>
<td>FREN A102</td>
<td>Elementary French II</td>
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<td>FREN A201</td>
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<td>FREN A202</td>
<td>Intermediate French II</td>
</tr>
<tr>
<td>FREN A301</td>
<td>Advanced French I</td>
</tr>
<tr>
<td>FREN A302</td>
<td>Advanced French II</td>
</tr>
<tr>
<td>GER A101</td>
<td>Elementary German I</td>
</tr>
<tr>
<td>GER A102</td>
<td>Elementary German II</td>
</tr>
<tr>
<td>GER A201</td>
<td>Intermediate German I</td>
</tr>
<tr>
<td>GER A202</td>
<td>Intermediate German II</td>
</tr>
<tr>
<td>GER A301</td>
<td>Advanced German I</td>
</tr>
<tr>
<td>GER A302</td>
<td>Advanced German II</td>
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<tr>
<td>HIST A101</td>
<td>Western Civilization I</td>
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<td>HIST A102</td>
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<td>HIST A121</td>
<td>East Asian Civilization I</td>
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<td>HIST A122</td>
<td>East Asian Civilization II</td>
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<td>HIST A131</td>
<td>History of United States I</td>
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<tr>
<td>HIST A132</td>
<td>History of United States II</td>
</tr>
<tr>
<td>HIST A341</td>
<td>History of Alaska</td>
</tr>
<tr>
<td>HNRS A192</td>
<td>Honors Seminar: Enduring Books</td>
</tr>
<tr>
<td>HUM A211</td>
<td>Introduction to Humanities I</td>
</tr>
<tr>
<td>HUM A212</td>
<td>Introduction to Humanities II</td>
</tr>
<tr>
<td>HUM A250</td>
<td>Myths and Contemporary Culture</td>
</tr>
<tr>
<td>JPN A101</td>
<td>First Year Japanese I</td>
</tr>
<tr>
<td>JPN A102</td>
<td>First Year Japanese II</td>
</tr>
<tr>
<td>JPN A201</td>
<td>Second Year Japanese I</td>
</tr>
<tr>
<td>JPN A202</td>
<td>Second Year Japanese II</td>
</tr>
<tr>
<td>JPN A301</td>
<td>Advanced Japanese I</td>
</tr>
<tr>
<td>JPN A302</td>
<td>Advanced Japanese II</td>
</tr>
<tr>
<td>LING A101</td>
<td>The Nature of Language</td>
</tr>
<tr>
<td>MUS A221</td>
<td>History of Music I</td>
</tr>
<tr>
<td>MUS A222</td>
<td>History of Music II</td>
</tr>
<tr>
<td>PHIL A101</td>
<td>Introduction to Logic</td>
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<tr>
<td>PHIL A201</td>
<td>Introduction to Philosophy</td>
</tr>
<tr>
<td>PHIL A211</td>
<td>History of Philosophy I</td>
</tr>
<tr>
<td>PHIL A212</td>
<td>History of Philosophy II</td>
</tr>
<tr>
<td>PHIL A301</td>
<td>Ethics</td>
</tr>
<tr>
<td>PHIL A313</td>
<td>Eastern Philosophy and Religion</td>
</tr>
<tr>
<td>PHIL A314</td>
<td>Western Religions</td>
</tr>
<tr>
<td>PS A331</td>
<td>Political Philosophy</td>
</tr>
<tr>
<td>PS A332</td>
<td>History of Political Philosophy I: Classical</td>
</tr>
<tr>
<td>PS A333</td>
<td>History of Political Philosophy II: Modern</td>
</tr>
<tr>
<td>RUS A101</td>
<td>Elementary Russian I</td>
</tr>
</tbody>
</table>

Undergraduate Programs

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www.uaa.alaska.edu

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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.

Laboratory courses illustrate how scientists develop, test and interpret hypotheses, and reach supportable conclusions. They will have an introductory knowledge of social science thinking which includes observation, empirical data analysis, theoretical models, quantitative reasoning, and application to social aspects of contemporary life. A student who has met the social science General Education Requirement is expected to be able to demonstrate knowledge of social science approaches and to apply that knowledge in a particular content area.

Courses completed at UAA must be selected from the following Social Sciences courses:

**Anthropology**
- ANTH A101: Introduction to Anthropology
- ANTH A200: Natives of Alaska
- ANTH A202: Cultural Anthropology
- ANTH A250: The Rise of Civilization

**Economics**
- ECON A123: Introduction to Behavioral Economics
- ECON A201: Principles of Microeconomics
- ECON A210: Environmental Economics and Policy

**Environmental Science**
- EDEC A105: Introduction to the Field of Early Childhood
- ENV I A212: Living on Earth: People and the Environment

**Geography**
- GEOG/ INTL A101: Local Places/Global Regions: An Introduction to Geography
- HNRS A292: Honors Seminar in Social Science
- HS A220: Core Concepts in the Health Sciences

**Psychology**
- PSY A101: Principles of Social Psychology

**Sociology**
- JUST A110: Introduction to Justice
- JUST/ SOC A251: Crime and Delinquency

**Sociology**
- JUST A330: Justice and Society
- LSSS A111: Cultural Foundations of Human Behavior
- PARL A101: Introduction to Law
- PS A101: Introduction to American Government
- PS A102: Introduction to Political Science
- PS A311: Comparative Politics

- PS/SOC A351: Political Sociology
- PSY A111: General Psychology
- PSY A150: Lifespan Development

Courses completed at UAA must be selected from the following Natural Sciences courses:

**Astronomy**
- ASTR A103/L: Solar System Astronomy

**Biology**
- BIOL A102: Introductory Biology
- BIOL A103: Introductory Biology Laboratory
- BIOL A111: Human Anatomy and Physiology I
- BIOL A112: Human Anatomy and Physiology II
- BIOL A115: Fundamentals of Biology I
- BIOL A116: Fundamentals of Biology II
- BIOL A178: Fundamentals of Oceanography Laboratory
- BIOL/ CPLX A200: Introduction to Complexity
- CHEM A103/L: Survey of Chemistry
- CHEM A104/L: Introduction to Organic Chemistry and Biochemistry
- CHEM A105/L: General Chemistry I
- CHEM A106/L: General Chemistry II
- ENVI/ GEOG A211: Earth Systems: The Science and Geography of the Natural Environment
- ENVI/ GEOG A211L: Earth Systems: The Science and Geography of the Natural Environment Laboratory
- GEOL A111: Physical Geology
- GEOL A115/L: Environmental Geology
- GEOL A178: Fundamentals of Oceanography Laboratory
- GEOL A179: Fundamentals of Oceanography Laboratory
- GEOL A221: Historical Geology
- LSIS A101: Discoveries in Science
- LSIS A201: Life on Earth
- LSIS A202: Concepts and Processes: Natural Sciences
- PHYS A101: Physics for Poets
- PHYS A123/L: Basic Physics I
- PHYS A124/L: Basic Physics II
- PHYS A211/L: General Physics I
- PHYS A212/L: General Physics II

**Credits**

7. **Social Sciences**

(outside the major; from two different disciplines)

The social sciences focus on the acquisition, analysis and interpretation of empirical data relevant to the human experience. Disciplines differ in their focus on collective as opposed to individual behavior, biological as opposed to social or cultural factors, the present as opposed to the past, and quantitative as opposed to qualitative data. Students who complete a General Education social sciences course are expected to be able to demonstrate knowledge of social science approaches and to apply that knowledge in a particular content area.
Students completing the integrative capstone requirement must demonstrate the ability to integrate knowledge by accessing, judging and comparing knowledge gained from diverse fields and by critically evaluating their own views in relation to those fields. Courses completed at UAA must be selected from the following Integrative Capstone courses:

- ACCT A452 Auditing
- ANTH A354 Culture and Ecology
- ART A491 Senior Seminar
- ASTR/
- BIOL A365 Astrobiology
- ATA A492 Air Transportation System Seminar
- BIOL A378 Marine Biology
- BIOL A452 Human Genome
- BIOL/CHEM/
- PHYS A456 Nonlinear Dynamics and Chaos
- BIOL A489 Population Genetics and Evolutionary Processes
- CA A495 Hospitality Internship
- CE A438 Design of Civil Engineering Systems
- CEL A450 Civic Engagement Capstone
- CHEM A441 Principles of Biochemistry I
- CIS A326 Information Age Literacy
- CIS A376 Management Information Systems
- CM A422 Sustainability in the Built Environment
- CM A450 Construction Management Professional Practice
- CS A470 Applied Software Development Project
- CSE A438 Design of Computer Engineering Systems
- DH A424 Community Dental Health II
- DN A415 Community Nutrition
- DNCE A370 Interdisciplinary Dance Studies: Issues and Methods
- ECON A492 Seminar in Economic Research
- EDFN A300 Philosophical and Social Context of American Education
- EDFN A304 Comparative Education
- EE A438 Design of Electrical Engineering Systems
- ENGL A434 History of Rhetoric
- ENGL A486 Public Science Writing
- ENVI A470 Environmental Planning and Problem Solving
- GEO A460 Geomatics Design Project
- GEOG A390A Topics in Global Geography
- GEOL A456 Geoarcheology
- HIST/INTL/
- PS A325 Northeast Asia in 21st Century
- HIST A390A Themes in World History
- HIST A427 Post-Soviet Culture and Society
- HNRS A490 Senior Honors Seminar
- HS A491 Health Issues in Alaska
- HUMS A495B Human Services Practicum IV

**Note: 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 the Related Undergraduate Admissions Policies in Chapter 7, Academic Standards and Regulations.)

Concurrent Baccalaureate Programs

**Double Majors**

Baccalaureate degree-seeking students may graduate (during the same semester) with two majors, provided they have applied for and been accepted in each degree program and 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 declare a double major at the time of initial admission to UAA or add a major at a later date through the change of major/degree process. Forms are available from Enrollment Management One-Stop or online at www.uaa.alaska.edu/admissions/forms.cfm. 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 must satisfy the catalog requirements in effect at the time of acceptance into the major(s) or the catalog requirements in effect at the time of graduation.

**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. Forms are available at Enrollment Management One-Stop or online at www.uaa.alaska.edu/admissions/forms.cfm. Students must satisfy the catalog requirements in effect at the time of acceptance into the degree program(s) or the catalog requirements in effect at the time of graduation. 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.

Interdisciplinary Baccalaureate Degrees

Upon completing at least 15 UAA credits, a student may develop an interdisciplinary BA or BS degree 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, General Education Requirements, 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 General Education Requirements 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.

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 faculty are highly trained and energetic professionals who are here to impart the knowledge and skills of their academic disciplines both to majors within the college and to students in the various professional schools and the community. The formal means of communicating this knowledge and these skills are the courses and degree programs of the college.

The college welcomes applications from students who have just graduated from high school as well as from those who are continuing their higher education, whether to complete an associate’s or a baccalaureate degree or to undertake graduate studies. Students who wish to begin work on their degrees at another university or at a junior or community college and intend to transfer credits to the University of Alaska Anchorage should plan their coursework in accordance with the General University Requirements and the requirements of the particular program in which they are interested in earning a degree.

Prospective transfer students, particularly those who have not decided upon a major, should pay special attention to the requirements of programs within the College of Arts and Sciences regarding the applicability of credits toward degrees.

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:

Arts
One to two years with emphasis in basic and fundamental courses in the arts with more advanced courses dependent upon students’ particular interest.

Computer Science
One to two years. Basic knowledge of computer science recommended for all college-bound students.

English
Four years with emphasis on spelling, writing, grammar, and research skills, such as preparation of bibliographies.

Language
One to two years. Suggested languages: German, Russian, Latin, Japanese, French, Spanish, Chinese or Native languages.

Mathematics
- **BA candidates**: Three years with emphasis on algebra I and II, trigonometry, geometry, analysis.
- **BS candidates**: Four years with emphasis on algebra I and II, trigonometry, geometry, analysis.

Science
- **BA candidates**: Two to three years with emphasis in biology, chemistry, physics, geology and/or earth science.
- **BS candidates**: Three to four years with emphasis in biology, chemistry, physics, geology and/or earth science.

Social Sciences
Two years with emphasis in world history, U.S. history, comparative political theory, current events, geography, cultural anthropology and/or prehistoric archaeology.
College of Arts and Sciences Requirements

To earn a Bachelor of Arts; Bachelor of Science; or Bachelor of Music, Performance, students must complete the CAS requirements shown below, in addition to the General Education Requirements, the General University Requirements, and major program requirements. Students completing an interdisciplinary studies degree in which all academic disciplines represented in their major concentration are within the College of Arts and Sciences must also meet the CAS BA or BS requirements. Students should examine the program descriptions for the major program and consult with an advisor before making final course selections. Some courses may be used to satisfy more than one requirement in a degree program.

Electives
No more than 6 credits in lower division Education-Physical Education (EDPE), and/or Physical Education Professional (PEP), and/or Physical Education and Recreation (PER) courses may be applied toward a BA or BS degree program offered by the College of Arts and Sciences.

Bachelor of Arts
The Bachelor of Arts degree is a liberal arts degree. The basic assumption of a liberal arts degree is that a broad knowledge base will serve the student over a lifetime.

A. Cultural Heritages
   1. Comparative Cultures (ANTH A250) 3
   2. Western Culture (HIST A101 and HIST A102) 6
   3. American Culture (HIST A131, HIST A132, PS A101) 3

B. Arts and Letters
   1. Introduction to Literature (ENGL A121, A301, A302, A305, A306, A307) 3
   2. Language/Humanities Any two-semester sequence in one of the following humanities sequences or in a language other than English: [AKNS A101-A102 (with same letter suffix), ART A261-A262, ENGL A201-A202, MUS A221-A222*, PHIL A211-A212, PHIL A313-A314, PS A332-A333, THR A311-A312, THR A411-A412] 6-8
   *BA Music majors must select courses outside their major.

C. Ways of Knowing
   (ENGL A120, PHIL A101, PHIL A201, PHIL A301, PHIL A421) 3

D. Social Behavior
   Choose one of the following not in the major:
   (ANTH A101, COMM A101, ECON A201, JPC A101, PS A102, PSY A111, SOC A101, SWK/HUMS A106) 3

Bachelor of Science
The requirements of the Bachelor of Science degree are designed to equip students with the technical competencies needed in scientific disciplines.

A. Mathematics and Statistics
   (MATH A200 or MATH A272) (STAT A253 or STAT A307) 3-4
   (STOR A253 or STOR A307) 3-4

B. Computer Programming
   (CS A109, CS A110, CS A111, CS A201, CS A202, ES A201) 3

C. Language/Humanities
   Any two-semester sequence in French, German, Japanese, Russian or Spanish, or one of the following humanities sequences:
   (ART A261-A262, ENGL A201-A202, MUS A221-A222, PHIL A211-A212, PHIL A313-A314, PS A332-A333, THR A311-A312, THR A411-A412) 6-8

D. Natural Sciences
   To be selected from the following list:

   *The total natural science requirement of each student includes 16 credits (7 credits from the General Education natural science requirement and 9 credits from the CAS Bachelor of Science requirement). These two requirements may be met by any combination of applicable courses that combine to 16 credits. The total must include two laboratory courses and at least 6 credits in each of two disciplines.

Bachelor of Music, Performance
Language Proficiency 8
Two semesters of oral language study.

Bachelor of Fine Arts
The Bachelor of Fine Arts is a professionally oriented program designed to prepare students for careers in art. No additional college requirements.

Bachelor of Liberal Studies
The Bachelor of Liberal Studies (BLS) degree is an interdisciplinary program intended for students who prefer a broad liberal arts and sciences degree rather than a Bachelor of Arts or Bachelor of Science degree in a single discipline. No additional college requirements.

CAS Minor
A minor from the College of Arts and Sciences will consist of a minimum of 18 credits, at least 6 of which will be upper division. Refer to each discipline for specific courses required. Also see Minors policy earlier in this chapter.

The following is the listing of degrees available from the College of Arts and Sciences:

ASSOCIATE OF ARTS
The Associate of Arts (AA) degree provides a solid foundation in mathematics and written and oral communication, the natural and social sciences, the humanities and fine arts. The AA degree prepares students for career advancement and baccalaureate programs and to better understand their world.

Program Outcomes
Students graduating with an AA degree from UAA will be able to:
- Communicate effectively with diverse audiences (individual, group, or public) using a variety of verbal and nonverbal communication strategies;
- Respond effectively to writing assignments using appropriate genres and standard written English;
- Use library and electronic research responsibly and appropriately;
- Identify, describe, and evaluate the aesthetic, historical and philosophical aspects of material culture, including artistic expressions, language, and texts;
- Apply critical thinking skills to identify the premises and conclusions of arguments, evaluate their soundness, and recognize common fallacies;
- Use appropriate mathematical language and symbols to develop and communicate solutions and demonstrate quantitative and analytical skills and knowledge;
• Articulate the fundamentals, developments, and impacts of one or more scientific disciplines and develop and analyze evidence-based conclusions about the natural and social world.

Admission Requirements
Complete the Undergraduate Certificate and Associate Degree Program Admission Requirements located at the beginning of Chapter 7 Academic Standards and Regulations.

General University Requirements
Complete General University Requirements for the Associate of Arts Degrees located at the beginning of this chapter.

Degree Requirements
All courses must be at the 100 level or above. At least 20 credits of the required 60 credits must be at the 200 level. Students intending to complete the AA degree and then continue on to a baccalaureate degree should consult the Advising Note for AA Students Who Plan to Pursue a Baccalaureate Degree below.

Course Requirements

1. Oral Communication Skills
   - COMM A111 Fundamentals of Oral Communication (3)
   - COMM A235 Small Group Communication (3)
   - COMM A237 Interpersonal Communication (3)
   - COMM A241 Public Speaking (3)
   - 3

2. Written Communication Skills
   - ENGL A111 Methods of Written Communication (3)
     and one of the following:
     - CIOS A260A Business Communications (3)*
     - ENGL A211 Academic Writing About Literature (3)
     - ENGL A212 Technical Writing (3)
     - ENGL A213 Writing in the Social and Natural Sciences (3)
     - ENGL A214 Persuasive Writing (3)
   - 6

3. Humanities and Fine Arts
   - Three courses from the GER Classification List.
     At least one course each from the Humanities and Fine Arts areas.
   - 9

4. Mathematical and Natural Sciences
   - MATH A105 Intermediate Algebra (3)*
     or one course from the Quantitative Skills area of GER Classification List (3)
   - Two courses from the Quantitative Skills area of GER Classification List (3+3) (6)
   - 9

5. Social Sciences
   - Two Social Sciences courses from different disciplines (3)
     from the Social Sciences area of GER Classification List (3)
   - 6

Degree Completion Requirements

6. Electives
   - 27

Total minimum credits

* Please note: CIOS A260A and MATH A105 do not meet the General Education Requirements for the baccalaureate degree.

Advising Note for AA Students Who Plan to Pursue a Baccalaureate Degree:
AA students who plan to pursue a baccalaureate degree must take care in planning their curriculum. Please see an advisor and take note of the following:

• UAA baccalaureate students are required to complete 12 credits of basic college-level skills from the Oral Communication (3), Written Communication (6), and Quantitative Skills (3) areas of the General Education Classification List prior to completing 60 total degree-applicable credits.

• Students with 60 credits or more who have not completed the baccalaureate 12-credit, basic college-level skills requirement will have one full academic year to fulfill this requirement, after which they will not be allowed to take additional courses as degree-seeking students. MATH A105 and CIOS A260A do not count toward completing the baccalaureate GER requirements.

• Students who have taken two Natural Science courses as part of their AA program should be aware that a 1-credit science laboratory is required for the baccalaureate degree.

• Students who plan to apply AA credits to a UAA baccalaureate degree, and who know the program or major they are going to transfer into, should consult the General Education Requirements for their specific program or major. Programs often require specific GER courses for their majors. Students planning to transfer should use AA electives to fulfill prerequisites and requirements for their anticipated major.

• Students who plan to apply AA credits to a UAA baccalaureate degree, and who do not know which program or major they wish to pursue, should plan as follows:

1. Oral Communication Skills
   - COMM A111 Fundamentals of Oral Communication (3)
   - COMM A235 Small Group Communication (3)
   - COMM A237 Interpersonal Communication (3)
   - COMM A241 Public Speaking
   - 6

2. Written Communication Skills
   - ENGL A111 Methods of Written Communication (3)
     and one of the following:
     - ENGL A211 Academic Writing About Literature (3)
     - ENGL A212 Technical Writing (3)
     - ENGL A213 Writing in the Social and Natural Sciences (3)
     - ENGL A214 Persuasive Writing (3)
   - 9

3. Humanities and Fine Arts
   - One course from the Fine Arts area of the GER Classification List (3)
   - Two courses from the Humanities area of the GER Classification List (6)
   - 10

4. Mathematical and Natural Sciences
   - One MATH/STAT course from the Quantitative Skills area of GER Classification List (3)
   - Two natural science courses from the Natural Sciences area of GER Classification List, including a laboratory course (7)
   - 12

5. Social Sciences
   - Two social science courses from different disciplines (3)
     from the Social Science area of GER Classification List (6)
   - 6

ALASKA NATIVE STUDIES
Social Sciences Building (SSB), Room 378, (907) 786-6135
www.uaa.alaska.edu/native

The Alaska Native Studies program provides the student with an introduction to Alaskan Native ways of knowing and seeing the world, an experiential and theoretical exploration of Alaskan Native cultures, and a series of critical perspectives on traditional and contemporary Native experiences and politics in a pluralistic 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 and the conflict between traditional Native values and those of the dominant Euro-American society. The Alaska Native Studies minor provides a valuable enrichment to any UAA baccalaureate degree.
Minor, Alaska Native Studies

1. Complete the following core courses:
   - AKNS A201 Alaska Native Perspectives 3
   - AKNS A492 Seminar: Cultural Knowledge of Native Elders 3

2. Complete one of the following focus areas:
   **A. Policy Focus**
   - AKNS A290 Selected Topics in Alaska Native Studies (1-3) and/or
   - AKNS A490 Selected Topics in Alaska Native Studies (1-3)
   - AKNS/PS A346 Alaska Native Politics (3)
   - AKNS/PS A411 Tribes, Nations and Peoples (3)

   **A. Language Focus**
   - AKNS A101 Alaska Native Languages I (4)
   - AKNS A102 Alaska Native Languages II (4)

2. Complete a minimum of 6 credits from the following:
   (must be other courses than those taken from the above focus areas)
   - AKNS A101 Alaska Native Languages I (4)
   - AKNS A102 Alaska Native Languages II (4)
   - AKNS A109 Alaska Native Language Orthography (4)
   - AKNS/PS A146 Introduction to Alaska Native Dance (1-2)
   - AKNS/MUS A215 Music of Alaska Natives and Indigenous Peoples of Northern Regions (3)
   - AKNS A290 Selected Topics in Alaska Native Studies (1-3)
   - AKNS/PS A346 Alaska Native Politics (3)
   - AKNS/PS A411 Tribes, Nations and Peoples (3)
   - AKNS A420 Alaska Native Education (3)
   - AKNS A490 Selected Topics in Alaska Native Studies (1-3)
   - AKNS A495 Alaska Native Studies Internship (1-3)
   - ANTH A200 Natives of Alaska (3)
   - ANTH A207 Ethno-History of Alaska Natives (3)
   - ANTH A345 Northwest Coast Cultures (3)
   - ANTH A346 Aleut Adaptations (3)
   - ART A365 Native Art of Alaska (3)
   - ENGL A445 Alaska Native Literatures (3)
   - HIST A341 History of Alaska (3)
   - JUST A455 Rural Justice (3)

3. A minimum of 19 credits is required for the minor, of which 6 credits must be upper division.

**FACULTY**

Nancy Furlow, Interim Director, ANTHF1@uaa.alaska.edu
Edgar Blatchford, Associate Professor, Ebblatch@lpc.alaska.edu
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**ANTHROPOLOGY**

Beatrice McDonald Hall (BMH), Room 214, (907) 786-6840
http://anthro.uaa.alaska.edu

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 in either archaeology or sociocultural anthropology in Alaska studies, the department believes that such specialization should be deferred until graduate work.

**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 degree in Anthropology.
3. Meet the requirements for Graduation with Honors, as listed in Chapter 7, Academic Standards and Regulations.
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. Note: the course may be taken on a one-semester (3-credit) or two-semester (6-credit) basis.

**Admission Requirements**

Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.

**Graduation Requirements**

Students must complete the following graduation requirements:

**A. General University Requirements**
Complete the General University Requirements for All Baccalaureate Degrees located at the beginning of this chapter.

**B. General Education Requirements**
Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

**C. College of Arts and Sciences Requirements**
Complete the College of Arts and Sciences Requirements for either a BA or BS degree listed at the beginning of the CAS section.

**D. Major Requirements**

**Bachelor of Arts, Anthropology**

1. Complete 36 credits from items 2 through 6, 18 of which must be upper division credits.
2. Complete three of the following core courses (9 credits):
   - ANTH A202 Cultural Anthropology (3)
   - ANTH A205 Biological Anthropology (3)
   - ANTH A210 Introduction to Anthropological Linguistics (3)
   - ANTH A211 Fundamentals of Archaeology (3)
3. Complete the following courses (6 credits):
   - ANTH A250 Rise of Civilization (3)
   - ANTH A410 History of Anthropology (3)
4. Complete three ethnographic area courses (9 credits) from the following:
   - ANTH A200 Natives of Alaska (3)
   - ANTH A325 Cook Inlet Anthropology (3)
   - ANTH A333 Peoples and Cultures of Southeast Asia (3)
   - ANTH A335 Native North Americans (3)
   - ANTH A346 Peoples and Cultures of South America (3)
   - ANTH A358 Peoples and Cultures of Scandinavia (3)
   - ANTH A427 Ethnohistory of Alaska Natives (3)
   - ANTH A429 Contemporary Alaska Native Societies (3)
   - ANTH A434 Peoples and Cultures of Northeast Asia (3)
   - ANTH A435 Northwest Coast Cultures (3)
   - ANTH A436 Aleut Adaptations (3)
   - ANTH A437 Eskimo Adaptations (3)
   - ANTH A438 Tlingit and Haida Adaptations (3)
   - ANTH A499 Athapaskan Adaptations (3)
Of the following ethnographic area courses which emphasize archaeology, no more than 6 credits can be used to satisfy the ethnographic area requirement:
ANTH A312 North American Archaeology (3)
ANTH A413 Peopling of the Americas (3)
ANTH A416 Arctic Archaeology (3)
ANTH A436 Aleut Adaptations (3)
ANTH A437 Eskimo Adaptations (3)
ANTH A438 Tlingit and Haida Adaptations (3)
ANTH A439 Athapaskan Adaptations (3)

5. Complete two courses (6 credits) from the following topical/theoretical courses:
ANTH A270 Cross-Cultural Perspectives on Women (3)
ANTH A273 Biological Anthropology (3)
ANTH A354 Cultural Anthropology (3)
ANTH A360 Anthropology of Art (3)
ANTH A361 Language and Culture (3)
ANTH A365 Races: Modern Human Diversity (3)
ANTH A375 Introduction to Cultural Resource Management (3)
ANTH A400 Anthropology of Religion (3)
ANTH A415 Applied Anthropology (3)
ANTH A425 Archaeology of Identity (3)
ANTH A437 Archaeology of Ethnic Relations (3)
ANTH A445 Evolution of Humans and Disease (3)
ANTH A447 Medical Anthropology (3)
ANTH A457 Food and Nutrition: An Anthropological Perspective (3)
ANTH A460 Peace, War, and Violence: An Anthropological Perspective (3)
ANTH A476 Ethical Issues in Archaeology (3)
ANTH A478 Ethical Issues in Archaeology (3)
ANTH A480 Analytical Techniques in Archaeology (3)
ANTH A481 Museum Studies in Anthropology (3)
ANTH A482 Historical Archaeology (3)
ANTH A484 Lithic Technology (3)
ANTH A485 Human Osteology (3)
ANTH A486 Applied Human Osteology (3)

Note: The upper division special topics course (ANTH A490) or independent study course (ANTH A397, ANTH A497) may be petitioned to satisfy ethnographic area or topical/theoretical course requirements, depending on course content.

6. Anthropology electives: Any 6 credits in Anthropology

7. Complete one statistics course from the following:
   STAT A252 Elementary Statistics (3)
   STAT A253 Applied Statistics for the Sciences (4)
   STAT A307 Probability (3)
   Any six courses in Anthropology.

8. A minimum of 120 credits is required for the degree, of which 42 credits must be upper division to satisfy General Education Requirements.

Bachelor of Science, Anthropology

1. Complete 36 credits from items 2 through 6, 18 of which must be upper division credits.
2. Complete three of the following core courses:
   ANTH A202 Cultural Anthropology (3)
   ANTH A205 Biological Anthropology (3)
   ANTH A210 Introduction to Anthropological Linguistics (3)
   ANTH A211 Fundamentals of Archaeology (3)
   ANTH A250 Rise of Civilization (3)
   ANTH A410 History of Anthropology (3)
3. Complete the following courses:
   ANTH A250 Rise of Civilization (3)
   ANTH A410 History of Anthropology (3)
4. Complete three ethnographic area courses from the following:
   ANTH A200 Natives of Alaska (3)
   ANTH A325 Cook Inlet Anthropology (3)
   ANTH A333 Peopling of the Americas (3)
   ANTH A355 Native North Americans (3)
   ANTH A365 Peopling of the Americas (3)
   ANTH A388 Cultural Anthropology (3)
   ANTH A427 Ethnography of Alaska Natives (3)
   ANTH A429 Contemporary Alaska Native Societies (3)
   ANTH A434 Peoples and Cultures of Southeast Asia (3)
   ANTH A435 Northwest Coast Cultures (3)

Minor, Anthropology

Students majoring in another subject who wish to minor in Anthropology, must complete the following requirements. A total of 18 credits is required for the minor, 6 of which must be upper division.
1. Select two courses (6 credits) from the following:
   ANTH A101 Introduction to Anthropology (3)
   ANTH A202 Cultural Anthropology (3)
   ANTH A205 Biological Anthropology (3)
   ANTH A210 Introduction to Anthropological Linguistics (3)
   ANTH A211 Fundamentals of Archaeology (3)
   ANTH A250 Rise of Civilization (3)
2. Complete at least one course (3 credits) from either the ethnographic area or the topical/theoretical area, as specified above for majors in Anthropology.
3. Complete three courses (9 credits) of Anthropology electives.

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ART
Fine Arts Building (ARTS), Room 302A, (907) 786-1783
http://art.uaa.alaska.edu

The aim of the Department of Art is to prepare and empower students to use their artistic abilities to make a difference in society. A comprehensive multi-studio approach encourages independent thinking, strengthens creativity, and develops a knowledge of the critical and historical aspects of art.

Students acquire technical skills and gain confidence to work with a variety of materials while exploring and evaluating a broad heritage of past and contemporary art and design.

Program Outcomes
Students graduating with a Bachelor of Arts or Bachelor of Fine Arts will be able to demonstrate:
1. Effective communication and fiscal skills to be a practicing artist as applied to art proposals, exhibitions and business matters.
2. The expression of ideas in a cohesive body of work.
3. Critical thinking, writing and research skills allowing the discovery of original approaches to creative problem solving.

Students choose from several areas of study:
• BA in Art — Creative problem solving in a liberal arts context.
• BFA in Art — The Department of Art offers the Bachelor of Fine Arts Degree in Art with a Studio Emphasis in Graphic Design. Refer to the Bachelor of Fine Arts section following for degree requirements.
• Art Education — The Department of Art offers a minor in Art Education for students interested in working in educational settings. The minor does not lead to initial teacher certification. UAA does not currently offer a teacher certification program in art. Students interested in becoming K-12 art teachers may complete the BA or BFA in Art at UAA and pursue teacher certification through the UAF School of Education post-baccalaureate licensure program.
• Continuing Education — Either as a pre- or post-baccalaureate student.

The Bachelor of Arts and the Bachelor of Fine Arts are accredited by the National Association of Schools of Art and Design.

Students must note the following:
1. Some courses do not apply to degree programs.
2. Some courses may be taken for repeat credit.
3. 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 appropriate instructor permission, but may find the classroom experience difficult or unrewarding.
4. Art majors must obtain pre-registration approval from Art faculty for upper division Art coursework undertaken each semester.

Bachelor of Arts, Art
Admission Requirements
Complete the Baccalaureate Degree Program Admission Requirements in the front of this chapter.

Graduation Requirements
Students must complete the following:

A. General University Requirements
Complete the General University Requirements for Baccalaureate Degrees in the front of this chapter. A maximum of 60 credits in Art may be applied toward the degree. Transfer students who are candidates for the BA degree with a major in Art must complete a minimum of 18 Art credits in residence.

B. General Education Requirements
Complete the General Education Requirements for Baccalaureate Degrees in the front of this chapter.

C. College of Arts and Sciences Requirements
Complete the College of Arts and Sciences requirements in the front of this chapter.

D. Major Requirements

Lower Division Art (27 credits)
1. Complete the following core courses:
   ART A105 Beginning Drawing (3)
   ART A111 Two-Dimensional 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)
2. Choose one two-dimensional course, one three-dimensional course, and one course from either list to total 9 credits:
   Two-Dimensional Area: 3-6
   ART A112 Color Design (3)
   ART A213 Beginning Painting (3)
   ART A215 Beginning Printmaking (3)
   ART A224 Beginning Photography (3)
   ART A257 Digital Art and Design I (3)
   ART A271 Beginning Surface Design (3)
   ART A273 Beginning Woven Forms (3)
   Three-Dimensional Area: 3-6
   ART A201 Beginning Handbuilt Ceramics (3)
   ART A202 Beginning Wheelthrown Ceramics (3)
   ART A209 Beginning Metalsmithing and Jewelry (3)
   ART A211 Beginning Sculpture (3)
   ART A272 Beginning Fiber Structures (3)

Upper Division Studio Art (15 credits)
3. Complete a total of 15 credits in the areas of studio emphasis listed below, a minimum of 9 credits must be taken from one of the following studio areas:
   Ceramics  Drawing
   Digital Art & Graphic Design  Fibers
   Jewelry/Metalsmithing  Painting
   Photography  Printmaking
   Sculpture

Upper Division Art History (6 credits)
4. Select 6 credits from the following: 6
   ART A360A History of Non-Western Art I (3)
   ART A360B History of Non-Western Art II (3)
Undergraduate Programs, College of Arts and Sciences

ART A361 History of Graphic Design (3)
ART A362 History of Modern Art (3)
ART A363 History of Contemporary Art (3)
ART A364 Italian Renaissance Art (3)
ART A366 Asian Art (3)
ART A367 History of Photography (3)
ART A492 Art History Seminar (3)

Miscellaneous Requirements (21 credits)
5. Complete the following:
   PHIL A401 Aesthetics
   ART A491 Senior Seminar (Capstone) 3
   BA A166 Small Business Management 3
   Upper division general electives 15 credits 15
6. A total of 120 credits is required for the degree, of which 42 credits must be upper division.

Bachelor of Fine Arts, Art
The Bachelor of Fine Arts degree is a professionally oriented program designed to prepare students for careers in art. Enrollment in the BFA program is recommended only for those students willing to make the considerable commitment of time and energy necessary to achieve professional competence in their primary area of studio emphasis. Students desiring to enter the BFA program should request a copy of the current program policy from the department.

Admission Requirements
Complete the Baccalaureate Degree Programs Admission Requirements at the beginning of this chapter. Admission into the BFA program, termination from it, and granting of the degree are done at the discretion of the BFA Committee.

Students admitted into the BFA program must complete a minimum of 24 art credits in residence at UAA after acceptance into the BFA program. For the transfer student, a minimum of 12 resident Art credits must be completed in the primary area of studio emphasis, and a minimum of 3 resident Art credits completed in the secondary area of studio emphasis.

Applicants for admission into the BFA program must meet the following minimum requirements:
1. Applicants must have been officially admitted to UAA and declared an intention to pursue the BFA degree.
2. Applicants must have completed all lower division foundation core course requirements for the BFA degree.
3. Applicants must have been enrolled at UAA for at least one semester.
4. Applicants must meet minimum academic GPA requirements of: 2.50 overall coursework and 3.00 overall Art coursework.

BFA Requirements
All materials must be submitted to the Department of Art at least two weeks prior to the BFA Committee's scheduled application review:
1. Application for admission into the BFA program.
2. Letter of intent stating objectives and qualifications in relation to either the BA in Art or BFA in Art degree programs.
3. Copies of all college transcripts.
4. A list of all college art courses taken with grade received.
5. Portfolio of 15-20 pieces of studio work in primary and secondary concentrations showing technical skills, design abilities, and a potential for developing a conceptual vision. Applicants must submit work for consideration in both slide or digital formats and original works of art. Applications will be reviewed once a semester, and admission decisions are determined in October and March. Acceptance into the BFA program will be determined by a consensus of BFA Committee members at the meeting.

Academic Progress
To graduate with a BFA in Art students must have met the following GPA requirements:
1. A minimum overall major GPA of 3.00.
2. A minimum GPA of 3.50 in the primary area of studio emphasis.
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
With approval, upon completion of all studio courses in the student’s primary and secondary areas of emphasis, BFA candidates will enroll in ART A491 Senior Seminar offered fall semesters only, and ART A499 Thesis offered spring semesters only. ART A491 meets the capstone requirement for the GER. 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 Thesis. During ART A499 Thesis students will complete a body of work that will culminate in a formal exhibition. BFA students enrolled in ART A499 Thesis will meet with the BFA Committee a minimum of twice a semester.

Exhibitions and Presentations
BFA candidates will generally participate in the BFA Group Show to be held in the Kimura Gallery. All aspects of the thesis exhibition must be approved by the BFA Committee. Works will be selected by the BFA Committee. The BFA Group Show will be held during the spring semester each year. Graduating BFA students are invited, but not required, to donate one work of art to UAA’s permanent collection. Acceptance of donated student work is left to the discretion of the BFA Committee. Prior to completing all BFA requirements, the student is responsible for submitting an Application for Graduation to obtain the degree.

Graduation Requirements
Students must complete the following graduation requirements:

A. General University Requirements
   Complete the General University Requirements for Baccalaureate Degrees in the front of this chapter.

B. General Education Requirements
   Complete the General Education Requirements for Baccalaureate Degrees in the front of this chapter.

C. College of Arts and Sciences Requirements
   There are no additional college requirements for the BFA degree.

D. Major Requirements
   Complete the following required Art courses with a minimum overall major GPA of 3.00 and a minimum GPA of 3.50 in the primary area of studio emphasis. A minimum cumulative GPA of 2.50 in all university coursework is required to graduate. A maximum of 84 credits in Art may be applied toward the degree.

Foundation Core Courses (24 credits)
1. Complete the following core courses:
   ART A105 Beginning Drawing 3
   ART A111 Two-Dimensional Design 3

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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 (9 credits)
2. Choose one course from the two-dimensional list and one course from the three-dimensional list, and one course from either list to total 9 credits:

Two-Dimensional Area: 3-6
ART A213 Beginning Painting (3)
ART A215 Beginning Printmaking (3)
ART A224 Beginning Photography (3)
ART A257 Digital Art and Design I (3)
ART A271 Beginning Surface Design (3)
ART A273 Beginning Woven Forms (3)

Three-Dimensional Area: 3-6
ART A201 Beginning Handbuilt Ceramics (3)
ART A202 Beginning Wheelthrown Ceramics (3)
ART A209 Beginning Metalsmithing and Jewelry (3)
ART A211 Beginning Sculpture (3)
ART A272 Beginning Fiber Structures (3)

Art History (9 credits)
3. Select three courses from the following: 9
ART A360A History of Non-Western Art I (3)
ART A360B History of Non-Western Art II (3)
ART A361 History of Graphic Design (3)
ART A362 History of Modern Art (3)
ART A363 History of Contemporary Art (3)
ART A364 Italian Renaissance Art (3)
ART A366 Asian Art (3)
ART A367 History of Photography (3)
ART A492 Art History Seminar (3)

Primary Studio Concentration (18 credits)
Select Primary and Secondary Studio Concentrations from the following:

Ceramics Drawing
Digital Art & Graphic Design Fibers
Jewelry/Metalsmithing Painting
Photography Printmaking
Sculpture

4. Select a primary studio concentration from the list above and complete the following studio courses in the same discipline:

200 level Beginning studio course 3
Note: Must be other than a course selected to fill the beginning studio electives listed above.
300 level Intermediate studio course 6
400 level Advanced studio course 6

5. Select a support course from following (3 credits): 3
ART A390 Selected Topics in Studio Art (3)
ART A490 Selected Topics in Studio Art (3)
ART A498 Individual Research (1-3)
or other by permission of advisor

Secondary Studio Concentration (9 credits)
6. Select a secondary studio concentration from the list and complete the following studio courses in the same discipline:

200 level Beginning studio course 3
Note: Must be other than a course selected to fill the beginning studio electives listed above.
300 level Intermediate studio course 3

7. Select a support course from following (3 credits): 3
300 level Intermediate studio course (3)
400 level Advanced studio course (3)
ART A390 Selected Topics in Studio Art (3)
ART A490 Selected Topics in Studio Art (3)
ART A498 Individual Research (1-3)

Thesis Requirements (6 credits)
8. Complete the following courses:
ART A491 Senior Seminar (full semesters only) 3
ART A499 Thesis (spring semesters only) 3

Miscellaneous Requirements (12 credits)
9. Complete PHIL A401 Aesthetics 3
10. Art electives (9 credits) 9
Complete 9 credits of electives selected from art history, art education or art studio courses.
11. A total of 121 credits is required for the degree, of which 42 credits must be upper division. A total of 84 credits in Art may be applied to the degree.

Minor, Art
Students majoring in another subject who wish to minor in Art must complete the following requirements. A total of 18 credits is required for the minor, 6 credits of which must be upper division.

Art History (6 credits)
ART A261 History of Western Art I 3
ART A262 History of Western Art II 3

Design (3 credits)
ART A111 Two-Dimensional Design (3)
ART A113 Three-Dimensional Design (3)

Drawing (3 credits)
ART A115 Beginning Drawing (3)
ART A205 Intermediate Drawing (3)
ART A305 Advanced Drawing (3)
ART A306 Life Drawing and Composition I (3)
ART A405 Experimental Drawing (3)
ART A407 Life Drawing and Composition II (3)

Studio (6 credits)
Studio emphasis courses 6

Minor, Art Education
Students majoring in another discipline and Art students in the Art program must complete the following sequence of six courses for a minor in Art Education. A total of 18 credits is required for the minor. Six courses are being added as a minor in the Art Department under the heading of Art Education. The minor constitutes 18 credits and is made up of the following courses:

ART A203 Introduction to Art Education 3
ART A204 History and Philosophy of Art Education 3
ART A303 Curriculum Planning and Interpretation in Art 3
ART A304 Art Experience: Social, Cultural, and Educational 3
ART A403 Arts and Technology 3
ART A404 Diversity and Visual Culture 3

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DIGITAL ART
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www.kpc.alaska.edu
Contact: Celia Anderson, (907) 262-0361, IFCRA@uaa.alaska.edu
or Jayne Jones, (907) 262-0374, IFJMJ@uaa.alaska.edu

Advising for this program is only available from the Art 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 only offered at Kenai Peninsula College. Graduates of this two-year program at Kenai Peninsula College will be knowledgeable in digital camera operation and imaging software, quality printing techniques, and available industry services. Students develop skills that are applicable to either the digital arts industry or the creation of fine art.

The program is designed so that graduates:
• Are prepared for entry-level positions, able to advance in their careers, or integrate digital skills for personal artistic expression.
• Can successfully integrate into a more advanced, specialized digital art program.
• Are well versed in a variety of digital tools and can adapt easily to new technological advances.
• Use judgmental skills to create and edit expressive visual imagery.
• Utilize knowledge of art history as taught in core curriculum to help create and assess effective design.
• Develop unique design solutions and work easily with restrictions of a given job assignment.
• Can contribute in a professional manner within a digital art environment or related field.

Theory will be presented and opportunities for practice will enable students to:
• Effectively utilize a variety of the following digital resources and art tools to create images for commercial, design, fine art applications or personal use:
  - Digital/ film cameras
  - Imaging and design software
  - Film and flatbed scanners
  - Printers
  - Service bureaus
• Create expressive imagery and evaluate its effectiveness through the critiquing process.
• Draw on their knowledge of historical and contemporary art in the development of their own work.
• Identify and achieve competence in art and craft appropriate for advancement to a more specialized degree.
• Conceptualize ideas and develop unique solutions to design problems.
• Demonstrate professional skills applicable to the creative arts workplace.

The Digital Art degree graduate will be prepared for entry-level positions in the photographic industry and graphic arts support services. Possibilities include entry-level assistantships for commercial or corporate photography studios, professional internships, lab assistants, production assistants or entry-level positions in small businesses. The Associate of Applied Science in Digital Art is a launchpad to a professional application or to further education in a specialized digital art program.* Students wishing to earn a Bachelor of Arts in Art with UAA will need to complete all applicable General Education and College of Arts and Sciences Requirements for Baccalaureate Degrees. The majority of art core course requirements will be satisfied (see Advising below).

*Transfer of credits for institutions outside the UAA system is not guaranteed. Each university and college makes its decision autonomously. The student should have a strong portfolio and be knowledgeable in their areas of concentration.

Advising
It is particularly important for students to meet with their advisor each semester for the purpose of reviewing their academic progress and planning enrollment in future courses. AAS students who intend to pursue a baccalaureate degree should consult a faculty or academic advisor for appropriate course selections.

Many of the Digital Art program courses require students to demonstrate a level of computer competency evidenced by completion of a course using one or more of the following applications: word processing, spreadsheets, databases, and communications, or an introductory course in data processing, microcomputers or image editing.

It is the student's responsibility to design their course of study with Digital Art faculty in the Department of Art at Kenai Peninsula College to ensure all prerequisites and computer competencies have been met and that the university and major degree requirements are understood and followed.

Associate of Applied Science, Digital Art

Admission Requirements for Degree Completion
Satisfy the Admission to Certificate and Associate Degree Program Requirements in Chapter 7, Academic Standards and Regulations.

Graduation Requirements
Students are required to make a presentation of portfolio work before the Digital Art Program Advisory Board in their graduating semester.

Students must complete the following graduation requirements:

A. General University Requirements
1. Complete the General University Requirements for Associate Degree Programs located at the beginning of this chapter.
2. Complete the Associate of Applied Science General Degree Requirements (15 credits) located at the beginning of this chapter.

B. Major Requirements
Complete the following Digital Art core courses (18 Credits):
- ART A105 Beginning Drawing 3
- ART A111 Two-Dimensional Design 3
- ART A112 Color Design 3
- ART A257 Digital Art and Design I 3
- ART A261 History of Western Art I 3
- ART A262 History of Western Art II 3

Digital Arts Specialty: Areas of Concentration
1. Digital Photography Concentration (27 Credits Total):
   - ART A220 Digital Imaging for Photography 3
   - ART A225 Beginning Photography - Digital 3
   - ART A228 Art as a Profession 3
   - ART A323 Color Photography 3
   - ART A325 Digital Media for Photography 3
   - ART A367 History of Photography 3

2. Digital Photography Concentration Electives
   (9 Credits Minimum); suggested electives:
   - ART A113 Three-Dimensional Design (3)
   - ART A205 Intermediate Drawing (3)
   - ART A213 Beginning Painting (3)
   - ART A215 Beginning Printmaking (3)
   - ART A224 Beginning Photography (3)
   - ART A295V Internship/Visual Art (1-3)
   - ART A324 Intermediate Photography (3)
   - BA A166 Small Business Management (3)
   - BA A260 Marketing Practices (3)
   - BA A264 Personal Selling (3)
   - JPC A101 Media and Society (3)
The Bachelor of Arts and the Bachelor of Science degree programs require a total of 124-125 credits for graduation and can be completed in four years by students who have had adequate high school preparation in math and sciences. Refer to the beginning of this chapter for recommended high school courses.

Program Objectives and Expected Outcomes
The curriculum of the UAA Biological Sciences program is designed to produce graduates who:

1. Have a basic knowledge of the principles relating to the biological sciences with an emphasis in either molecular or organismal biology.
2. Have an ability to think critically, dissect problems, and offer solutions.
3. Have developed written and oral communications skills consistent with a career in biological sciences.
4. Have developed sufficient competency in knowledge and skills to obtain employment as an entry-level biologist and be able to progress professionally within the discipline.
5. Have developed a mental attitude that learning is a lifetime occupation to maintain relevancy in the biological profession.

In keeping with the objectives, it is expected that graduates of the Biological Sciences program will have:

1. An ability to apply their knowledge of general biology to the workplace or higher education pursuits.
2. An ability to accept challenges and think through problems until solutions are derived and effectively communicate the solutions to supervisors.
3. An ability to design and conduct projects that include fieldwork, laboratory analyses, and interpretation in the discipline.
4. An ability to recognize that education does not stop at graduation, but looks to continuing education as a professional responsibility.

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 towards any degree programs in the biological sciences. All are offered as demand warrants.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>BIOL A074</td>
<td>Field Natural History</td>
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<tr>
<td>BIOL A075</td>
<td>Local Flora</td>
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<tr>
<td>BIOL A100</td>
<td>Human Biology</td>
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<tr>
<td>BIOL A104</td>
<td>Natural History of Alaska</td>
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<tr>
<td>BIOL A124</td>
<td>Biota of Alaska: Selected Topics</td>
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<tr>
<td>BIOL A126</td>
<td>Birds in Field and Laboratory</td>
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</tbody>
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Departmental Honors in Biology
Undergraduate Biological Science majors may be recognized for exceptional performance by earning Departmental Honors in Biology. In order to receive honors in biology, a student must meet each of the following requirements:

1. Meet the requirements for Graduation with Honors as listed in Chapter 7, Academic Standards and Regulations.
2. Meet the requirements for a BA/BS degree 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 Senior Thesis. Biological Science faculty members must approve the project proposal and final written report.
Bachelor of Arts, Biological Sciences

Admission Requirements
Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.

Academic Progress
In order to graduate with a BA in Biological Sciences, all courses covered under Major Requirements for a BA in Biological Sciences must be completed with a grade of C or better. Students who audit a course in biology or who are unable to earn a grade of C or better in the course may repeat the course. All prerequisites for biology courses must be completed with a grade of C or better. Students repeating a course in the Department of Biological Sciences are required to complete all components of the course during the semester in which the course is retaken. For a course with a lecture and laboratory component, students may not carry forward an individual lecture or laboratory grade from a previous semester in which the course was taken.

Graduation Requirements
Students must complete the following graduation requirements:

A. General University Requirements
Complete the General University Requirements for All Baccalaureate Degrees located at the beginning of this chapter.

B. General Education Requirements
Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

C. College of Arts and Sciences Requirements
Complete the College of Arts and Sciences Requirements listed at the beginning of the CAS section.

D. Major Requirements
1. Complete these required core courses:
   - BIOL A115/L: Fundamentals of Biology I with Laboratory (4)
   - BIOL A116/L: Fundamentals of Biology II with Laboratory (4)
   - BIOL A224/L: Fundamentals of Cell Biology with Laboratory (4)
   - BIOL A252/L: Principles of Genetics with Laboratory (4)
   - BIOL A310/L: Principles of Physiology with Laboratory (4)
   - BIOL A316: Introduction to Plant Physiology (3) or
   - BIOL A415: Comparative Animal Physiology (3)
   - BIOL A492: Undergraduate Seminar (1)
   - CHEM A105: General Chemistry I (3)
   - CHEM A105L: General Chemistry I Laboratory (1)
   - CHEM A106: General Chemistry II (3)
   - CHEM A106L: General Chemistry II Laboratory (1)
   - MATH A201: Calculus I (4)
   - MATH A202: Calculus II (4)
   - PHYS A211: General Physics I (3)
   - PHYS A212: General Physics II (3)

2. It is recommended that students complete 8 credits from the following:
   - GEOL A111: Physical Geology (4)
   - GEOL A221: Historical Geology (4)
   - PHYS A123: Basic Physics I (3)
   - PHYS A123L: Basic Physics I Laboratory (1)
   - PHYS A124: Basic Physics II (3)
   - PHYS A124L: Basic Physics II Laboratory (1)
   - CHEM A105: General Chemistry I (3)
   - CHEM A105L: General Chemistry I Laboratory (1)
   - CHEM A106: General Chemistry II (3)
   - CHEM A106L: General Chemistry II Laboratory (1)
   - CHEM A321: Organic Chemistry I (3)
   - CHEM A322: Organic Chemistry II (3)
   - CHEM A323L: Organic Chemistry Laboratory (2)
   - MATH A200: Calculus I (4)
   - MATH A201: Calculus II (4)
   - PHYS A123: Basic Physics I (3)
   - PHYS A123L: Basic Physics I Laboratory (1)
   - PHYS A124: Basic Physics II (3)
   - PHYS A124L: Basic Physics II Laboratory (1)
   - PHYS A211: General Physics I (3)

3. Complete 15-17 credits of upper division program electives from the following areas:
   - Ecology (3-4)
   - Microbiology (4-5)
   - Biology electives (8)

4. A total of 124 credits is required for the degree, of which 42 credits must be upper division.

Bachelor of Science, Biological Sciences

The Bachelor of Science degree 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 biology. A wide selection of electives is available to all students, including courses offered under BIOL A394 and BIOL A490, which are selected topics courses. 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
Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.

Academic Progress
In order to graduate with a BS in Biological Sciences, all courses covered under Major Requirements for a BS in Biological Sciences must be completed with a grade of C or better. Students who audit a course in biology or who are unable to earn a grade of C or better in the course may repeat the course. All prerequisites for biology courses must be completed with a grade of C or better. Students repeating a course in the Department of Biological Sciences are required to complete all components of the course during the semester in which the course is retaken. For a course with a lecture and laboratory component, students may not carry forward an individual lecture or laboratory grade from a previous semester in which the course was taken.

Graduation Requirements
Students must complete the following graduation requirements:

A. General University Requirements
Complete the General University Requirements for All Baccalaureate Degrees located at the beginning of this chapter.

B. General Education Requirements
Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

C. College of Arts and Sciences Requirements
Complete the College of Arts and Sciences Requirements listed at the beginning of the CAS section.

D. Major Requirements
1. Some major requirements may also be used to satisfy the College of Arts and Sciences BS requirements.
   - Complete these required support courses:
     - CHEM A105: General Chemistry I (3)
     - CHEM A106: General Chemistry II (3)
     - CHEM A106L: General Chemistry II Laboratory (1)
     - CHEM A321: Organic Chemistry I (3)
     - CHEM A322: Organic Chemistry II (3)
     - CHEM A323L: Organic Chemistry Laboratory (2)
     - MATH A200: Calculus I (4)
     - MATH A201: Calculus II (4)
     - PHYS A123: Basic Physics I (3)
     - PHYS A123L: Basic Physics I Laboratory (1)
     - PHYS A124: Basic Physics II (3)
     - PHYS A124L: Basic Physics II Laboratory (1)
     - PHYS A212: General Physics II Laboratory (1)

2. Complete these required core courses:
   - BIOL A115/L: Fundamentals of Biology I with Laboratory (4)
   - BIOL A116/L: Fundamentals of Biology II with Laboratory (4)
   - BIOL A224/L: Fundamentals of Cell Biology with Laboratory (4)
   - BIOL A252/L: Principles of Genetics with Laboratory (4)
   - BIOL A310/L: Principles of Physiology with Laboratory (4)
   - BIOL A316: Introduction to Plant Physiology (3) or
   - BIOL A415: Comparative Animal Physiology (3)
   - BIOL A492: Undergraduate Seminar (1)
   - CHEM A105: General Chemistry I (3)
   - CHEM A105L: General Chemistry I Laboratory (1)
   - CHEM A106: General Chemistry II (3)
   - CHEM A106L: General Chemistry II Laboratory (1)
   - MATH A201: Calculus I (4)
   - MATH A202: Calculus II (4)
   - PHYS A123: Basic Physics I (3)
   - PHYS A123L: Basic Physics I Laboratory (1)
   - PHYS A124: Basic Physics II (3)
   - PHYS A124L: Basic Physics II Laboratory (1)
   - PHYS A211: General Physics I (3)
3. Complete Biological Sciences core courses:

- BIOL A115/L Fundamentals of Biology I with Laboratory 4
- BIOL A116/L Fundamentals of Biology II with Laboratory 4
- BIOL A242/L Fundamentals of Cell Biology with Laboratory 4
- BIOL A252/L Principles of Genetics with Laboratory 4
- BIOL A271/L Principles of Ecology with Laboratory 4
- BIOL A308 Principles of Evolution 3
- BIOL A310/L Principles of Physiology with Laboratory (4) 3-4
- BIOL A316 Introduction to Plan Physiology (3)
- BIOL A415 Comparative Animal Physiology (3)
- BIOL A430 General Microbiology 5
- BIOL A492 Undergraduate Seminar 1

4. Complete 11-12 credits of upper division program electives from the following list:

   - Applied Microbiology (3)
   - Human Genome* (3)
   - Molecular Biology (3)
   - Molecular Biology Laboratory (1)
   - Virology (3)
   - Immunochemistry (4)
   - Developmental Biology (4)
   - Parasitology (4)
   - Comparative Animal Physiology (3)
   - Comparative Anatomy of Vertebrates (4)
   - Microtechnique (4)
   - Instructional Practicum: Laboratory (1)

   a. Recommended electives in cellular and molecular biology:
   - Applied Microbiology (3)
   - Human Genome* (3)
   - Molecular Biology (3)
   - Molecular Biology Laboratory (1)
   - Virology (3)
   - Immunochemistry (4)
   - Developmental Biology (4)
   - Parasitology (4)
   - Comparative Animal Physiology (3)
   - Comparative Anatomy of Vertebrates (4)
   - Microtechnique (4)
   - Instructional Practicum: Laboratory (1)

   b. Recommended electives in organismal, ecology and evolutionary biology:
   - Introduction to Plant Physiology (3)
   - Systematic Botany (4)
   - Biology of Non-Vascular Plants (4)
   - Biology of Vascular Plants (4)
   - Physiological Plant Ecology (3)
   - Parasitology (4)
   - Comparative Animal Physiology (3)
   - Ichthyology (4)
   - Mammalogy (4)
   - Ornithology (4)
   - Invertebrate Zoology (4)
   - Comparative Anatomy of Vertebrates (4)

Ecology-Systems

- BIOL A309 Biogeography (3)
- BIOL A373 Conservation Biology (3)
- BIOL A378 Marine Biology (3)
- BIOL A430 Marine Mammal Biology (4)
- BIOL A441 Animal Behavior (4)
- BIOL A445 Plant-Herbivore Ecology (4)
- BIOL A450 Microbial Ecology (3)
- BIOL A477 Tundra and Taiga Ecosystems (3)
- BIOL A478 Biological Oceanography (4)
- BIOL A479 Physiological Plant Ecology (3)
- BIOL A489 Population Genetics and Evolutionary Processes* (3)

Techniques

- BIOL A403 Microtechnique (4)
- BIOL A495 Instructional Practicum: Laboratory (1)

c. Special topics, independent study and individual research (credits vary):

- BIOL A456 Nonlinear Dynamics and Chaos (3)
- BIOL A490 Selected Lecture Topics in Biology (1-3)
- BIOL A490L Selected Laboratory Topics in Biology (1-3)
- BIOL A497 Independent Study in Biology
- BIOL A498 Individual Research
- BIOL A499 Senior Thesis (3)

   *Integrative capstone courses

4. A total of 122-125 credits is required for the degree, of which 42 credits must be upper division.

Bachelor of Science, Natural Sciences

The Department of Biological Sciences also oversees the Bachelor of Science in Natural Sciences. This curriculum emphasizes the interrelationships among the sciences. This flexible degree program can be used to meet admissions requirements of specific professional schools in medicine, dentistry, and veterinary medicine. It is also designed for health sciences practitioners who wish to obtain a stronger background in both the biological and chemical sciences, and for those preparing to teach science at the secondary level.

For a complete program description see the Natural Sciences section of this chapter.

Minor, Biological Sciences

Students majoring in another subject who wish to minor in Biological Sciences must complete the following requirements. A total of 28 credits is required for the minor, 12 of which must be upper division.

- BIOL A115/L Fundamentals of Biology I with Laboratory 4
- BIOL A116/L Fundamentals of Biology II with Laboratory 4
- BIOL A242/L Fundamentals of Cell Biology with Laboratory 4
- BIOL A252/L Principles of Genetics with Laboratory 4
- BIOL A271/L Principles of Ecology with Laboratory 4
- BIOL A308 Principles of Evolution 3
- BIOL A310/L Principles of Physiology with Laboratory (4) 3-4
- BIOL A316 Introduction to Plan Physiology (3)
- BIOL A415 Comparative Animal Physiology (3)
- BIOL A430 General Microbiology 5
- BIOL A492 Undergraduate Seminar 1

- Applied Microbiology (3)
- Human Genome* (3)
- Molecular Biology (3)
- Molecular Biology Laboratory (1)
- Virology (3)
- Immunochemistry (4)
- Developmental Biology (4)
- Parasitology (4)
- Comparative Animal Physiology (3)
- Comparative Anatomy of Vertebrates (4)
- Microtechnique (4)
- Instructional Practicum: Laboratory (1)

- Introduction to Plant Physiology (3)
- Systematic Botany (4)
- Biology of Non-Vascular Plants (4)
- Biology of Vascular Plants (4)
- Physiological Plant Ecology (3)
- Parasitology (4)
- Comparative Animal Physiology (3)
- Ichthyology (4)
- Mammalogy (4)
- Ornithology (4)
- Invertebrate Zoology (4)
- Comparative Anatomy of Vertebrates (4)

- Microtechnique (4)
- Instructional Practicum: Laboratory (1)

- Introduction to Plant Physiology (3)
- Systematic Botany (4)
- Biology of Non-Vascular Plants (4)
- Biology of Vascular Plants (4)
- Physiological Plant Ecology (3)
- Parasitology (4)
- Comparative Animal Physiology (3)
- Ichthyology (4)
- Mammalogy (4)
- Ornithology (4)
- Invertebrate Zoology (4)
- Comparative Anatomy of Vertebrates (4)

FACULTY

Lilian Alessa, Professor, AFLA@uaa.alaska.edu
Raymond Bailey, Professor, AFRP6@uaa.alaska.edu
Marilyn Barker, Affl. Associate Professor, AFMH8@uaa.alaska.edu
Loren Buck, Professor, Loren@uaa.alaska.edu
Jason Burkhart, Assistant Professor, AFJLB7@uaa.alaska.edu
Jennifer Moss Burns, Associate Professor, AFJMB4@uaa.alaska.edu
Douglas Causey, Professor, AFDC@uaa.alaska.edu
Matt Carlson, Assistant Professor, AFMLC2@uaa.alaska.edu
Kirys Duddleston, Associate Professor, AFKD1@uaa.alaska.edu
Raymond Bailey, Professor, AFRPB@uaa.alaska.edu
Martha Hatch, Associate Professor, AFMLC2@uaa.alaska.edu
Timothy Hinterberger, Associate Professor, AFTJH@uaa.alaska.edu
Miki Ii, Assistant Professor, AFML1@uaa.alaska.edu
Mathematics specific a proper high school preparation. Consult the College of Arts and Sciences. Biochemistry is a four-year baccalaureate program which assumes great progress in explaining life in chemical terms. Methods of chemistry to the problems of biology, biochemists have made chemical, physical, and biological sciences. By applying the concepts and course requirements in inorganic, analytical, organic, physical chemistry government or industry. Students majoring in Chemistry will meet basic program.

The Bachelor of Science in Chemistry with options in Chemistry or biochemistry. The biochemistry option is designed for students who prefer a more oriented approach to 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 degree in Chemistry.
2. Meet the requirements for Graduation with Honors as listed in Chapter 7, Academic Standards and Regulations.
3. Maintain a minimum GPA of 3.50 in Chemistry 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.

Bachelor of Science, Chemistry Admission Requirements
Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.

Academic Progress
In order to graduate with a BS in Chemistry, all courses covered under Major Requirements for a BS in Chemistry must be completed with a grade of C or better.

Graduation Requirements
Students must complete the following graduation requirements:

A. General University Requirements
Complete the General University Requirements for All Baccalaureate Degrees located at the beginning of this chapter.

B. General Education Requirements
Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

C. College of Arts and Sciences Requirements
Complete the College of Arts and Sciences Requirements listed at the beginning of the CAS section.

D. Major Requirements
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.

1. Students working toward a degree in Chemistry can choose one of two options:

Chemistry Option (82-83 credits)
Complete the following required courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BIOL A115</td>
<td>Fundamentals of Biology I</td>
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<td>CHEM A105</td>
<td>General Chemistry I</td>
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<td>General Chemistry I Laboratory</td>
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<td>CHEM A106</td>
<td>General Chemistry II</td>
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<td>CHEM A106L</td>
<td>General Chemistry II Laboratory</td>
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<td>CHEM A212</td>
<td>Quantitative Analysis</td>
<td>5</td>
</tr>
<tr>
<td>CHEM A253</td>
<td>Principles of Inorganic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM A321</td>
<td>Organic Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM A322</td>
<td>Organic Chemistry II</td>
<td>3</td>
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<tr>
<td>CHEM A323L</td>
<td>Organic Chemistry Laboratory</td>
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CHEM A331 Physical Chemistry I 3
CHEM A332 Physical Chemistry II 3
CHEM A333L Physical Chemistry Laboratory 2
CHEM A434 Instrumental Methods 4
CHEM A441 Principles of Biochemistry I 3
CHEM A453 Advanced Inorganic Chemistry 5
CHEM A492 Undergraduate Seminar (1) 2
CHEM A498 Individual Research (3) 6
MATH A200 Calculus I 4
MATH A201 Calculus II 4
MATH A202 Calculus III 4
MATH A314 Linear Algebra 3
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

Upper Division Elective (choose one of the following) 3-4
BIOL A310 Principles of Physiology (3)
BIOL A415 Comparative Animal Physiology (4)
BIOL A461 Molecular Biology (3)
CHEM A442 Principles of Biochemistry II (3)
CHEM A450 Environmental Chemistry (3)
CHEM A456 Non-linear Dynamics and Chaos (3)
CHEM A460 Chemical Ecotoxicology (3)
CHEM A471 Immunology (4)
GEOL A321 Mineralogy (4)
GEOL A360 Geochemistry (3)
GEOL A460 Environmental Geology (3)
MATH A202 Ordinary Differential Equations (3)
MATH A242 Partial Differential Equations (3)
PHYS A303 Modern Physics (3)
PHYS A320 Simulation of Physical Systems (3)
PHYS A403 Quantum Mechanics (3)
PHYS A413 Statistical Methods (3)

Biochemistry Option (86-87 credits)

Complete the following required courses:
BIOL A115 Fundamentals of Biology I 4
BIOL A116 Fundamentals of Biology II 4
BIOL A242 Fundamentals of Cell Biology 4
BIOL A252 Principles of Genetics 4

Upper Division Biology (choose one of the following) 3-4
BIOL A310 Principles of Physiology (3)
or
BIOL A415 Comparative Animal Physiology (4)
or
BIOL A461 Molecular Biology (3)
CHEM A105 General Chemistry I 3
CHEM A105L General Chemistry I Laboratory 1
CHEM A106 General Chemistry II 3
CHEM A106L General Chemistry II Laboratory 1
CHEM A253 Principles of Inorganic Chemistry 3
CHEM A212 Quantitative Analysis 5
CHEM A321 Organic Chemistry I 3
CHEM A322 Organic Chemistry II 3
CHEM A323L Organic Chemistry Laboratory 2
CHEM A331 Physical Chemistry I 3
CHEM A333L Physical Chemistry Laboratory 2
CHEM A434 Instrumental Methods 4
CHEM A441 Principles of Biochemistry I 3
CHEM A442 Principles of Biochemistry II 3
CHEM A443 Biochemistry Laboratory 2
CHEM A492 Undergraduate Seminar (1) 2
CHEM A498 Individual Research (3) 6
MATH A200 Calculus I 4
MATH A201 Calculus II 4
MATH A202 Calculus III 4
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

2. A total of 120-126 credits is required for the degree, of which 42 credits must be upper division.

Minor, Chemistry

Students majoring in another subject who wish to minor in Chemistry must complete the following requirements. A total of 24 credits is required for the minor.

CHEM A105 General Chemistry I 3
CHEM A105L General Chemistry I Laboratory 1
CHEM A106 General Chemistry II 3
CHEM A106L General Chemistry II Laboratory 1
CHEM A212 Quantitative Analysis 5
CHEM A321 Organic Chemistry I 3
CHEM A322 Organic Chemistry II 3
CHEM A323L Organic Chemistry Laboratory 2
CHEM A331 Physical Chemistry I 3
CHEM A333L Physical Chemistry Laboratory 2

Minor, Communication

Students majoring in another subject who wish to minor in Communication must complete the following requirements. A total of 18 credits is required for the minor.

Select 9 credits from the following:

COMM A101 Introduction to Human Communication (3)
COMM A111 Fundamentals of Oral Communication (3)
COMM A235 Small Group Communication (3)
COMM A237 Interpersonal Communication (3)
COMM A241 Public Speaking (3)

Select 9 credits from the following:

COMM A236 Interviewing (3)
COMM A305 Intercultural Communication (3)
COMM A320 Argumentation and Debate (3)
COMM A340 Nonverbal Communication (3)
COMM A346 Oral Interpretation of Literature (3)
Students must complete the following graduation requirements:

**Graduation Requirements**

Complete the Admission to Baccalaureate Programs Requirements in Chapter 7 of this UAA catalog.

Meet the requirements for Graduation with Honors as listed in Chapter 7, Academic Standards and Regulations.

Meet the requirements for a BA/BS degree in Computer Science.

**Bachelor of Arts, Computer Science**

**Admission Requirements**

Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.

**Graduation Requirements**

Students must complete the following graduation requirements:

**A. General University Requirements**

Complete the General University Requirements for All Baccalaureate Degrees located at the beginning of this chapter.

**B. General Education Requirements**

Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

**C. College of Arts and Sciences Requirements**

Complete the College of Arts and Sciences Requirements for a BA degree listed at the beginning of the CAS section.

**D. Major Requirements**

1. Complete the following core courses (33 credits)
   - CS A201 Programming Concepts I 3
   - CS A202 Programming Concepts II 3
   - CS A221 Computer Organization and Assembly Programming 3
   - CS A320 Operating Systems 3
   - CS A330 Algorithms and Data Structures 3
   - CS A331 Programming Language Concepts 3
   - CS A342 Networks 3
   - CS A351 Automata, Algorithms, and Complexity 3
   - CS A360 Database Systems 3
   - CS A401 Software Engineering 3
   - CS A470 Applied Software Development Project (3) 3
   - or CS A495 Internship Project (3)

2. Complete the following required support courses (12-14 credits):
   - ENGL A312 Advanced Technical Writing (3) 3
   - or ENGL A414 Research Writing (3)
   - MATH A200 Calculus I (4) 3-4
   - or MATH A272 Applied Calculus (3)
   - MATH A231 Introduction to Discrete Mathematics 3
   - STAT A253 Applied Statistics for the Sciences (4) 3-4
   - or STAT A307 Probability (3)

3. Complete an additional 15 upper division credits in Computer Science, Mathematics (excluding MATH A420 and MATH A495), or Statistics. Nine of these credits must be in Computer Science. A maximum of 3 credits of CS A395 may be applied to degree requirements.

4. A grade of C or higher must be received in all MATH, CS, and STAT courses required to satisfy the above program requirements.

5. All Computer Science majors must take a standardized test of knowledge of computer science approved by the Computer Science 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.

6. Students are encouraged to develop their program with a Computer Science advisor.

7. A total of 120 credits is required for the degree, of which 42 credits must be upper division.

**Bachelor of Science, Computer Science**

**Admission Requirements**

Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.

**Graduation Requirements**

Students must complete the following graduation requirements:

**FACULTY**

**Communication and Discourse Studies:**
- Lauren Bruce, Associate Professor, AFLKB@uaa.alaska.edu
- Steve Johnson, Associate Professor, AFSLJ@uaa.alaska.edu
- Doug Parry, Professor, AFDJP@uaa.alaska.edu
- Shannon Whitney, Associate Professor, AFSAW@uaa.alaska.edu

**Communication and Human Behavior:**
- Marcia Stratton, Associate Professor, AFMRS@uaa.alaska.edu

**COMPUTER SCIENCE**

**Social Sciences Building (SSB), Room 154, (907) 786-1744/786-4824**

www.math.uaa.alaska.edu

The Department of Mathematical Sciences 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 degree 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 degree 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 2001 computing curriculum guidelines developed by the Association for Computing Machinery (ACM) and the ABET Inc.’s Computing Accreditation Commission (CAC). 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.

**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 as listed in Chapter 7 of this UAA catalog.
2. Meet the requirements for a BA/BS degree in Computer Science.
3. Earn a 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.
Graduation Requirements
Students must complete the following graduation requirements:

A. General University Requirements
Complete the General University Requirements for All Baccalaureate Degrees located at the beginning of this chapter.

B. General Education Requirements
Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

C. College of Arts and Sciences Requirements
Complete the College of Arts and Sciences Requirements for a BS degree listed at the beginning of the CAS section.

D. Major Requirements
1. Complete the following core courses (37 credits):
   - CS A201 Programming Concepts I 3
   - CS A202 Programming Concepts II 3
   - CS A221 Computer Organization and Assembly Programming 3
   - CS/EE A241 Computer Hardware Concepts 4
   - CS A320 Operating Systems 3
   - CS A330 Algorithms and Data Structures 3
   - CS A331 Programming Language Concepts 3
   - CS A342 Networks 3
   - CS A351 Automata, Algorithms, and Complexity 3
   - CS A360 Database Systems 3
   - CS A401 Software Engineering 3
   - CS A470 Applied Software Development Project (3) 3
   - or CS A495 Internship Project (3)

2. Complete the following required support courses (25 credits):
   - MATH A200 Calculus I 4
   - MATH A201 Calculus II 4
   - MATH A231 Introduction to Discrete Mathematics 3
   - STAT A307 Probability 3
   - PHYS A123/L Basic Physics I (4) 4
   - or PHYS A211/L General Physics I (4)
   - PHYS A124/L Basic Physics II (4) 4
   - or PHYS A212/L General Physics II (4)
   - ENGL A312 Advanced Technical Writing (3) 3
   - or ENGL A414 Research Writing (3)

3. Complete an additional 12 upper division credits in Computer Science, Mathematics (excluding MATH A420 and MATH A495), or Statistics. Nine of these credits must be in Computer Science. A maximum of 3 credits of CS A395 may be applied to degree requirements.

4. A grade of C or higher must be received in all MATH, CS, and STAT courses required to satisfy the above program requirements.

5. All Computer Science majors must take a standardized test of knowledge of computer science approved by the Computer Science 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.

6. Students are encouraged to develop their program with a Computer Science advisor.

7. A total of 120 credits is required for the degree, of which 42 credits must be upper division.

Minor, Computer Science
Students majoring in another subject who wish to minor in Computer Science must complete the following requirements:

1. Complete the five required courses:
   - CS A101 Introduction to Computer Science 3
   - CS A201 Programming Concepts I 3
   - CS A202 Programming Concepts II 3
   - CS A221 Computer Organization and Assembly Programming 3
   - MATH A231 Introduction to Discrete Mathematics 3

2. Complete 9 credits of upper division Computer Science courses.

3. A total of 24 credits is required for the minor.

FACULTY
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John Lund, Cooperating Assistant Professor, A#L100@uaa.alaska.edu
David Meyers, Associate Professor, AFDM@uaa.alaska.edu
Kenrick Mock, Associate Professor, AFKRM@uaa.alaska.edu
Frank Moore, Associate Professor, AFWM@uaa.alaska.edu
Kirk Scott, Associate Professor, AFKAS@uaa.alaska.edu

ENGLISH
Administration/ Humanities Building (ADM), Room 101, (907) 786-4355
http://english.uaa.alaska.edu/

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, literature, linguistics, and thinking strategies. The composition program provides courses that fulfill the university's General Education Requirement in written communication. More advanced writing courses offer opportunities for students to develop skills in electronic communication, disciplinary writing, and research.

Students who major in English choose one of three options: literature, rhetoric and language, or education. The literature option focuses on significant examples of literature from different periods and genres, as well as the social and cultural forces that shape them. The rhetoric and language option focuses on rhetorical strategies and techniques of composition, emphasizing historical and theoretical perspectives in contemporary settings. The education option prepares students for teaching literature and writing at the middle school and secondary levels, and for admission to UAA's Master of Arts in Teaching program.

All three options prepare majors to conduct research in the discipline and to write for a variety of purposes and audiences. In addition, all three options offer the opportunity to earn honors in English.

The Literature minor 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 Professional Writing minor prepares students to interpret and present complex information in a readable form to various audiences using a variety of media, including written words, illustrations, digital multimedia, online help systems, websites, and videos. The minor develops strong language, visual, and analytical skills, as well as aptitude for technical information, particularly in the industry in which students plan to work: computer science, engineering, medicine, aerospace, or business.

The Linguistics minor 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 includes two introductory courses and four elective courses which are offered through the Anthropology and English departments. Most courses emphasize the structure of the English language.

For information on English placement tests, challenge exams, transfer credits, petition procedures, or special registration, contact the English Department.
Honors in English
The Department of English recognizes exceptional undergraduate students by awarding them departmental honors in English. Honors in English may be coordinated with the UAA Honors Program. To graduate with Departmental Honors, the student must be a declared English major, satisfy all requirements for a BA degree in English (literature, rhetoric, or education option), and meet the following requirements:
1. Meet the requirements for Graduation with Honors as listed in Chapter 7, Academic Standards and Regulations.
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:
   - ENGL A403 Topics in Autobiography (3)
   - ENGL A404 Topics in Women’s Literature (3)
   - ENGL A429 Major Authors (3)
   - ENGL A440 Topics in Comparative Literature (3)
   - ENGL A444 Topics in Native Literatures (3)
   - ENGL A490 Topics in Language and Literature (1-3)
   - ENGL A491 Topics in Composition and Rhetoric (3)
4. Complete ENGL A499 English Honors Thesis, with a grade of A in the judgment of two faculty readers. The thesis must be completed under the guidance of a member of the English faculty and should be 30-40 pages in length. Students are encouraged to enroll concurrently in ENGL A414 Research Writing.

Bachelor of Arts, English
Admission Requirements
Complete the Baccalaureate Degree Programs Admission Requirements at the beginning of Chapter 7, Academic Standards and Regulations.

Graduation Requirements
Students must complete the following graduation requirements:

A. General University Requirements
Complete the General University Requirements for Baccalaureate Degrees located at the beginning of this chapter.

B. General Education Requirements
Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

C. College of Arts and Sciences Requirements
Complete the College of Arts and Sciences requirements listed at the beginning of the CAS section.

D. Major Requirements
Students working toward a degree in English may choose from three options: literature, rhetoric, and language, or education.

1. Complete the following core courses (15 credits):
   - ENGL A201 Masterpieces of World Literature I (3)
   - ENGL A202 Masterpieces of World Literature II (3)
   - ENGL A351 Poetry (3)
   - ENGL A434 History of Rhetoric (3)
   - ENGL A435 History of Criticism (3)
2. Complete one of the following options:
   - **Literature Option (24 credits)**
     - **Complete 3 credits from national literature:**
       - ENGL A301 Literature of Britain I (3)
       - ENGL A302 Literature of Britain II (3)
       - ENGL A305 National Literatures in English (3)
       - ENGL A306 Literature of the United States I (3)
       - ENGL A307 Literature of the United States II (3)
     - **Complete 3 credits from each period:**
       - **Early**
         - ENGL A310 Ancient Literature (3)
         - ENGL A315 Survey of Medieval Literature (3)
         - ENGL A320 Renaissance Literature (3)

   - **Middle**
     - ENGL A325 Neoclassical Literature (3)
     - ENGL A330 Literature of Romanticism (3)
     - ENGL A340 The Victorian Period (3)

   - **Late**
     - ENGL A343 Modern and Contemporary Literature (3)
     - ENGL A440 Topics in Comparative Literature (3)

   - **Complete 3 credits from genre:**
     - ENGL A361 The Novel (3)
     - ENGL A363 Short Story (3)
     - ENGL A371 Narrative Nonfiction (3)
     - ENGL A381 Drama (3)
     - ENGL A383 Film Interpretation (3)
     - ENGL A391 Genres of Subject and Theme (3)

   - **Complete 6 credits from specialized studies:**
     - ENGL A424 Shakespeare (3)
     - and one of the following:
       - ENGL A403 Topics in Autobiography (3)
       - ENGL A404 Topics in Women’s Literatures (3)
       - ENGL A429 Major Authors (3)
       - ENGL A444 Topics in Native Literatures (3)
       - ENGL A445 Alaska Native Literatures (3)

   - **Complete 3 credits upper division English or Creative Writing and Literary Arts elective:**
     - ENGL A450 Linguistics and English Language Teaching (3)
     - ENGL A487 Standard Written English (3)
     - ENGL A495 Internship in Professional Writing (1-6)

   - **Complete 3 credits from rhetoric and language theory:**
     - ENGL A475 Modern Grammar (3)
     - ENGL A476 History of English Language (3)
     - ENGL A491 Topics in Composition and Rhetoric (3)

   - **Complete 6 credits upper division elective:**
     - One upper division Rhetoric course
     - One upper division English or Creative Writing and Literary Arts elective

   - **Education Option (24 credits)**
     - **Complete 12 credits from reading & literature:**
       - ENGL A424 Shakespeare (3)*
       - and one of the following:
         - ENGL A361 The Novel (3)
         - ENGL A363 Short Story (3)
         - ENGL A371 Narrative Nonfiction (3)
         - ENGL A381 Drama (3)
         - ENGL A383 Film Interpretation (3)
         - ENGL A391 Genres of Subject and Theme (3)
     - **Complete 6 credits from specialized studies:**
       - ENGL A424 Shakespeare (3)
       - and one of the following:
         - ENGL A403 Topics in Autobiography (3)
         - ENGL A404 Topics in Women’s Literatures (3)
         - ENGL A429 Major Authors (3)
         - ENGL A444 Topics in Native Literatures (3)
         - ENGL A445 Alaska Native Literatures (3)

   - **Complete 3 credits upper division English or Creative Writing and Literary Arts elective:**
     - ENGL A450 Linguistics and English Language Teaching (3)
     - ENGL A487 Standard Written English (3)
     - ENGL A495 Internship in Professional Writing (1-6)

   - **Complete 3 credits from rhetoric and language theory:**
     - ENGL A475 Modern Grammar (3)
     - ENGL A476 History of English Language (3)
     - ENGL A491 Topics in Composition and Rhetoric (3)

   - **Complete 6 credits upper division elective:**
     - One upper division Rhetoric course
     - One upper division English or Creative Writing and Literary Arts elective

University of Alaska Anchorage 2010-2011 Catalog
www.uaa.alaska.edu
MINOR, ENGLISH

The Department of English offers a minor in English with an emphasis in literature, linguistics, or professional writing. A total of 18 credits is required for the minor.

Students majoring in another subject who wish to minor in English must complete the following requirements.

Linguistics Emphasis

1. Complete these required courses (6 credits):
   - LING A101 The Nature of Language (3)
   - LING A201 Intermediate Grammar (3)
   - ANTH A361 Language and Culture (3)
   - ENGL A450 Linguistics and English Language Teaching (3)
   - ENGL A475 Modern Grammar (3)
   - ENGL A476 History of English Language (3)
   - ENGL A487 Standard Written English (3)
   - ENGL A490 Topics in Language and Literature (1-3)*

2. Complete 12 credits from the following:
   - ANTH A210 Introduction to Anthropological Linguistics (3)
   - ENGL A451 Advanced Composition (3)
   - ENGL A461 Professional Writing (3)
   - ENGL A483 Internship in Professional Writing (1-6)
   - ENGL A491 Topics in Composition and Rhetoric (3)

3. A total of 120 credits is required for the degree, of which 42 credits must be upper division.

Minor, Creative Writing and Literary Arts

Students who wish to minor in Creative Writing and Literary Arts must complete the following requirements:

1. CWLA A260 Introduction to Creative Writing (3)
2. One the following:
   - CWLA A352 Writers’ Workshop: Poetry (3)
   - CWLA A362 Writers’ Workshop: Fiction (3)
   - CWLA A372 Writers’ Workshop: Nonfiction (3)
   - CWLA A382 Writers’ Workshop: Drama and Screenwriting (3)
3. One of the following:
   - ENGL A351 Poetry (3)
   - ENGL A361 The Novel (3)
   - ENGL A363 Short Story (3)
   - ENGL A371 Narrative Nonfiction (3)
   - ENGL A381 Drama (3)
   - ENGL A383 Film Interpretation (3)
4. One 300- or 400-level literature course. (3)
5. One of the following:
   - CWLA A452 Advanced Writers’ Workshop: Poetry (3)
   - CWLA A462 Advanced Writers’ Workshop: Fiction (3)
   - CWLA A472 Advanced Writers’ Workshop: Nonfiction (3)
   - CWLA A482 Advanced Writers’ Workshop: Drama and Screenwriting (3)
6. One 300- or 400-level workshop (in a different genre) or one of the following:
   - CWLA A259 Short Format Introduction to Creative Writing (repeatable twice with a change in subtitle) (1-3)
   - CWLA A260 Introduction to Creative Writing (repeatable once) (3)
   - ENGL A495 Internship in Professional Writing (1-6)
7. A total of 18 credits is required for the minor.

FACULTY

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Environmental & Society
Beatrice McDonald Hall (BMH), Room 213 (907) 786-6049
www.uaa.alaska.edu/ges

Environmental problems and society’s responses to the challenges presented by a changing environment are some of the most pressing issues facing our modern world. The interdisciplinary degree in Environment & Society prepares students to be informed citizens and for careers in environmental advocacy, policy setting and analysis, education, urban and resource planning, and graduate studies in a variety of disciplines.

The curriculum in the Environment & Society degree program will educate students about the fundamental role of interconnected, natural/living systems in supporting life and social well-being and the key threats to these systems and the challenges society faces in meeting these threats. In addition, students are exposed to the key methods and tools they will need to engage as professionals and citizens to promote the long-term health and vitality of ecological, social, economic, and cultural systems and to make informed decisions about environmental issues.

Curriculum in the Environment & Society major, as well as other coursework offered by the Department of Geography and Environmental Studies, places an emphasis on community engagement and the development of advanced skills in public science writing.

In addition to a Bachelor of Arts and a Bachelor of Science in Environment & Society, minors in Environmental Studies and in Geography are also offered.

Program Outcomes
The specific educational outcomes that support the program objectives are to produce graduates who are able to:

• Describe the fundamental role of natural/living systems in supporting life and social well-being and the key threats to these systems.

• Explain the central importance of interconnections and relationships among people and the natural world in understanding the environmental and related challenges facing society.

• Apply appropriate methods and tools to engage as professionals and citizens to promote the long-term health and vitality of ecological, social, economic, and cultural systems.

• Demonstrate the ability to think critically about the relative merits of arguments, to anticipate consequences of actions, and to make informed decisions about environmental issues.

Bachelor of Arts, Environment & Society

Bachelor of Science, Environment & Society

Admission Requirements
Complete the Admission to Baccalaureate Programs Requirements listed at the beginning of this chapter.

Graduation Requirements
Students must complete the following graduation requirements:

A. General University Requirements
Complete the General University Requirements of Baccalaureate degrees listed at the beginning of this chapter.

B. General Education Requirements
Complete the General Education Requirements for Baccalaureate degrees listed at the beginning of this chapter.

C. College of Arts and Sciences Requirements
Complete the College of Arts and Sciences Requirements for either a BA or BS degree listed at the beginning of the CAS section.

Major Requirements
1. Complete the following departmental core courses (11 credits)
   - GEOG A211 Earth Systems: Science and Geography of the Natural Environment 3
   - GEOG A211L Earth Systems: Science and Geography of the Natural Environment Lab 1
   - ENVI A212 Living on Earth: People and the Environment 3
   - ENVI A470 Environmental Planning and Problem Solving 4

2. Complete the following interdisciplinary core courses (22 credits)
   - BIOL A373 Conservation Biology 3
   - CEL A292 Introduction to Civic Engagement 3
   - CEL A395 Civic Engagement Internship 3
   - ENGL A478 Public Science Writing 3
   - ENVI A210 Environmental Economics and Policy 3
   - ENVI A210N Environmental Economics and Policy 3
   - PHIL A303 Environmental Ethics 3
   - GIS A268 Elements of Geographic Information Systems (GIS) 4

3. Complete 9-10 credits from one of the following emphases: 9-10 credits:
   - Life Science and Environment Emphasis:
     - BIOL A271 Principles of Ecology (4)
     - BIOL A309 Biogeography (3)
     - BIOL A331 Systematic Botany (4)
     - BIOL A378 Marine Biology (3)
     - BIOL A475 Arctic Tundra Ecosystems (3)
     - BIOL A476 Boreal Ecosystems (3)
     - BIOL A485* Selected Topics in Biology (3)
   - Natural Science and Environment Emphasis:
     - BIOL A485* Selected Topics in Biology (3)
     - CHEM A450 Environmental Chemistry (3)
     - GEOL A115 Environmental Geology (3)
     - GEOL A340 Hydrogeology (3)
     - GEOL A350 Geomorphology (4)
     - GEOL A455 Permafrost (3)
     - GEOL A457 Soil Genesis and Classification (3)
     - GEOL A460 Environmental Geochemistry (3)
   - Society and Environment Emphasis:
     - ANTH A354 Culture and Ecology (3)
     - ECON A415 Urban and Regional Economics (3)
     - ECON A435 Economics of Resources (3)
     - LSSS A311 People, Places, and Ecosystems (3)
     - SOC A307 Demography (3)
     - SOC A309 Urban Sociology (3)
     - SOC A404 Environmental Sociology (3)

* To be taken under the topic title “Environmental and Ecological Applications of Geographic Information Systems (GIS)”.

A total of 120 credits is required for the degree, of which 42 credits must be upper division.

Minor, Environmental Studies**
Students majoring in another subject who wish to minor in Environmental Studies must complete the following requirements. At least 20 credits are required for the minor.

1. Complete the following required core courses (11 credits):
   - ENVI GEOG A211 Earth Systems: Science and Geography of the Natural Environment 3
ENVI/A211L Earth Systems: Science and Geography of the Natural Environment Lab 1
ENVI A212 Living on Earth: People and the Environment 3
ENVI A470 Environmental Planning and Problem Solving 4

2. Complete three of the following courses, with at least one from each list (9 credits):

List A
- BIOL A271 Principles of Ecology (3)
- BIOL A373 Conservation Biology (3)
- BIOL A485* Selected Topics in Biology (3)
- CHEM A450 Environmental Chemistry (3)
- GEOL A115 Environmental Geology (3)
- GIS A268 Elements of Geographic Information Systems (4)
- GIS A370 Geographic Information Systems and Remote Sensing for Natural Resources (3)

List B
- ANTH A354 Culture and Ecology (3)
- CEL A292 Introduction to Civic Engagement (3)
- CEL A395 Civic Engagement Internship (3)
- ENGL A478 Public Science Writing (3)
- ECON A210 Environmental Economics and Policy (3)
- ENVI/PHIL A303 Environmental Ethics (3)
- LSSS A311 People, Places, and Ecosystems (3)
- SOC A404 Environmental Sociology

*To be taken under the topic title “Environmental and Ecological Applications of Geographic Information Systems (GIS).”
** Not available to Environment & Society majors.

Minor, Geography

Students majoring in another subject who wish to minor in Geography must complete the following requirements. At least 20 credits are required for the minor.

1. Complete the following required core courses: (11 credits)
   - GEOG/INTL A101 Local Places/Global Regions: An Introduction to Geography 3
   - ENVI/GEOG A211 Earth Systems: Science and Geography of the Natural Environment 3
   - ENVI/GEOG A211L Earth Systems: Science and Geography of the Natural Environment Lab 1
   - GIS A268 Elements of Geographic Information Systems (GIS) 4

2. Complete one of the following options: (9 Credits)
   a. Nine credits of upper division GEOG
   b. LSSS A311 and 6 credits of upper division GEOG

FACULTY

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AFFILIATED FACULTY

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GEOLOGICAL SCIENCES

ConocoPhillips Integrated Sciences Building (CPSB), Room 101, (907) 786-4940 www.uaa.alaska.edu/geology

Geology is the science that studies planet Earth. The geological sciences incorporate areas of study in:

1. Earth materials including mineralogy, petrology, sedimentology and stratigraphy, volcanology, ore deposits, and structure;
2. Geologic Earth history including historical geology and paleontology;
3. Earth surface processes including geomorphology, soils, paleoclimatology, glacial geology, and permafrost; and
4. 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 degree in Geological Sciences is available for undergraduates.

The Geological Sciences faculty is highly motivated to transmit their knowledge and passion for the geological sciences and focus on combining classroom education with laboratory and field work. 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 in Geological Sciences 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 offers two tracks: general geology or environmental geology. The general geology track includes core geology courses with upper division course electives. The environmental geology track requires core geology courses plus upper division electives that focus on environmental topics including environmental geochemistry, hydrogeology, and soils. Students are strongly encouraged to consult with Geologic Sciences faculty to choose the direction of study suiting their goals.

The Bachelor of Science in Geological Sciences program requires a minimum of 120 credits for graduation. It 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 in all disciplines.

Program Objectives and Expected Outcomes

The curriculum of the UAA Geological Sciences program is designed to produce graduates who:

1. Have a basic knowledge of the principles related to the geological sciences with either an emphasis in environmental geology or general geology;
2. Have an understanding of how to think scientifically and apply their knowledge to solve geologic problems;
3. 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;
4. Have a fundamental understanding of Alaskan geology and environmental problems in Alaska;
5. Are able to communicate their ideas; and
6. 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:

1. An ability to apply their knowledge of general geology and/or environmental geology;
2. An ability to accept challenges and think through problems until they are solved;
3. An ability to design and conduct projects that include field work, laboratory analyses and interpretation in their area of emphasis;
4. Experience in field geology in Alaska;
5. An ability to communicate effectively; and
6. A recognition of the need for, and ability to pursue, lifelong learning.

**Honors in Geological Sciences**
The Department of Geological Sciences offers recognition to students who demonstrate exceptional promise in the science by awarding them with the 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 degree in Geological Sciences.
3. Complete 6 credits of GEOL A499 Senior Thesis or 3 credits of GEOL A498 Directed Research and 3 credits of GEOL A499 Senior Thesis in Geological Sciences with a B or better.
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.

**Bachelor of Science, Geological Sciences**

**Admission Requirements**
Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.

**Academic Progress**
In order to graduate with a BS in Geological Sciences, all courses covered under Major Requirements for a BS in Geological Sciences must be completed with a grade of C or better. Students who audit a course in Geological Sciences or who are unable to earn a grade of C or better in the course may repeat the course. All prerequisites for Geological Sciences courses must be completed with a grade of C or better.

Please consult the undergraduate academic advisor in the Department of Geological Sciences to obtain a student handbook for the Geological Sciences major.

**Graduation Requirements**
Students must complete the following graduation requirements:

**A. General University Requirements**
Complete the General University Requirements for All Baccalaureate Degrees located at the beginning of this chapter.

**B. General Education Requirements**
Complete the General Education Requirements for Baccalaureate Degrees located at the beginning of this chapter.

**C. College of Arts and Sciences Requirements**
Complete the College of Arts and Sciences Requirements listed at the beginning of the CAS section of this catalog.

**D. Major Requirements**

1. Some major requirements may also be used to satisfy the College of Arts and Sciences BS requirements.
2. Complete these required support courses (23-24 credits):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM A105/L</td>
<td>General Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM A106/L</td>
<td>General Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS A123/L</td>
<td>Basic Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS A124/L</td>
<td>Basic Physics II</td>
<td>4</td>
</tr>
<tr>
<td>MATH A200</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>STAT A253</td>
<td>Applied Statistics for the Sciences (4)</td>
<td>3-4</td>
</tr>
<tr>
<td>STAT A307</td>
<td>Probability (3)</td>
<td></td>
</tr>
</tbody>
</table>

*Note: Math A201 Calculus II is highly recommended for students majoring in Geological Sciences.

3. Complete Geological Sciences core curriculum courses (40 credits):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>Complete the following required courses</td>
<td>34</td>
</tr>
<tr>
<td>GEOL A111</td>
<td>Physical Geology</td>
<td>4</td>
</tr>
<tr>
<td>GEOL A221</td>
<td>Historical Geology</td>
<td>4</td>
</tr>
<tr>
<td>GEOL A321</td>
<td>Mineralogy</td>
<td>4</td>
</tr>
<tr>
<td>GEOL A322</td>
<td>Igneous and Metamorphic Petrology</td>
<td>4</td>
</tr>
<tr>
<td>GEOL A335</td>
<td>Structural Geology</td>
<td>4</td>
</tr>
<tr>
<td>GEOL A350</td>
<td>Geomorphology</td>
<td>4</td>
</tr>
<tr>
<td>GEOL A360</td>
<td>Geochemistry</td>
<td>3</td>
</tr>
<tr>
<td>GEOL A310</td>
<td>Professional Practices in Geology</td>
<td>3</td>
</tr>
<tr>
<td>GEOL A452</td>
<td>Sedimentology and Stratigraphy</td>
<td>4</td>
</tr>
</tbody>
</table>

*GEOL A480 and GEOL A481 are offered through UAA. Geology Field Camps are offered through other accredited academic institutions and 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 at least a minimum grade of 2.00.

4. Students must select one of the following tracks in the Geological Sciences. Students may complete both tracks, but may not use the same courses to fulfill the requirements in each track.

**A. General Geological Sciences Track (13-14 credits)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete 13-14 credits of the following:</td>
<td>13-14</td>
<td></td>
</tr>
<tr>
<td>GEOL A320</td>
<td>Volcanology</td>
<td>3</td>
</tr>
<tr>
<td>GEOL A325</td>
<td>Geology of Ore Deposits</td>
<td>3</td>
</tr>
<tr>
<td>GEOL A340</td>
<td>Hydrogeology</td>
<td>3</td>
</tr>
<tr>
<td>GEOL A380</td>
<td>Anchorage Field Studies</td>
<td>3</td>
</tr>
<tr>
<td>GEOL A381</td>
<td>Kenai Peninsula Field Studies</td>
<td>3</td>
</tr>
<tr>
<td>GEOL A382</td>
<td>Geologic Field Studies</td>
<td>3</td>
</tr>
<tr>
<td>GEOL A421</td>
<td>Invertebrate Paleontology</td>
<td>4</td>
</tr>
<tr>
<td>GEOL A454</td>
<td>Glacial and Quaternary Geology</td>
<td>3</td>
</tr>
<tr>
<td>GEOL A455</td>
<td>Permafrost</td>
<td>3</td>
</tr>
<tr>
<td>GEOL A456</td>
<td>Geoarcheology</td>
<td>3</td>
</tr>
<tr>
<td>GEOL A457</td>
<td>Soil Genesis and Classification</td>
<td>4</td>
</tr>
<tr>
<td>GEOL A460</td>
<td>Environmental Geochemistry</td>
<td>3</td>
</tr>
<tr>
<td>GEOL A475</td>
<td>Environmental Geophysics</td>
<td>3</td>
</tr>
<tr>
<td>GEOL A480**</td>
<td>Geologic Field Methods</td>
<td>3</td>
</tr>
<tr>
<td>GEOL A481**</td>
<td>Alaska Geologic Field Investigations</td>
<td>3</td>
</tr>
</tbody>
</table>

**GEOL A480 and GEOL A481 may be applied toward recommended electives if they are not being applied to satisfy the core curriculum credits.

**B. Environmental Geological Sciences Track (13-14 credits)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a</td>
<td>Complete the following 3 required credits:</td>
<td></td>
</tr>
<tr>
<td>GEOL A340</td>
<td>Hydrogeology</td>
<td>3</td>
</tr>
</tbody>
</table>
1.b Complete at least 6 additional credits from the following 6
   GEOL A454 Glacial and Quaternary Geology (3)
   GEOL A455 Permafrost (3)
   GEOL A457 Soil Genesis and Classification (4)
   GEOL A460 Environmental Geochmistry (3)
   GEOL A475 Environmental Geophysics (3)
   GEOL A495 Geology Internship (1-3)
2.a Complete at least 4 elective credits from the following: 4
   GEOL A320 Volcanology (3)
   GEOL A325 Geology of Ore Deposits (3)
   GEOL A380 Anchorage Field Studies (3)
   GEOL A381 Kenai Peninsula Field Studies (3)
   GEOL A382 Geologic Field Studies (3)
   GEOL A421 Invertebrate Paleontology (4)
   GEOL A454 Glacial and Quaternary Geology (3)
   GEOL A455* Permafrost (3)
   GEOL A456 Geoarchaeology (3)
   GEOL A457* Soil Genesis and Classification (4)
   GEOL A460* Environmental Geochemistry (3)
   GEOL A475* Environmental Geophysics (3)
   GEOL A480^ Geologic Field Methods (3)
   GEOL A481^ Alaska Geologic Field Investigations (3)
   GEOL A482 Geologic Field Investigations (3)
   GEOL A490 Advanced Topics in Geology (1-4)
   GEOL A492 Geology Seminar (1)
   GEOL A495* Geology Internship (1-3)
   GEOL A498 Student Research (1-6)
   GEOL A499 Senior Thesis (3)

^ GEOL A480 and GEOL A481 may be applied toward recommended electives if they are not being applied to satisfy the core curriculum credits.
* GEOL A455, GEOL A457, GEOL A460, GEOL A475, and GEOL A495 may be applied toward the recommended electives if they are not being applied to satisfy the requirements under B.1.a. and B.1.b. for the Environmental Geoscience Track.

5. A minimum of 120 credits is required for the degree, of which 42 must be upper division credits.

**Minor, Geological Sciences**

Students majoring in another subject who wish to minor in Geological Sciences must complete the following requirements. Completion of a minimum of 18 credits is required for the minor, 8 of which must be upper division.

- GEOL A111 Physical Geology 4
- GEOL A221 Historical Geology 4
- Upper division Geological Sciences electives 8
- Other Geological Sciences electives 2 or more

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**HISTORY**

Administration/ Humanities Building (ADM), Room 147, (907) 786-1539
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.

**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 degree in History.
3. Meet the requirements for Graduation with Honors as listed in Chapter 7, Academic Standards and Regulations.
4. Maintain a grade point average of 3.50 or above in courses specific to the History major.
5. Complete HIST A377 Historiography with a grade of A.
6. Complete the HIST A477 Senior Seminar 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.

**Bachelor of Arts, History**

**Admission Requirements**

Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.

**Graduation Requirements**

Students must complete the following graduation requirements:

**A. General University Requirements**

Complete the General University Requirements for All Baccalaureate Degrees located at the beginning of this chapter.

**B. General Education Requirements**

Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

*The department recommends that its majors complete GEOG A101 to satisfy part of the CAS social science requirement and GEOG A211/L to satisfy part of the GER natural science requirement.

**C. College of Arts and Sciences Requirements**

Complete the College of Arts and Sciences Requirements listed at the beginning of the CAS section.

**D. Major Requirements**

1. Complete the following survey courses:
   - 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
2. Complete 6 credits of non-Western History courses: 6
   HIST A121 East Asian Civilization I (3)
   HIST A122 East Asian Civilization II (3)
   HIST A320 The Rise, Fall, and Reinvention of the Samurai (3)
   HIST A321 Modern China (3)
   HIST A322 Modern Japan (3)
   HIST A323 Communist China (3)

   HIST/INTL/PS A325 Northeast Asia in 21st Century (3)
   HIST A330 Russia in East Asia (3)
   HIST A390A Themes in World History*(3)

   * May be repeated once with a change in subtitle.

3. Complete 15 credits of upper division History electives. 15
   Note: Only 3 credits of HIST A444 may be applied to a major in History.
   Note: GEOG/HIST A345 Across This Land and GEOG A415 Anglo-Saxons and Vikings are cross-listed with History and may be counted toward the upper division electives requirement for majors.

4. Complete HIST A377 Historiography: The Uses and Abuses of History 3

5. Complete HIST A477 Senior Seminar. 3

6. A total of 120 credits is required for the degree, of which 42 credits must be upper division.

Minor, History
A total of 18 credits is required for the minor, 9 of which must be upper division.

1. HIST A101 Western Civilization I (3) 6
   and
   HIST A102 Western Civilization II (3)
   or
   HIST A131 History of United States I (3)
   and
   HIST A132 History of United States II (3)

2. Upper division History electives* 9

3. History elective, any level 3

*Note: Only 3 credits of HIST A444 may be applied to a minor in History.

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INTERNATIONAL STUDIES
Administration/Humanities Building (ADM), Room 262, 786-1509
www.uaa.alaska.edu/intl

The interdisciplinary Bachelor of Arts in International Studies provides students with the analytical skills and cross-cultural sensitivities required of informed, global citizens. Core courses introduce students to different modes of enquiry and understanding and provide the foundation for a comparative approach to issues across regions, societies, and cultures. Coursework in a specific track focuses the student on a particular language and region. The program capstone requires students to apply acquired analytical skills and modes of enquiry across regions, societies, and cultures in a comparative examination of various topics.

To further develop their global competence, students majoring in International Studies will have the option to participate in study abroad or an approved internship. Students must petition to fulfill major requirements with study abroad or internship credits.

Students who complete a bachelor’s of International Studies will gain an understanding of the challenges and complexities of cross-cultural interactions in an increasingly interconnected world. Students will experience different ways of viewing and questioning the world as expressed in primary sources, as well as the complexities of a specific area (Russian, Northeast Asia, Europe, Canada) informed by multiple perspectives.

Honors in International Studies
Students majoring in International Studies are eligible to graduate with honors if they satisfy the following requirements:
A. Meet the requirements for Graduation with Honors as listed in Chapter 7, Academic Standards and Regulations.
B. Meet the requirements for a Bachelor of Arts in International Studies.
C. Maintain a grade point average of 3.80 or above in courses applicable to the degree requirements.
D. Complete the program capstone course (GEOG A390A, HIST A390A, or PHIL A440) with a honor grade (A).

Bachelor of Arts, International Studies
Admission Requirements
Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.

Graduation Requirements
Students must complete the following graduation requirements:
A. General University Requirements
   Complete the General University Requirements for All Baccalaurete Degrees located at the beginning of this chapter.
B. General Education Requirements
   Complete the General Education Requirements for Baccalaureate Degrees located at the beginning of this chapter.
C. College of Arts and Sciences Requirements
   Complete the College of Arts and Sciences Bachelor of Arts Requirements listed at the beginning of the CAS section.
D. Major Requirements
   Note: Courses which may be used to meet GER and/or CAS BA requirements are designated by an asterisk (*) after their numbers. Courses in the GER lists for Tier 2 social sciences and humanities requirements may be used to fulfill both International Studies requirements and GER Tier 2 requirements in social sciences and humanities.

1. Complete 18 credits of required core courses
   Introductory Survey
   (May be used to fulfill both an International Studies degree requirement and the Tier 2 GER social sciences requirement.)
2. Complete 6 credits of non-Western History courses:
   HIST A121 East Asian Civilization I (3)
   HIST A122 East Asian Civilization II (3)
   HIST A320 The Rise, Fall, and Reinvention of the Samurai (3)
   HIST A321 Modern China (3)
   HIST A322 Modern Japan (3)
   HIST A323 Communist China (3)

   HIST/INTL/PS A325 Northeast Asia in 21st Century (3)
   HIST A330 Russia in East Asia (3)
   HIST A390A Themes in World History*(3)

   * May be repeated once with a change in subtitle.

3. Complete 15 credits of upper division History electives. 15
   Note: Only 3 credits of HIST A444 may be applied to a major in History.
   Note: GEOG/HIST A345 Across This Land and GEOG A415 Anglo-Saxons and Vikings are cross-listed with History and may be counted toward the upper division electives requirement for majors.

4. Complete HIST A377 Historiography: The Uses and Abuses of History 3

5. Complete HIST A477 Senior Seminar. 3

6. A total of 120 credits is required for the degree, of which 42 credits must be upper division.

Minor, History
A total of 18 credits is required for the minor, 9 of which must be upper division.

1. HIST A101 Western Civilization I (3) 6
   and
   HIST A102 Western Civilization II (3)
   or
   HIST A131 History of United States I (3)
   and
   HIST A132 History of United States II (3)

2. Upper division History electives* 9

3. History elective, any level 3

*Note: Only 3 credits of HIST A444 may be applied to a minor in History.

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Bill Myers, Associate Professor, AFWLM@uaa.alaska.edu

INTERNATIONAL STUDIES
Administration/Humanities Building (ADM), Room 262, 786-1509
www.uaa.alaska.edu/intl

The International Studies program at UAA prepares students to be global citizens in an interdependent world. International and intercultural understanding and competency are essential in all aspects of life and work, and this program seeks to prepare students to be contributing members of the international community.
GEOG/
INTL A101* Local Places/Global Regions: An Introduction to Geography (3)

Social Sciences Selection
(Courses below that are also listed in the list for Tier 2 GER social sciences may be used to fulfill both an International Studies degree requirement and the Tier 2 GER social sciences requirement.)

ANTH A250* The Rise of Civilization (3)
EDFN A304* Comparative Education (3)
JUST A365 Comparative Justice Systems (3)
PS A102* Introduction to Political Science (3)
PS A301 Comparative Political Economy (3)
PS A321 International Relations (3)

Humanities and Fine Arts Selection

ART A262* History of Western Art II (3)
ENGL A202* Masterpieces of World Literature II (3)
ENGL A343 Modern and Contemporary Literature (3)
PHIL A212* History of Philosophy II (3)
PHIL A313* Eastern Philosophy and Religion (3)
PHIL A314* Western Religions (3)
THR A312* Representative Plays II (3)

Capstone Course Selection

GEOG A390A* Topics in Global Geography (3) or HIST A390A* Themes in World History (3) or PHIL A400* Ethics, Community, and Society (3)

2. Complete four semesters of college-level language appropriate to track (101-102, 201-202, or higher) 16
3. Complete 12 credits as specified in one of the tracks below

Russia Track (Language: Russian)

HIST A330 Russia in East Asia 3

Russia Elective Course Selection

ANTH A434 Peoples and Cultures of Northeast Asia (3)
ART A492 Art History Seminar (with topic) 20th Century Russian Art: Symbolist Developments-Perestroika and Beyond (3)
GEOG A344 The Slavic World (3)
GEOG A447 The Silk Road (3)
HIST A423 Medieval Russian History (3)
HIST A424 Imperial Russian History (3)
HIST A425 History of the Soviet Union (3)
HIST/ RUSS A427* Post-Soviet Culture and Society (3)
HIST A477 Senior Seminar (with approved topic) (3)
HIST A486 Studies in Modern Europe (with approved topic) (3)
PS A492* Senior Seminar in Politics (with approved topic) (3)
RUSS A390 Selected Topics in Advanced Russian (3)
RUSS A490A Selected Topics in Russian Culture (1-3)
RUSS A490B Selected Topics in Russian Culture in Translation (1-3)
THR A490 Selected Topics in Performance (with topic Modern Russian Drama: Gogol to the Present) (3)
THR A492* Senior Seminar (with approved topic) (3)

Any course with the appropriate focus and approved by academic petition for the category. For example, a topics course that focuses on Russia. (3)

Northeast Asia Track (Language: Chinese or Japanese)

INTL/HIST/ PS A325* Northeast Asia in 21st Century 3

Northeast Asia Elective Course Selection

ANTH A434 Peoples and Cultures of Northeast Asia (3)
ART A366 Asian Art (3)
HIST A320 The Rise, Fall, and Reinvention of the Samurai (3)
HIST A321 Modern China (3)
HIST A322 Modern Japan (3)
HIST A323 Communist China (3)
HIST A330 Russia in East Asia (3)
HIST A477 Senior Seminar (with approved content) (3)
JPN A310 Selected Topics in Advanced Japanese (with approved content) (3)
PHIL A313* Eastern Philosophy and Religion (3)
PS A492* Senior Seminar in Politics (with approved content) (3)
THR A492* Senior Seminar (with approved topic) (3)

Any course with the appropriate focus and approved by academic petition for the category. For example, a topics course that focuses on China or Japan (3)

Europe Track (Language: French, German, Spanish)

HIST A316 Twentieth Century Europe 3

European Elective Course Selection

ART A362 History of Modern Art (3)
ART A363 History of Contemporary Art (3)
ECON/ HIST A360 Modern Economic History (3)
ENGL A343 Modern and Contemporary Literature (3) (if not taken as a core course)
ENGL A440 Topics in Comparative Literature (with approved topic) (3)
FREN A310 Selected Topics in Advanced French (with approved topic) (3)
FREN A432 Studies in Literature and Culture (with approved topic) (3)
GEOG A344 The Slavic World (3)
GER A310 Selected Topics in Advanced German (with approved topic) (3)
GER A490 Selected Topics in German Literature (with approved topic) (3)
HIST A314 Nineteenth Century Europe (3)
HIST A411 History of Modern Germany (3)
HIST A477 Senior Seminar (with approved topic) (3)
HIST A486 Studies in Modern Europe (3)
PHIL A314* Western Religions (3)
PS A311* Comparative Politics (3)
PS A333* History of Political Philosophy II: Modern (3)
SPAN A432 Studies in Literature and Culture (with approved topic) (3)
SPAN A490 Selected Topics in Hispanic Culture and Civilization (with approved topic) (3)
THR A412* History of Theatre II
THR A492* Senior Seminar (with approved topic) (3)

Any course with the appropriate focus and approved by academic petition for the category. For example, a topics course that focuses on Europe. (3)

Canada Track (Language: French)

INTL A315* Canada: Nation and Identity 3

Canada Elective Course Selection

ANTH A416 Arctic Archeology (3)
ANTH A435 Northwest Coast Cultures (3)
Minor, International North Pacific Studies

Students majoring in another subject and wishing to minor in International North Pacific Studies must complete the following requirements:

1. Complete the following courses: 9
   - INTL A315* Canada: Nation and Identity
   - INTL/HIST/PS A325* Northeast Asia in 21st Century
   - HIST A330 Russia in East Asia

2. Complete 8 credits of a language appropriate to the Canada, Northeast Asia, or Russia track of the Bachelor of Arts in International Studies.

3. Complete one elective course from either the Canada, Northeast Asia, or Russia tracks of the Bachelor of Arts in International Studies.

4. A total of 20 credits is required for the minor.

Minor, Canadian Studies

Students majoring in another subject and wishing to minor in Canadian Studies must complete the following requirements:

1. Complete the following course: 3
   - INTL A315* Canada: Nation and Identity

2. Complete 8 credits of a language appropriate to the Canada track of the Bachelor of Arts in International Studies.

3. Complete three elective courses from the Canada track of the Bachelor of Arts in International Studies.

4. A total of 20 credits is required for the minor.

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JOURNALISM AND PUBLIC COMMUNICATIONS

Professional Studies Building (PSB), Room 154, (907) 786-4180
http://jpc.uaa.alaska.edu

The Department of Journalism and Public Communications (JPC) offers an undergraduate program leading to the Bachelor of Arts with concentrations in Journalism, Strategic Communications, Telecommunications and Film, Digital Graphics and Design, and Integrated Media.

The Department of 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.

The department’s academic programs are designed to prepare graduates to understand principles and practices of contemporary journalism, professional communications, and media industries. The program prepares students to develop skills for gathering and presenting information through various media. Computers are used throughout the program and students are required to produce media against deadlines. Students also are required to develop a portfolio of their media work for faculty review in their final year.

Department 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.

Students graduating from this program will have developed and demonstrated:

- Expressive characteristics enabling them to visually realize their ideas and to create a body of work illustrating their creative analogical abilities.

- Conceptual characteristics enabling them to develop qualitative work that is consistent with their ideas, exhibits original concepts, illustrates growth, and articulates concepts in creative ways.

- Formal characteristics enabling them to illustrate a technical mastery of the use of materials, a grasp of composition and formal elements and an appreciation for risk-taking in the context of formal considerations.

- Abilities to articulate ideas in relationship to orally based critical discourse in the classroom.

Honor 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:

1. Complete 80 credits of A and B courses.
2. Complete 8 credits of the following courses:
   - JPC 491* Senior Seminar
3. Complete 2 courses with a grade of A in each course.
4. A total of 20 credits is required for the honors.

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:

1. Students must be majoring in Journalism and Public Communications.
2. Students must have a minimum grade point average of 3.5 (4.0 scale).
3. Students must complete 18 credits of JPC courses.
4. Students must complete 4 courses with a grade of A in each course.
5. A total of 20 credits is required for the honors.

Honor in Journalism and Public Communications (International)

Students majoring in Journalism and Public Communications are eligible to graduate with department honors if they satisfy all of the following requirements:

1. Students must be majoring in Journalism and Public Communications.
2. Students must have a minimum grade point average of 3.5 (4.0 scale).
3. Students must complete 18 credits of JPC courses.
4. Students must complete 4 courses with a grade of A in each course.
5. A total of 20 credits is required for the honors.

Honor in Journalism and Public Communications (Canadian)

Students majoring in Journalism and Public Communications are eligible to graduate with department honors if they satisfy all of the following requirements:

1. Students must be majoring in Journalism and Public Communications.
2. Students must have a minimum grade point average of 3.5 (4.0 scale).
3. Students must complete 18 credits of JPC courses.
4. Students must complete 4 courses with a grade of A in each course.
5. A total of 20 credits is required for the honors.
A. Meet the requirements for a BA degree in Journalism and Public Communications:
B. Maintain a grade point average of 3.50 in JPC courses: and
C. Complete JPC A492, JPC Senior Seminar, in the final spring term of study with an honor grade (A or B).

Note: Department honors are awarded by the faculty in Journalism and Public Communications.

Bachelor of Arts, Journalism and Public Communications

Admission Requirements
Submit a Declared Major form for department approval. Students are accepted into JPC for a BA in Journalism; Strategic Communications; Telecommunications and Film; or Integrated Media, or into the BFA in Public Communications.

Graduation Requirements

A. General University Requirements
Complete the General University Requirements for Baccalaureate degrees found in the beginning of this chapter.

B. General Education Requirements
Complete General Education Requirements for Baccalaureate degrees found at the beginning of this chapter.

C. College of Arts and Sciences Requirements
Complete the College of Arts and Sciences Requirements for Bachelor of Arts degrees found at the beginning of this chapter. Note that 81 credits must be outside the major; 66 of those credits must be in the liberal arts as approved by JPC faculty (liberal arts courses are normally found in the College of Arts and Sciences); and 42 credits must be 300- and 400-level courses.

D. Major Requirements
Complete 126 credits for the degree: 45 credits must be JPC credits. Matriculation in Department of Journalism and Public Communications

1. Complete four Journalism and Public Communications core courses with a grade of C or better 12
   JPC A201 Reporting and Writing News (3)
   JPC A202 First Amendment and Media Ethics (3)
   JPC A203 Writing and Producing for Electronic Media (3)
   JPC A204 Information Gathering (3)
   Note: JPC A201 is required for Journalism and Strategic Communications majors. All majors must complete JPC A202 before taking JPC A203 and JPC A204, which may be taken simultaneously.

2. Complete one of the following JPC 200-level elective courses: 3
   JPC A211 Visual Literacy (3)
   JPC A212 Copy Editing (3)
   JPC A213 Digital Imaging (3)

3. Complete one of the following JPC 300-level elective courses: 3
   JPC A312 History of Alaska Media (3)
   JPC A313 Movies and The First Amendment (3)
   JPC A314 Documentary Filmmakers and Filmmaking (3)

4. Complete one of JPC 400-level elective courses: 3
   JPC A404 Global Media and International (3)
   Communications Systems (3)
   JPC A405 Communications and Media Theories (3)
   JPC A413 Communications Law (3)
   JPC A454 Media Project Management (3)

5. Complete JPC research course: 3
   JPC A403 Communications and Media Research (3)

6. Complete 21 JPC elective credits to fulfill one of the following JPC concentration areas; one course (3 credits) may be taken in any JPC concentration area.

   Journalism Concentration 21
   JPC A342 Photojournalism (3)
   JPC A343 Radio News Reporting (3)
   JPC A344 Television News Reporting (3)
   JPC A345 Web Design (3)
   JPC A346 Magazine Writing (3)
   JPC A442 Web Journalism (3)
   JPC A443 Advanced Reporting (3)
   JPC A444 Specialty Reporting (3)
   JPC A445 Design for Print I (3)
   JPC A446 Design for Print II (3)
   JPC A492 JPC Senior Seminar (3)
   JPC A495 JPC Practica and Internship (1-6)
   JPC A497 Independent Study (3)

   Strategic Communications Concentration 21
   JPC A362 Principles of Strategic Communications (3)
   JPC A363 Research Methods for Strategic Communications (3)
   JPC A366 Planning and Writing for Strategic Communications (3)
   JPC A368 Commercial Photography (3)
   JPC A369 Design for Publications (3)
   JPC A462 Corporate Communications (3)
   JPC A463 Crisis Communications (3)
   JPC A464 Development Communications (3)
   JPC A465 Strategic Communications Campaigns I (3)
   JPC A466 Strategic Communications Campaigns II (3)
   JPC A492 JPC Senior Seminar (3)
   JPC A495 JPC Practica and Internship (1-6)
   JPC A497 Independent Study (3)

   Telecommunications & Film Concentration 21
   JPC A382 Digital Audio Production (3)
   JPC A383 TV Studio Production (3)
   JPC A384 Digital Video Production (3)
   JPC A385 Scriptwriting for Film and Television (3)
   JPC A481 Advanced Digital Audio Production (3)
   JPC A482 TV Post-Production (3)
   JPC A483 Broadcast Graphics (3)
   JPC A484 Documentary Film Production I (3)
   JPC A485 Documentary Film Production II (3)
   JPC A486 Independent Film Production I (3)
   JPC A487 Independent Film Production II (3)
   JPC A492 JPC Senior Seminar (3)
   JPC A495 JPC Practica and Internship (1-6)
   JPC A497 Independent Study (3)

   Integrated Media Concentration 21
   This option prepares students for careers in a changing media world, which involves a blend of print, broadcast and online media. Students may combine courses in any JPC option areas to fulfill 21 elective credits in the Integrated Media concentration. The following three courses are required for the Integrated Media option:
   JPC A213 Digital Imaging (3)
   JPC A345 Web Design (3)
   JPC A442 Web Journalism (3)
   Note: Only JPC juniors and seniors with a 3.25 GPA may enroll in JPC Practica and Internships. JPC practica require an approved academic plan and the approval of the appropriate JPC media advisor, JPC internships require the approval of the director of JPC internships.
Minor, Journalism and Public
Communications
For a JPC minor, students need six courses of which JPC A201 and JPC A204 are required. The remaining 12 credits may be taken from any JPC courses. Eighteen credits are required for the minor.
JPC A201 Reporting and Writing News (3)
JPC A203 Writing and Producing for Electronic Media (3)
JPC 300- and 400-level electives (12)

FACULTY
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Red Bradley, Term Professor, rbradley@jpc.alaska.edu
Joy C. Mapaye, Assistant Professor, jmapaye@jpc.alaska.edu
Ron McGee, Assistant Professor, rmcgee@jpc.alaska.edu

LANGUAGES
Administration/Humanities Building (ADM), Room 287, (907) 786-4037
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 degree’s use 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, Russian, and Spanish as emphasis languages, with additional lower division courses in American Sign Language (ASL), Chinese, Korean, and Latin. 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 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.

Honors in Languages
The Department of Languages recognizes exceptional undergraduate students by awarding them Departmental Honors in Languages. To graduate with departmental honors, students must be declared Languages majors and meet the following requirements:
1. Meet the requirements for Graduation with Honors as listed in Chapter 7, Academic Standards and Regulations;
2. Satisfy all requirements for a BA degree in Languages;
3. Maintain an overall UAA GPA of 3.50 with a 3.85 in the major;
4. Notify their departmental advisor in writing at least two semesters prior to graduation of intent to graduate with departmental honors;
5. Receive an honors score (90 percent) (based upon criteria established by the department) on a comprehensive examination in the language(s) of focus; the comprehensive examination must be completed at least one semester prior to graduation.

Bachelor of Arts, Languages
Admission Requirements
Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.

Academic Progress
No course in which a grade below C has been received will count toward the major or minor.

Graduation Requirements
Students must complete the following graduation requirements:

A. General University Requirements
Complete the General University Requirements for All Baccalaureate Degrees located at the beginning of this chapter.

B. General Education Requirements
Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

C. College of Arts and Sciences Requirements
Complete the College of Arts and Sciences Requirements listed at the beginning of the CAS section.

D. Major Requirements
1. Students working toward a degree in Languages may choose from two options:
   Option I: Single Language
   a. Choose an emphasis language from French, German, Japanese, Russian, or Spanish.
   b. Complete one of the following four courses: 3
      ENGL A311 Advanced Composition (3)
      ENGL A435 History of Criticism (3)
      LING A101 The Nature of Language (3)
      LSSS A111 Cultural Foundations of Human Behavior (3)
   c. Complete the following four courses in the emphasis language (16 credits):
      A201 Intermediate I* 4
      A202 Intermediate II* 4
      A301 Advanced I 4
      A302 Advanced II 4
      *Japanese courses have the same course number but different titles: JPN A201 Second Year Japanese I and JPN A202 Second Year Japanese II.
   d. Complete 12 credits of approved upper division electives in or related to the emphasis language or culture, at least 9 of which must be taught in the emphasis language (contact Language Program Coordinator for list of approved courses taught in English). 12
   e. Complete an additional 6 credits of emphasis language approved electives in or related to the emphasis language or culture, but which must be upper division if taught in the emphasis language (contact department for list of approved courses taught in English). 6

Chapter 10 Page 110
**Liberal Studies**

**Social Sciences Building (SSB), Room 343, (907) 786-1707**

http://liberalstudies.uaa.alaska.edu

The Bachelor of Liberal Studies (BLS) degree is an interdisciplinary program that provides both significant breadth across a variety of fields, meaningful depth in a single field, and the interconnections and integration among fields that allow a fuller comprehension of the modern world. It is intended for those students who prefer a broad liberal arts and sciences degree, rather than a Bachelor of Arts or Bachelor of Science degree in a single discipline. This may include students with particularly wide or still uncertain personal or career interests, or those who intend to become elementary education teachers, for whom the program has been designed specifically to incorporate the relevant state of Alaska standards and those of the National Council for Accreditation of Teacher Education (NCATE). Students wishing a career as elementary teachers should plan on pursuing the post-baccalaureate program in elementary teacher preparation following graduation with a BLS.

Other students selecting the BLS may, with proper advising, wish to pursue professional graduate education in law or other fields. While with the proper discipline area concentration a BLS graduate may pursue graduate study in a particular discipline area, students who plan to attend graduate school in a specific area are generally advised to take a disciplinary major. Many of the courses comprising the BLS are also included as the arts and sciences content component of the Bachelor of Arts in Elementary Education, offered by the College of Education for those students desiring an undergraduate route to certification as an elementary teacher.

**Bachelor of Liberal Studies**

**Admission Requirements**

Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.

**Graduation Requirements**

Students must complete the following graduation requirements:

**A. General University Requirements**

Complete the General University Requirements for All Baccalaureate Degrees located at the beginning of this chapter.

**B. General Education Requirements**

Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

**C. Major Requirements**

Courses marked with an asterisk (*) fulfill UAA General Education Requirements. Courses in bold face are also included in the Bachelor of Arts in Elementary Education, offered by the College of Education. Students must complete the following requirements and meet with a BLS or CAS advisor prior to entering their junior year and file an approved program of study form with the department. Forms and approved disciplinary areas can be found at http://liberalstudies.uaa.alaska.edu, or by contacting the department at (907) 786-1707.

1. **Communications and Writing Skills**
   
   - **COMM A111** Fundamentals of Oral Communication 3
   - **ENGL A111** Methods of Written Communication 3
   - **ENGL A214** Persuasive Writing 3

---

**Option II: Dual Languages**

a. Choose an emphasis language from French, German, Japanese, Russian, or Spanish; and a second language from among those or ASL.

b. Complete one of the following four courses:
   
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL A311</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A435</td>
<td>3</td>
</tr>
<tr>
<td>LING A101</td>
<td>3</td>
</tr>
<tr>
<td>LSSS A111</td>
<td>3</td>
</tr>
</tbody>
</table>

   **Credits:** 12

   **Required:** A total of 120 credits is required for the degree, of which 42 credits must be upper division.

**Language Credit by Placement**

An accepted, degree-seeking UAA student who has completed in residence one of the Department of Languages UAA catalog courses (A102-A301) with a grade of B or better 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 by Placement is limited to one time per language. This policy does not apply to credit earned through Credit by Examination, the College Board Advanced Placement to one time per language. This policy does not apply to credit earned beyond the level of A202. Language Credit by Placement is limited to the two immediately preceding courses, if any, up to a total of 8 credits (A102-A301).

**Minor, Languages**

Students who wish to minor in languages must complete the following requirements: a total of 19 credits taught in the target language at or above the 200 level with at least 11 credits being upper division. Credits must be in one discipline chosen from the following languages:

- French
- German
- Japanese
- Russian
- Spanish

**FACULTY**

- Michihiro Ano, Assistant Professor, Japanese
- Margrit Engel, Professor Emerita, German, AFMAE@uaa.alaska.edu
- Patricia Fagan, Associate Professor, Spanish, APFCE@uaa.alaska.edu
- Hiroko Harada, Professor, Japanese, AFHJ@uaa.alaska.edu
- Susan Kalina, Professor, Russian, AFSMK@uaa.alaska.edu
- Theodore Kassier, Professor, Spanish, AFTLK@uaa.alaska.edu
- Nataša Masanović, Associate Professor, German, AFNM@uaa.alaska.edu

**FACULTY**

- Rebeca Maseda Garcia, Assistant Professor, Spanish, AFRMG@uaa.alaska.edu
- Francisco Miranda, Associate Professor, Spanish, AFFM1@uaa.alaska.edu
- Sudarsan Rangarajan, Associate Professor, French, sudarsan@uaa.alaska.edu
- Dave Robertson, Coordinator, American Sign Language, AFDER@uaa.alaska.edu

**University of Alaska Anchorage 2010-2011 Catalog**

www.uaa.alaska.edu
2. Liberal Studies Integrated Sciences (LSIS) Core
LSIS A101* Discoveries in Science 1
LSIS A201* Life on Earth 5
LSIS A202* Concepts and Processes: Natural Sciences 5

3. Mathematical Skills
MATH A107 or MATH A108 or MATH A109 or MATH A172 or MATH A200 or MATH A201 or MATH A272* 3-6
STAT A252 Elementary Statistics (3) 3-4
or
STAT A253* Applied Statistics for the Sciences (4)

4. Liberal Studies Social Sciences (LSSS) Core
AKNS/PS A411 Tribes, Nations and Peoples 3
LSSS A111 Cultural Foundations of Human Behavior 3
PSY Complete one course in psychology (recommend PSY A111* General Psychology or PSY A150* Lifespan Development) 3
ANTH A250* The Rise of Civilization 3
LSSS A311 People, Places, and Ecosystems 3
LSSS A312 Individuals, Groups, and Institutions 3

5. Liberal Studies Humanities Core
Complete one course from GER fine arts list*. 3
Complete an approved Elective in studio art, performing art or creative writing (Must be different from course used for the fine arts General Education Requirement). 3
HIST A335 Major Themes in US History 3
HUM A211* Introduction to Humanities I 3
HUM A212* Introduction to Humanities II 3
ENGL A202* Masterpieces of World Literature II 3
Complete a two semester sequence of a language, American Sign Language, or Alaska Native Studies Language course (same language both semesters)*. 6-8
Literature Elective 3
Complete an approved upper division literature elective. (Must be different from courses used for the humanities/ fine arts General Education Requirements).

6. Liberal Studies Integrative Core
LSIC/ PHIL A231 Truth, Beauty, and Goodness 3
LSIC A331 Power, Authority, and Governance 3
LSIC A332 Science, Technology, and Culture 3
LSIC A488A Capstone Project I: Design and Research 3
LSIC A488B Capstone Project II: Analysis and Presentation 3
LSIC A392 Seminar in Liberal Studies 1

7. Two Discipline Area Concentration 18
a. Twelve credits in one discipline, of which 9 credits must be at the upper division level (See approved list of disciplines at http://liberalstudies.uaa.alaska.edu and):
b. Nine additional credits in a second discipline of which 3 credits must be at the upper division level (See approved list of disciplines at http://liberalstudies.uaa.alaska.edu). For example, 12 credits in Political Science and 9 credits in English.

8. Electives 7
9. A total of 120-124 credits is required for the degree, of which 42 credits must be upper division.

FACULTY
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Martha Hatch, Associate Professor, math@uaa.alaska.edu
Ann Jache, Assistant Professor, jache@uaa.alaska.edu
Kimberly Pace, Assistant Professor, AFKJP@uaa.alaska.edu
Fran Pokr, Instructor, AFFPA@uaa.alaska.edu
Travis Rector, Assistant Professor, AFTAR@uaa.alaska.edu

MATHEMATICS
Social Sciences Building (SSB), Room 154, (907) 786-1744/786-4824
www.math.uaa.alaska.edu

The Department of Mathematical Sciences offers a Bachelor of Science degree and a Bachelor of Arts degree in Mathematics. Each degree has two options: the Traditional Option and the Secondary Teaching Preparation Option.

The Traditional Option in the baccalaureate degree programs in Mathematics offers 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. The Traditional Option also prepares a student for graduate study in the mathematical sciences. Both the Traditional Option (with appropriately chosen electives) and the Secondary Teaching Preparation Option satisfies NCATE standards, and prepares a student to teach mathematics at the high school level.

In addition, the Department of Mathematical Sciences offers courses and programs for those students who wish to:

a. Obtain an Associate of Applied Science degree
b. Obtain an Associate of Arts degree
c. Obtain a variety of certificates
d. Study mathematics for use in another discipline
e. Improve job-related mathematics skills
f. Study mathematics for self-interest

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 as listed in Chapter 7, Academic Standards and Regulations.
2. Meet the requirements for a BA/BS degree in Mathematics.
3. Earn 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.

Bachelor of Arts, Mathematics Admission Requirements
Complete the Baccalaureate Degree Programs Admission Requirements listed at the beginning of this chapter.

Graduation Requirements
Students must complete the following graduation requirements.

A. General University Requirements
Complete the General University Requirements for Baccalaureate degrees listed at the beginning of this chapter.

B. General Education Requirements
Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

C. College of Arts and Sciences Requirements
Complete the College of Arts and Sciences Requirements listed at the beginning of the CAS section.
D. Major Requirements

Students pursuing a Bachelor of Arts degree in Mathematics may choose from two options:

1. Complete the following core courses (27 Credits)
   
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS A109</td>
<td>Computer Programming</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(Languages vary) (3)</td>
<td></td>
</tr>
<tr>
<td>CS A110</td>
<td>Java Programming</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(3)</td>
<td></td>
</tr>
<tr>
<td>CS A111</td>
<td>Visual Basic.Net Programming</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(3)</td>
<td></td>
</tr>
<tr>
<td>CS A201</td>
<td>Programming Concepts I (3)</td>
<td></td>
</tr>
<tr>
<td>MATH A200</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH A201</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH A202</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH A215</td>
<td>Introduction to Mathematical Proofs</td>
<td>2</td>
</tr>
<tr>
<td>MATH A303</td>
<td>Introduction to Modern Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH A314</td>
<td>Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>STAT A307</td>
<td>Probability</td>
<td>3</td>
</tr>
</tbody>
</table>

2. Complete one of the following options:
   
   **Traditional Option (21 Credits)**
   
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>MATH A302</strong> Ordinary Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>MATH A321</strong> Analysis of Several Variables</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>MATH A324</strong> Advanced Calculus</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>MATH A421</strong> Introduction to Complex Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MATH A422</td>
<td>Partial Differential Equations</td>
<td>3</td>
</tr>
</tbody>
</table>

   a. Complete three additional courses from the following list:
      MATH A305, MATH A306, MATH A371, MATH A407, MATH A408, MATH A410, MATH A420, MATH A422, MATH A426, STAT A308, STAT A402, STAT A403, STAT A404, STAT A405, STAT A407, STAT A408.

   b. 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.

   c. A total of 120 credits is required for the degree, of which 42 credits must be upper division.

Secondary Teaching Preparation Option (15 Credits)

The Secondary Teaching Preparation Option is intended for students interested in pursuing Secondary Teacher Certification to teach mathematics at the Middle School and High School level. To obtain Secondary Teacher Certification, an approved Teacher Preparation Program must be successfully completed through the College of Education. Students choosing the Secondary Teacher Preparation Option should obtain advising from an academic advisor in the College of Education no later than the beginning of the junior year.

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>MATH A305</td>
<td>Introduction to Geometries</td>
<td>3</td>
</tr>
<tr>
<td>MATH A306</td>
<td>Discrete Methods</td>
<td>3</td>
</tr>
<tr>
<td>MATH A420</td>
<td>History of Mathematics</td>
<td>3</td>
</tr>
</tbody>
</table>

   a. Complete two additional courses from the following list:
      MATH A302, MATH A321, MATH A324, MATH A371, MATH A407, MATH A408, MATH A410, MATH A420, MATH A422, MATH A426, STAT A308, STAT A402, STAT A403, STAT A404, STAT A405, STAT A407, STAT A408.

   b. 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.

   c. A total of 120 credits is required for the degree, of which 42 credits must be upper division.

Bachelor of Science, Mathematics

Admission Requirements

Complete the Baccalaureate Degree Programs Admission Requirements listed at the beginning of this chapter.

Graduation Requirements

Students must complete the following graduation requirements.

A. General University Requirements

Complete the General University Requirements for Baccalaureate degrees listed at the beginning of this chapter.

B. General Education Requirements

Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

C. College of Arts and Sciences Requirements

Complete the College of Arts and Sciences Requirements listed at the beginning of the CAS section.

D. Major Requirements

Students pursuing a Bachelor of Science in Mathematics may choose from two options:

1. Complete the following core courses (27 Credits)
   
<table>
<thead>
<tr>
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<td>MATH A314</td>
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<td>3</td>
</tr>
<tr>
<td>STAT A307</td>
<td>Probability</td>
<td>3</td>
</tr>
</tbody>
</table>

2. Complete one of the following options:
   
   **Traditional Option (21 Credits)**
   
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
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<td>MATH A410</td>
<td>Introduction to Complex Analysis</td>
<td>3</td>
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<td>Partial Differential Equations</td>
<td>3</td>
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   a. Complete three additional courses from the following list:
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   b. 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.

   c. A total of 120 credits is required for the degree, of which 42 credits must be upper division.

Secondary Teaching Preparation Option (15 Credits)

The Secondary Teaching Preparation Option is intended for students interested in pursuing Secondary Teacher Certification to teach mathematics at the Middle School and High School level. To obtain Secondary Teacher Certification, an approved Teacher Preparation Program must be successfully completed through the College of Education. Students choosing the
Secondary Teaching Preparation Option should obtain advising from an academic advisor in the College of Education no later than the beginning of the junior year.

MATH A305  Introduction to Geometries  3
MATH A306  Discrete Methods  3
MATH A420  History of Mathematics  3

a. Complete two additional courses from the following list: MATH A302, MATH A321, MATH A324, MATH A371, MATH A407, MATH A408, MATH A410, MATH A422, MATH A426, STAT A308, STAT A402, STAT A403, STAT A404, STAT A405, STAT A407, STAT A408.

b. 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.

c. A total of 120 credits is required for the degree, of which 42 credits must be upper division.

Minor, Mathematics

Students majoring in another subject who wish to minor in Mathematics must complete the following requirements. A total of 18 credits is required for the minor, 6 of which must be approved upper division Mathematics credits.

MATH A200  Calculus I  4
MATH A201  Calculus II  4
MATH A202  Calculus III  4
Approved upper division Mathematics electives  6

 FACULTY

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Leonard Smiley, Professor, AFLMS@uaa.alaska.edu
Yelena Vagodina, Term Assistant Professor, AFYY@uaa.alaska.edu

MUSIC

Fine Arts Building (ARTS), Room 302, (907) 786-1595
http://music.uaa.alaska.edu

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 of Music 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 three degree programs: Bachelor of Arts, Music; Bachelor of Music, Performance; and Bachelor of Music, Music Education Emphasis. A minor in Music is also available.

The Bachelor of Arts, 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, Performance 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, Music Education Emphasis degree 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 for more information: http://ed.uaa.alaska.edu/mat.

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; the Bachelor of Music, Performance; or the Bachelor of Music, Music Education Emphasis 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 listed in Chapter 7, Academic Standards and Regulations. 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.
6. Receive an honors score (based on criteria established by the department) on a comprehensive examination for majors.

Bachelor of Arts, Music
Bachelor of Music, Performance
Bachelor of Music, Music Education Emphasis

Admission Requirements: All Majors

Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations. Students who declare a Music major and who qualify for admission to baccalaureate study are given pre-major status. 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 sight-singing/eartraining courses
will be required to complete MUS A111 Fundamentals of Music. Upon completion of the performance evaluation, advisors will assist students in planning a first year of study best suited to their needs.

**Academic Progress: All Majors**

Upon successful completion of one semester of juried private lessons (MUS A161), students file a Change of Degree Form to move from pre-major to major status. 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 Functional Piano IV, 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 is passed. See Music degree listings for specific requirements.

**Graduation Requirements: All Majors**

Students must complete the following graduation requirements:

A. **General University Requirements**

Complete the General University Requirements for All Baccalaureate Degrees located at the beginning of this chapter.

B. **General Education Requirements**

Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

Note: Total credits for graduation may increase unless students select at least 3 credits of upper division courses in fulfillment of GER/CAS requirements.

C. **College of Arts and Sciences Requirements**

Complete the College of Arts and Sciences Requirements for either a BA or BM, Performance degree, listed at the beginning of the CAS section. (There are no additional requirements for the BM, Music Education Emphasis degree).

D. **Major Requirements: All Majors**

1. Complete the following required courses:
   - MUS A131 Music Theory I 3
   - MUS A132 Music Theory II 3
   - MUS A133 Sightsinging and Ear Training I 2
   - MUS A134 Sightsinging and Ear Training II 2
   - MUS A154D Functional Piano IV 1
   - MUS A221 History of Music I 3
   - MUS A222 History of Music II 3
   - MUS A231 Music Theory III 3
   - MUS A232 Music Theory IV 3
   - MUS A233 Sightsinging and Ear Training III 2
   - MUS A234 Sightsinging and Ear Training IV 2
   - MUS A280 Basic Conducting 2
   - MUS A331 Form and Analysis 3

2. All Music majors enrolled in juried private music lessons must, during each semester of enrollment:
   a) Perform in at least one student recital;
   b) Stand for jury finals;
   c) Participate in an appropriate ensemble. See the ensemble requirements specific to each degree below;
   d) 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.

3. Music majors may not enroll in certain upper division academic courses (MUS A331, MUS A422-A424, or MUS A431-A432, for example) or in upper division private lessons (MUS A361) until they have passed the Piano Proficiency examination by jury.

E. **Additional Major Requirements: Bachelor of Arts, Music**

1. Private lessons on your major instrument: 4
   - MUS A161, MUS A162, MUS A261, MUS A262
2. Ensemble: 10
   - Five semesters of ensembles are required.
   - Choose the class appropriate to your major instrument:
     - **Voice Majors:**
       - MUS A301B University Singers (2)
     - **Piano Majors:**
       - MUS A302B Chamber Music and Accompanying (2)
     - **Wind Majors:**
       - MUS A303B University Wind Ensemble (2)
     - **Percussion Majors:**
       - MUS A303B University Wind Ensemble (2)
     - **String Majors:**
       - MUS A307B University Sinfonia (2)
     - **Guitar Majors:**
       - MUS A409B University Guitar Ensemble (2)
3. **Master Class**
   - Four semesters of Master Class are required.
   - Choose the class appropriate to your major instrument:
     - **Wind and String Majors:**
       - MUS A466 String and Wind Master Class (1)
     - **Voice, Piano and Guitar Majors:**
       - MUS A467 Piano Master Class (2)
       - MUS A468 Voice Master Class (2)
       - MUS A469 Guitar Master Class (2)
4. **Additional Major Requirements: Bachelor of Music, Performance**

1. Private lessons on your major instrument: 16
   - MUS A161 - A162
   - MUS A261 - A262
   - MUS A361 - A362
   - MUS A461 - A462
2. Ensemble: 16
   - Choose the class appropriate to your major instrument:
     - **Voice Majors:**
       - MUS A301B University Singers (2)
     - **Wind Majors:**
       - MUS A303B University Wind Ensemble (2)
     - **Percussion Majors:**
       - MUS A303B University Wind Ensemble (2)
     - **String Majors:**
       - MUS A307B University Sinfonia (2)
     - **Piano Majors:**
       - MUS A302B Chamber Music and Accompanying (2)
     - **Guitar Majors:**
       - MUS A409B University Guitar Ensemble (2)
3. 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 your major instrument in one of these courses:
MUS A302, MUS A313, MUS A365, MUS A407, MUS A408 or MUS A409.

Note: Credits completed will vary from 2 to 4, depending upon which courses are selected.

4. Master Class
Eight semesters of Master Class are required.
Choose the class appropriate to your major instrument:
Wind and String Majors:
MUS A466  String and Wind Master Class (1)
Voice, Piano and Guitar Majors:
MUS A467  Piano Master Class (2) or
MUS A468  Voice Master Class (2) or
MUS A469  Guitar Master Class (2)
Percussion Majors:
MUS A408B  University Percussion Ensemble (2)

5. Conducting:
MUS A381  Choral Conducting (2) or
MUS A382  Instrumental Conducting (2)

6. Upper division Elective Credits: 12
Select from these 3-credit courses:
MUS A421  Music in the Baroque Period (3)
MUS A422  Music in the Classical Period (3)
MUS A423  Music in the Romantic Period (3)
MUS A424  Music in the 20th Century (3)
MUS A431  Counterpoint (3)
MUS A432  Orchestration (3)

7. Students seeking a Bachelor of Music, Performance degree must complete a half recital their junior year and a full recital their senior year. Students must demonstrate in these recitals the ability to perform a program of artistic merit satisfactorily in public.

8. It is required that students select any two courses 8 (8 credits) of oral language to satisfy the CAS, BM Performance degree.

9. A total of 122-130 credits is required for the degree, of which 42 credits must be upper division.

G. Additional Major Requirements: Bachelor of Music, Music Education Emphasis

1. Private lessons on your major instrument: 16
MUS A161 - A162
MUS A261 - A262
MUS A361 - A362
MUS A461 - A462

2. Ensemble 16
Choose the class appropriate to your major instrument:
Voice Majors:
MUS A301B  University Singers (2)
Wind Majors:
MUS A303B  University Wind Ensemble (2)
Percussion Majors:
MUS A303B  University Wind Ensemble (2)
String Majors:
MUS A307B  University Sinfonia (2)
Piano Majors:
MUS A302B  Chamber Music and Accompanying (2) to total 12 and

MUS A301B  University Singers (2) to total 4 or
MUS A303B  University Wind Ensemble (2) or
MUS A307B  University Sinfonia (2)

Guitar Majors:
MUS A409B  University Guitar Ensemble (2) to total 12 and
MUS A301B  University Singers (2) to total 4 or
MUS A303B  University Wind Ensemble (2) or
MUS A307B  University Sinfonia (2)

3. 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 your major instrument in one of these courses:
MUS A302, MUS A313, MUS A365, MUS A407, MUS A408 or MUS A409.

Note: Credits completed will vary from 2 to 4, depending upon which courses are selected.

4. Master Class 8
Four or eight semesters of Master Class are required.
Choose the class appropriate to your major instrument:
Wind and String Majors:
MUS A466  String and Wind Master Class (1)
Voice, Piano and Guitar Majors:
MUS A467  Piano Master Class (2) or
MUS A468  Voice Master Class (2) or
MUS A469  Guitar Master Class (2)
Percussion Majors:
MUS A408B  University Percussion Ensemble (2)

5. Conducting:
MUS A381  Choral Conducting (2) or
MUS A382  Instrumental Conducting (2)

6. Methods and Techniques 12
MUS A371  Brass Methods and Techniques (2)
MUS A372  Woodwind Methods and Techniques (2)
MUS A373  String Methods and Techniques (2)
MUS A374  Voice Methods and Techniques (2)
MUS A375  Percussion Methods and Techniques (2)
MUS A376  Elementary Music Methods and Techniques (2)

7. Music History Elective (select from): 3
MUS A421  Music in the Baroque Period (3)
MUS A422  Music in the Classical Period (3)
MUS A423  Music in the Romantic Period (3)
MUS A424  Music in the 20th Century (3)

8. Orchestration 3
MUS A432  Orchestration

9. Students seeking a Bachelor of Music, Music Education Emphasis degree must complete a half recital during their senior year. Students must demonstrate in this recital the ability to satisfactorily perform a program of artistic merit in public.

10. It is recommended that students select HIST A341 as a GER social science course.

11. A total of 128-130 credits is required for the degree, of which 42 credits must be upper division.

12. Students seeking certification in Music K-12 must complete a one-year, Master of Arts in Teaching (MAT) program. Admission to the program is limited.
13. UAA’s graduate application for admission into the MAT program must be completed either by March 1 for admission to the program the following summer or by October 1 for admission to the program the following spring.

14. Students seeking music certification must have completed all requirements for the Bachelor of Music, Music Education Emphasis degree with a 3.00 GPA or better for admission to the MAT program.

15. Students must take the PRAXIS I and the PRAXIS II in music for admission to the MAT program.

16. Students seeking certification should contact the College of Education for an application packet and a detailed description of the MAT program.

Minor, Music

Students majoring in another subject who wish to minor in music must complete the following requirements. Nineteen credits are required for the minor, 8 of which must be upper division.

1. MUS A111 Fundamental of Music (3) or MUS A131 Music Theory I (3)
2. MUS A121 Music Appreciation (3) or MUS A221 History of Music I (3)
3. Private Lessons 2-4
   MUS A161-A162 (1-2)

To complete this requirement, students must successfully pass two jury exams, one at the end of each semester of study.

4. Master Class 2/4

Two semesters of master class are required; credits vary.

Choose the class appropriate to your major instrument:

MUS A408B University Percussion Ensemble (2)
MUS A466 String and Wind Master Class (1)
MUS A467 Piano Master Class (2)
MUS A468 Voice Master Class (2)
MUS A469 Guitar Master Class (2)

5. Ensemble 4/6

Choose the ensemble appropriate to your major instrument:

MUS A301B University Singers (2)
MUS A302B Chamber Music and Accompanying (2)
MUS A303B University Wind Ensemble (2)
MUS A307B University Sinfonia (2)
MUS A409B University Guitar Ensemble (2)

FACULTY

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NATURAL SCIENCES

ConocoPhillips Integrated Sciences Building (CPSB), Room 101, (907) 786-4770
http://biology.uaa.alaska.edu

Modern sciences do not stand alone. Most draw heavily upon the tenets of at least one other discipline. The Natural Sciences curriculum emphasizes the interrelationships among the sciences and allows students to obtain a strong background in two or more sciences while meeting the requirements of a single degree program. A minimum of 74 science credits is required for this major, as specified below. For individuals pursuing careers as secondary science educators, it is required by the College of Education that they complete 12 credits in each of the following sciences: biology, chemistry, physics, and earth and space science.

The Natural Sciences program is administered by the Department of Biological Sciences. For further information about the Natural Sciences program, contact the chairperson of the Department of Biological Sciences. Upon acceptance into the major, an academic advisor from the Department of Biological Sciences will be assigned in accordance with the student’s declared area of emphasis.

Bachelor of Science, Natural Sciences

Admission Requirements

Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.

Academic Progress

In order to graduate with a BS in Natural Sciences, all courses covered under Major Requirements for a BS in Natural Sciences 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. All prerequisites for courses used to meet the Natural Sciences degree requirements must be completed with a grade of C or better. Students repeating a course in the Department of Biological Sciences are required to complete all components of the course during the semester in which the course is repeated. For a course with a lecture and laboratory component, students may not carry forward an individual lecture or laboratory grade from a previous semester in which the course was taken.

Graduation Requirements

Students must complete the following graduation requirements:

A. General University Requirements

Complete the General University Requirements for All Baccalaureate Degrees located at the beginning of this chapter.

B. General Education Requirements

Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

C. College of Arts and Sciences Requirements

Complete the College of Arts and Sciences Requirements listed at the beginning of the CAS section. It is recommended that MATH A210 or MATH A272, STAT A253 or STAT A307, and the Computer Programming requirements be completed in the first two years of study.

Note: Major requirements may also be used to satisfy the College of Arts and Sciences Requirements.

D. Major Requirements

Students must complete the following major requirements:

1. Complete three of the following course sequences:
   B1OL A115/L Fundamentals of Biology I with Laboratory (4)
   B1OL A116/L Fundamentals of Biology II with Laboratory (4)
   CHEM A105 General Chemistry I (3)
   CHEM A105L General Chemistry I Laboratory (1)
   CHEM A106 General Chemistry II (3)
   CHEM A106L General Chemistry II Laboratory (1)
   GEOL A111 Physical Geology (4)
   GEOL A221 Historical Geology (4)
   PHYS A123 Basic Physics I (3)
   PHYS A123L Basic Physics I Laboratory (1)
PHYS A124 Basic Physics II (3)
and
PHYS A124L Basic Physics II Laboratory (1)

Note: It is recommended that the three science course sequences be completed in the first two years of study. For students whose emphasis lies in the area of the biological sciences, it is recommended that BIOL A242 and BIOL A252 also be completed within the first two years of study, as it is a prerequisite for several upper division biology courses.

2. Complete an additional 50 science credits, of which at least 35-38 credits must be upper division from at least two science disciplines. UAA science courses approved for the Natural Sciences degree are listed below.

- Anthropology: Geographic Information Systems
- Astronomy: Geomatics
- Biology: Health Sciences
- Chemistry: Honors Program
- Computer Science: Mathematics
- Environmental Studies: Psychology
- Geography: Statistics
- Geology: UAF Palmer Research Center

Other courses may be considered by petition. Acceptable credits from other accredited institutions include but are not limited to credits earned in the following disciplines:

- Statistics: Natural Resource Management
- Environmental Sciences: Wildlife Management
- Engineering: Oceanography

Note: Credit for laboratory, internship or clinical practicum courses will be awarded on an individual basis with the general rule of 1 credit for three lab hours applying in most cases.

3. Courses taken to meet the 50-credit Natural Science major degree requirement must be chosen with the approval of your advisor.

4. Submit a Program of Study-Natural Sciences Degree Form signed by your advisor to both the Office of the Registrar and the Department of Biological Sciences during the semester prior to the semester in which you plan to graduate. All courses listed in the Program of Study-Natural Sciences Degree must be approved by your formal advisor before you can submit the form to the Office of the Registrar and the Department of Biological Sciences.

5. A total of 120 credits is required for the degree, of which 42 credits must be upper division.

FACULTY

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PHILOSOPHY

Administration/Humanities Building (ADM), Room 254, (907) 786-4455
http://philosophy.uaa.alaska.edu

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 Philosophy Department offers several options for students interested in the study of philosophy: (1) a Bachelor of Arts in Philosophy, with a philosophy track, a law track, or an applied ethics track; (2) a Certificate of Applied Ethics; (3) a minor in Philosophy, with a philosophy track or law track. Please read the introduction to each program below to determine which one of these options may be suitable for your particular needs.

The philosophy track is designed for students planning to go on to graduate school in philosophy or other humanities areas such as religious studies, theology, or classics. It would also be 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 law track is designed for students planning on attending law school or related professional schools.

The applied ethics track is designed for four types of students: (1) those who intend to pursue a graduate degree in philosophy with programs that specialize in applied ethics; (2) those interested in a strong liberal arts degree (3) those who are seeking careers in the nonprofit sector, public administration, helping professions, or government service; and (4) those interested in the study of practical ethics.

The Certificate in Applied Ethics is designed for students whose intended careers will be complemented by emphasis in ethics education: for example, business majors who may plan also to be ethics officers; those who intend to become professionals, such as lawyers, nurses, social workers, or engineers; or those in public administration, the helping professions, government service, and nonprofits. It will also be applicable to persons presently in the workforce such as corporate ethics officers, executives, and professionals who are seeking career advancement or simply want to acquire skills and knowledge in ethical decision-making.
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, or the natural sciences. The law track is intended for students who plan to attend law school but may be majoring in another degree. This is an appropriate minor for Justice majors.

**Philosophy Department Honors**
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 degree in Philosophy.
2. Meet the requirements for Graduation with Honors as listed in Chapter 7, Academic Standards and Regulations.
3. Maintain a grade point average of 3.75 or above in courses specific to the Philosophy major.
4. Complete PHIL A498 Senior Research Project with an honor grade (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.

**Bachelor of Arts, Philosophy**

**Admission Requirements**
Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.

**Graduation Requirements**
Students must complete the following graduation requirements:

**A. General University Requirements**
Complete the General University Requirements for All Baccalaureate Degrees located at the beginning of this chapter.

**B. General Education Requirements**
Complete the General Education Requirements for Baccalaureate Degrees located at the beginning of this chapter.

**C. College of Arts and Sciences Requirements**
Complete the College of Arts and Sciences Requirements for the Bachelor of Arts listed at the beginning of the CAS section.

**D. Major Requirements**

1. Complete the following core courses:
   - **Logical Reasoning and Argumentation:**
     - PHIL A101 Introduction to Logic (3)
   - **Foundations of Philosophy:**
     - PHIL A201 Introduction to Philosophy (3)
     - PHIL A211 History of Philosophy I (3)
     - PHIL A212 History of Philosophy II (3)
   - **Ethical Theory and Value studies:**
     - PHIL A301 Ethics (3)

2. Choose one of the following tracks:
   - Note: Courses selected may not be used in more than one track.

   **Philosophy Track (21 credits)**
   Complete the following courses:
   - **Applied Ethics:**
     - PHIL A302 Biomedical Ethics (3)
     - PHIL/ ENVI A303 Environmental Ethics (3)
     - PHIL A304 Business Ethics (3)
     - PHIL A405 Professional Ethics (3)

   
**Philosophical Problems: Complete one course from each of the following two groups:** 6

- **Group A**
  - PHIL A309 Philosophy of Mind (3)
  - PHIL A317 Metaphysics (3)

- **Group B**
  - PHIL A318 Epistemology (3)
  - PHIL A421 Philosophy of the Sciences (3)

**Topics in Philosophy: Complete one course from the following:** 3

- PHIL A313 Eastern Philosophy and Religion (3)
- PHIL A314 Western Religion (3)
- PHIL A401 Aesthetics (3)
- PHIL A406 Philosophy of Law (3)
- PHIL A415 Feminist Philosophy (3)

**Complete the following three courses (9 credits):**

- PHIL A423 Advanced Ethical Theory (3)
- PHIL A490 Topics in Contemporary Philosophy (3)
- PHIL A492 Seminar on an Enduring Philosopher (3)

**Law Track (21 credits)**
Complete the following courses:

- **Professional Ethics:**
  - PHIL A405 Professional Ethics (3)

- **Philosophical Foundations of the Law:**
  - JUST A250 Development of Law (3)
  - PHIL A406 Philosophy of Law (3)
  - PHIL A423 Advanced Ethical Theory (3)
  - PS A332 History of Political Philosophy I: Classical (3)
  - PS A333 History of Political Philosophy II: Modern (3)
  - PS/JUST A343 Constitutional Law (3)

**Applied Ethics Track (18 credits)**
Complete the following courses:

- **Professional Ethics:**
  - PHIL A405 Professional Ethics (3)

- **Applied Ethics Core: Complete two courses from the following:** 6
  - PHIL A302 Biomedical Ethics (3)
  - PHIL A313 Eastern Philosophy and Religion (3)
  - PHIL A401 Aesthetics (3)
  - PHIL A406 Philosophy of Law (3)
  - PHIL A415 Feminist Philosophy (3)

**Complete the following three courses (9 credits):**

- PHIL A423 Advanced Ethical Theory (3)
- PHIL A490 Topics in Contemporary Philosophy (3)
- PHIL A495 Service Learning in Applied Ethics (3)

3. A total of 120 credits is required for the degree of which 42 credits must be upper division.

**Undergraduate Certificate, Applied Ethics**

**Admission Requirements**
A student must satisfy the Admission to Certificate Requirements in Chapter 7, Academic Standards and Regulations.

**Graduation Requirements**

1. Complete the following requirements:
   - **Written Communication Skills**
     - Complete two courses from the GER requirements for written communication skills. 6
Complete the following courses:

- Law Track (21 credits)
- Quantitative Skills
  Complete one course from the GER requirements for quantitative skills.
- Critical Reasoning Skills
  Complete the following course:
  - PHIL A101  Introduction to Logic 3
- Ethical Theory
  Complete the following course:
  - PHIL A301  Ethics 3
- Applied Ethics
  Complete two courses from the following:
  - PHIL A302  Biomedical Ethics (3)
  - PHIL A304  Business Ethics (3)
- Professional Ethics
  Complete one course from the following:
  - PHIL A405  Professional Ethics (3)
- BA A488  Environment of Business (3)
- HUMS A412  Ethical Issues in Human Services Practice (3)
- PADM A618  Public Accountability, Ethics and Law (3)
- PSY A611  Ethics and Professional Practice (3)

Note: Graduate courses taken to satisfy this requirement cannot also be counted towards a graduate degree in that program.

Service Learning
Complete the following course:
- PHIL A495  Service Learning in Applied Ethics 3

2. A total of 30 credits is required for the certificate.

Minor, Philosophy

Students majoring in another subject who wish to minor in Philosophy must complete the following requirements. A total of 18 credits is required for the minor, 6 of which must be upper division.

Choose one of the following tracks. (Courses selected may not be used in more than one track.)

**Philosophy Track (18 credits)**

Complete the following courses:

- **Logical Reasoning and Argumentation:**
  - PHIL A101  Introduction to Logic 3
- **Foundations of Philosophy:**
  - PHIL A201  Introduction to Philosophy 3
  - PHIL A211  History of Philosophy I 3
  - PHIL A212  History of Philosophy II 3
- **Ethics and Values:**
  - PHIL A301  Ethics 3
- **Philosophical Foundations of the Law:**
  - PHIL A406  Philosophy of Law 3
  - PHIL A423  Advanced Ethical Theory 3

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**PHYSICS**

ConocoPhillips Integrated Sciences Building (CPSB), Room 101, (907) 786-1238
http://salt.uaa.alaska.edu

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 Physics minor will provide a valuable option especially to Engineering, Math, Computer Science, Chemistry, Biology, or Geology majors. It is widely known that a strong physics background increases a graduate's employability.

Minor, Physics

Students majoring in another subject who wish to minor in Physics must complete for following requirements. A total of 18 credits is required for the minor.

- 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

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**POLITICAL SCIENCE**

Social Sciences Building (SSB), Room 367, (907) 786-4897
http://polsci.uaa.alaska.edu

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 five areas: comparative politics, international relations, political philosophy, American politics, and political behavior. Majors in Political Science 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 minors in Political Science and Public Administration. Students selecting the Political Science minor take two introductory courses and four additional, upper division Political Science electives. Students selecting the Public Administration minor take two introductory courses; courses in public administration, public policy, and organization theory; and one additional starred (*) course in Political Science.

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.

**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 degree 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 Senior Seminar in Politics in the final spring term of study with an honor grade (A or B).
4. Receive an honors score (based upon criteria established by the department) on a comprehensive examination for majors.

*Note: Departmental honors are awarded by the Political Science faculty.*

**Bachelor of Arts, Political Science**

**Admission Requirements**
Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.

**Graduation Requirements**
Students must complete the following graduation requirements:

**A. General University Requirements**
Complete the General University Requirements for All Baccalaureate Degrees located at the beginning of this chapter.

**B. General Education Requirements**
Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

**C. College of Arts and Sciences Requirements**
Complete the College of Arts and Sciences Requirements listed at the beginning of the CAS section.

**D. Major Requirements**

*Note: Courses required for Political Science minors which may be used to meet General Education Requirements and/or College of Arts and Sciences BA requirements are designated by a section mark ($) after their titles.*

1. Complete the following core courses:
   - PS A101 Introduction to American Government § 3
   - PS A102 Introduction to Political Science § 3
   - PS A301 Comparative Political Economy 3
   - PS A330 The American Political Tradition 3
   - PS/SOC A361 Social Science Research Methods 3
   - PS A492 Senior Seminar in Politics § 3

2. Complete one starred (*) course from each of the five areas below:
   - **Comparative Politics**
     - *PS A311 Comparative Politics § (3)
     - PS A312 Comparative Politics: Case Studies (3)
     - PS/ANCS A411 Tribes, Nations, and Peoples (3)
     - PS A490 Studies in Politics (1-3)
   - **International Relations**
     - *PS A321 International Relations § (3)
     - *PS A322 United States Foreign Policy (3)
     - PS A324 Model United Nations (3)
     - PS A424 International Law and Organizations (3)
     - PS A490 Studies in Politics (1-3)
   - **Political Philosophy**
     - *PS A331 Political Philosophy § (3)
     - *PS A332 History of Political Philosophy I: Classical § (3)
     - *PS A333 History of Political Philosophy II: Modern § (3)
     - PS A490 Studies in Politics (1-3)
   - **American Politics**
     - *PS A341 The United States Congress (3)
     - *PS A342 The American Presidency (3)
     - PS/JUST A343 Constitutional Law (3)
     - PS A344 State and Local Politics (3)
     - PS A345 Alaska Government and Politics (3)
     - PS/ANCS A346 Alaska Native Politics (3)
     - PS A347 Public Administration (3)
     - PS A348 Public Policy (3)
     - PS A490 Studies in Politics (1-3)
   - **Political Behavior**
     - *PS/SOC A351 Political Sociology § (3)
     - *PS A353 Political Behavior, Participation, and Democracy (3)
     - PS A453 Organization Theory (3)
     - PS A490 Studies in Politics (1-3)
     - PS A495 Internship in Political Science (3)

3. Complete 6 credits in additional upper division Political Science courses from one of the five areas listed above.
   - PS A490 may be repeated with different subtitle.

4. A total of 120 credits is required for the degree, of which 42 credits must be upper division, and a minimum of 39 Political Science credits.

**Minors**
The Department of Political Science offers two minors, one in Political Science and one in Public Administration. A minor requires 18 credits earned according to the following rules.

*Note: Courses required for Political Science minors which may be used to meet General Education Requirements and/or College of Arts and Sciences BA requirements are designated by a section mark ($) after their titles.*

**Political Science Minor**

**Introductory courses:**
- PS A101 Introduction to American Government § 3
- PS A102 Introduction to Political Science § 3

**Upper division Political Science courses:**
- 12

**Public Administration Minor**

**Introductory courses:**
- PS A101 Introduction to American Government § 3
- PS A102 Introduction to Political Science § 3
Additional courses, as follows:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PS A347</td>
<td>Public Administration</td>
<td>3</td>
</tr>
<tr>
<td>PS A348</td>
<td>Public Policy</td>
<td>3</td>
</tr>
<tr>
<td>PS A453</td>
<td>Organization Theory</td>
<td>3</td>
</tr>
</tbody>
</table>

One additional starred (*) course from one of the areas listed in item 2 above under major requirements. 3

Note: Political Science majors who earn a minor in Public Administration may not count upper division courses required for the minor (i.e., PS A347, PS A348, or PS A453) toward the major requirements in item 3 above for additional upper division credits in Political Science.

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PSYCHOLOGY

Social Sciences Building (SSB), Room 214, (907) 786-1711
http://psych.uaa.alaska.edu

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, 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 the Bachelor of Arts and the Bachelor of Science degrees 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.

Occupational Endorsement Certificate, Community Mental-Health Services

Students can earn on their transcript an Occupational Endorsement Certificate in Community Mental-Health Services. This transcripted certificate is available to any student – not just Psychology majors – who receive grades of C or higher in the following five courses designed to provide some of the knowledge and skills appropriate for a variety of entry-level jobs in community mental-health settings. Taken together, the five courses (and their two prerequisites) introduce students to mental-health problems, communication skills, consumer empowerment, assessment, professional networking, service facilitation, behavior change processes, advocacy, crisis intervention, organizational settings, documentation, ethics, and professional behavior. Mental health problems common to Alaska receive special emphasis. Two semesters of community placement allow skills to be practiced in mental health settings.

Occupational Endorsement Certificate Requirements

Admission

Complete admission requirements for Occupational Endorsement Certificates found in Chapter 7, Academic Standards and Regulations.

1. Satisfy General University Requirements for Occupational Endorsement Certificates found in the beginning of this chapter.
2. Complete the each of the following courses with a grade of C or higher:
   - PSY A327 Field Experience in Psychology I* 3
   - PSY A372 Community Psychology* 3
   - PSY A427 Field Experience in Psychology II 3
   - PSY A445 Strategies of Behavior Change 3
   - PSY A455 Mental Health Services in Alaska** 3
   - * Prerequisite: PSY A111 (General Psychology)
   - ** Prerequisite: PSY A345 (Abnormal Psychology)
3. In addition to the prerequisite courses, a total of 15 credits is required for the Occupational Endorsement Certificate in Community Mental-Health Services.

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.
3. Take PSY A412 Foundations of Modern Psychology.
4. Take PSY A420 Conducting Research in Psychology.
5. Complete PSY A499 Senior Thesis. 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.

Bachelor of Arts, Psychology

Bachelor of Science, Psychology

Admission Requirements

Complete the admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.

Graduation Requirements

Students must complete the following graduation requirements:

A. General University Requirements

Complete the General University Requirements for All Baccalaureate Degrees listed at the beginning of this chapter.

B. General Education Requirements

Complete the General Education Requirements listed at the beginning of this chapter.

C. College of Arts and Sciences Requirements

Complete the College of Arts and Sciences Requirements listed at the beginning of this chapter.

D. Major Requirements

1. Psychology Core Requirements (30 Credits)
   - PSY A111 General Psychology 3
   - PSY A150 Lifespan Development 3
   - PSY A260 Statistics for Psychology 3
   - PSY A260L Statistics for Psychology Lab 1
   - PSY A261 Research Methods in Psychology 4
   - PSY A372 Community Psychology 3
   - PSY A445 Strategies of Behavior Change 3
   - PSY A455 Mental Health Services in Alaska 3
   - PSY A427 Field Experience in Psychology II 3
   - PSY A327 Field Experience in Psychology I* 3
   - PSY A111 (General Psychology) 3
   - * Prerequisite: PSY A345 (Abnormal Psychology)

   * Prerequisite: PSY A111 (General Psychology)

   ** Prerequisite: PSY A345 (Abnormal Psychology)

   In addition to the prerequisite courses, a total of 15 credits is required for the Occupational Endorsement Certificate in Community Mental-Health Services.
2. Psychology Capstone Requirement (3 Credits)
A capstone course is required of all Psychology majors (BA or BS). This course 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 their baccalaureate degree should consider taking PSY A427. 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  Foundations of Modern Psychology (3) or
   PSY A420  Conducting Research in Psychology (3) or
   PSY A427  Field Experience in Psychology II (3) or
   PSY A428  Evolutionary Psychology (3) or
   PSY A499  Senior Thesis (3)

3. Psychology Electives (9 Credits)
   Take an additional 9 credits of psychology, 6 of which must be upper division.

4. Psychology Exit Examination
   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.

5. A total of 120 credits is required for this degree, of which 42 credits must be upper division.

Minor, Psychology

Students majoring in another subject who wish to minor in Psychology must complete a total of 18 credits of Psychology, of which 6 must be upper division.

Requirements include the following:
1. PSY A111 General Psychology
2. Three additional courses required in the core above (see list D.1).
3. Two additional Psychology courses

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SOCIOLOGY
Social Sciences Building (SSB), Room 372, (907) 786-1714
www.uaa.alaska.edu/sociology

Sociology is the scientific study of human interaction, social organization, and culture. As a social science, sociology seeks to describe, interpret, and explain variations in human conduct using empirical methods that include experiments, surveys, ethnographic observation, life histories, and historical and comparative approaches. Sociologists study many aspects of the human condition, including intimate relationships, aging and the life-course, deviance and crime, population growth and migration, bureaucratic power and collective action, religion and ideology, and inequalities of race, gender, and social class. The curriculum in sociology provides a background in social theory and an opportunity for the acquisition of practical social science research skills. It is meant to offer students a contribution to a liberal arts education, preparation for graduate training, and preparation for careers in applied sociology in a variety of organizational settings.

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.

Bachelor of Arts, Sociology
Bachelor of Science, Sociology

Admission Requirements
Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.

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
Students must complete the following graduation requirements:

A. General University Requirements
Complete the General University Requirements for all Baccalaureate Degrees listed at the beginning of this chapter.

B. General Education Requirements
Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

C. College of Arts and Sciences Requirements
Complete the College of Arts and Sciences Requirements for either a BA or BS degree listed at the beginning of the CAS section.

D. Major Requirements
1. Complete Sociology core courses (19 credits):
   SOC A101  Introduction to Sociology 3
   SOC A307  Demography 3
   SOC/PS A361  Social Science Research Methods 3
   SOC A402  Social Theory 3
   SOC/PSY A453  Application of Statistics to the Social Sciences 4
   SOC A488  Capstone Seminar 3
2. Complete an additional 18 credits of Sociology, 9 credits of which must be upper division.
3. Completion of 37 credits is required for the major in Sociology. A total of 120 credits is required for the degree, of which 42 credits must be upper division.

**Minor, Sociology**

Students majoring in another subject who wish to minor in Sociology must complete the following requirements. A total of 21 credits is required for the minor.

- SOC A101 Introduction to Sociology 3
- SOC/PS A361 Social Science Research Methods 3
- SOC A402 Social Theory 3
- Upper division Sociology electives 6
- Sociology electives, any level 6

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**STATISTICS**

Social Sciences Building (SSB), Room 154, (907) 786-1744
http://math.uaa.alaska.edu

Statistics courses are offered in the Department of Mathematical Sciences.

During the past several decades, the social and economic structure of the United States has shifted from an industrialized basis to an information and service base. Rapid development of computer technology has led to an increase in the use of statistics as a tool for analyzing data across all disciplines. Increasing demand exists for individuals with training in statistical analysis. The unprecedented growth of research institutes nationwide confirms the importance of sampling and statistical analysis.

Statistics is now widely used in a broad spectrum of disciplines. There is, and will continue to be, substantial demand among students and various entities within the community for this program.

**Minor, Statistics**

Students majoring in another subject who wish to minor in Statistics must complete the following requirements:

1. Complete these required courses:
   - STAT A307 Probability 3
   - STAT A308 Intermediate Statistics for the Sciences 3
   - MATH A200 Calculus I 4
   - MATH A201 Calculus II 4
   - Complete a minimum of 9 credits from the following:
     - STAT A402 Scientific Sampling (3)
     - STAT A403 Regression Analysis (3)
     - STAT A404 Analysis of Variance (3)
     - STAT A405 Nonparametric Statistics (3)
     - STAT A407 Time Series Analysis (3)
     - STAT A408 Multivariate Statistics (3)
     - STAT A490 Selected Topics in Statistics (1-3)
     - MATH A371 Stochastic Processes (3)
     - MATH A407 Mathematical Statistics I (3)
     - MATH A408 Mathematical Statistics II (3)

2. A total of 23 credits is required in the minor.

**THEATRE**

Fine Arts Building (ARTS), Room 302, (907) 786-1792
http://theatre.uaa.alaska.edu

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, scene design, lighting, costuming, makeup, dramatic literature, theatre history, dramatic theory and criticism, and play writing. The Dance program offers courses in dance techniques, choreography, improvisation, dance history and dance research methods.

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 UAA Theatre and Dance produces 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.

**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 degree 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 Individual Research with a minimum grade of B prior to enrolling in THR A499 Senior Thesis.
4. Complete THR A499 Senior Thesis with a minimum grade of B.
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.

**Bachelor of Arts, Theatre**

**Admission Requirements: All Majors**

Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.

**Graduation Requirements**

Students must complete the following graduation requirements:
A. General University Requirements
Complete the General University Requirements for All Baccalaureate Degrees listed at the beginning of this chapter.

B. General Education Requirements
Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

C. College of Arts and Sciences Requirements
Complete the College of Arts and Sciences Requirements listed at the beginning of the CAS section.

D. Major Requirements, BA Theatre
1. Complete the following required core courses (26 credits):
   - THR A121 Introduction to Acting 3
   - THR A131 Theatrical Production Techniques 3
   - THR A221 Movement for the Actor 3
   - THR A257 Costume Design and Construction I 3
   - THR A295 Theatre Practicum: Technical (1-3) 2
   - THR A306 Stage Management 3
   - THR A411 History of the Theatre I 3
   - THR A412 History of the Theatre II 3
   - THR A431 Directing I 3

2. Complete one of the following Design Area courses: 3
   - THR A347 Lighting Design (3)
   - THR A357 Costume Design and Construction II (3)
   - THR A491 Selected Topics in Technical Theatre (3)

3. Students working toward a degree in Theatre may choose from the following two options:
   - **Theatre Option: (18 credits)**
     Complete the following required courses (12 credits):
     - THR A111 Introduction to the Theatre 3
     - THR A141 Stagecraft I 3
     - THR A243 Scene Design 3
     - THR A311 Representative Plays I (3) or
     - THR A312 Representative Plays II (3)
     Complete two of the following Performance Area courses: 6
     - THR A222 Voice for the Actor (3)
     - THR A315 Playwriting Workshop (3)
     - THR A321 Meisner Acting Technique (3)
     - THR A325 Theatre Speech and Dialects (3)
     - THR A328 Acting Shakespeare (3)
     - THR A329 Combat for the Stage I (3)
     - THR A435 Directing II (3)
     - THR A490 Selected Topics in Performance (3)

   - **Dance Option: (18 credits)**
     Complete the following required courses (10 credits):
     - Any DNCE A100-Level Technique Class 2
     - DNCE A170 Dance Appreciation 3
     - DNCE A262 Theory and Improvisation 2
     - DNCE A361 Approaches to Dance Composition 3
     Complete 8 credits from the following Performance Area courses: 8
     - DNCE A101 Fundamentals of Ballet I (2)
     - DNCE A121 Fundamentals of Modern I (2)
     - DNCE/THR A124 Dance for Musical Theatre I (2)
     - DNCE A131 Fundamentals of Music-Based Jazz I (2)
     - DNCE A145 Dances of the West African Diaspora I (2)
     - DNCE/AKNS A146 Introduction to Alaska Native Dance (1-2)
     - DNCE A151 Fundamentals of Tap I (1)
     - DNCE A205 Fundamentals of Ballet II (2)
     - DNCE A223 Fundamentals of Modern II (2)
     - DNCE A224 Dance for Musical Theatre II (2)
     - DNCE A234 Fundamentals of Music-Based Jazz II (2)
     - DNCE A245 Dances of the West African Diaspora II (2)
     - DNCE A253 Beginning Tap II (1)
     - DNCE A321 Intermediate Modern I (2)
     - DNCE A322 Intermediate Modern II (2)
     - DNCE A360 Contemporary Techniques, Composition, and Repertory (1)

     *Note: DNCE A395 may be used for a maximum of 2 credits to meet elective Performance Area Requirements.

4. A total of 120 credits is required for the degree of which 42 credits must be upper division.

Minor, Theatre
Students majoring in another subject who wish to minor in Theatre must complete the following requirements. A total of 18 credits is required for the minor.

- THR A111 Introduction to the Theatre 3
- THR A121 Introduction to Acting 3
- THR A141 Stagecraft I 3
- THR A311 Representative Plays I (3) or
- THR A312 Representative Plays II (3)
- THR A411 History of the Theatre I (3) or
- THR A412 History of the Theatre II (3)

Minor, Dance
Students majoring in another subject who wish to minor in Dance must complete the following requirements. A total of 18 credits is required for the minor.

Complete the following required courses:
- DNCE A170 Dance Appreciation 3
- DNCE A262 Theory and Improvisation 2
- DNCE A361 Approaches to Dance Composition 3
- DNCE A370 Interdisciplinary Dance Studies: Issues and Methods 3
- THR A131 Theatrical Production Techniques 3

And choose 4 more credits from the following courses: 4
- DNCE A101 Fundamentals of Ballet I (2)
- DNCE A121 Fundamentals of Modern Dance I (2)
- DNCE/THR A124 Dance for Musical Theatre I (2)
- DNCE A131 Fundamentals of Music-Based Jazz I (2)
- DNCE A145 Dances of the West African Diaspora I (2)
- DNCE/ AKNS A146 Introduction to Alaska Native Dance (1-2)
- DNCE A151 Fundamentals of Tap I (1)
- DNCE A205 Fundamentals of Ballet II (2)
- DNCE A223 Fundamentals of Modern II (2)
- DNCE/THR A224 Dance for Musical Theatre II (2)
- DNCE A234 Fundamentals of Music-Based Jazz II (2)
- DNCE A245 Dances of the West African Diaspora II (2)
- DNCE A253 Beginning Tap II (1)
- DNCE A321 Intermediate Modern I (2)
- DNCE A322 Intermediate Modern II (2)
- DNCE A360 Contemporary Techniques, Composition, and Repertory (1)
FACULTY
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WOMEN’S STUDIES
Social Sciences Building (SSB), Room 355 (907) 786-4837
http://womens.uaa.alaska.edu

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.

Minor, Women’s Studies

Students majoring in another subject who wish to minor in Women’s Studies must complete the following requirements. A total of 18 credits is required for the minor, of which 9 must be upper division.

1. Complete these required courses:
   - WS A200 Introduction to Women’s and Gender Studies 3
   - WS A400 Feminist Theory 3
   - WS A401 Seminar in Women’s Studies* 3

2. Complete 9 credits of pre-approved electives:
   - 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.
   - ANTH A270 Cross-Cultural Perspectives on Women (3)
   - ENGL A403 Topics in Autobiography (3)**
   - ENGL A404 Topics in Women’s Literature (3)
   - HIST A381 American Women’s History to 1870 (3)
   - HIST A382 American Women’s History Since 1870 (3)
   - HUMS A350 Men and Masculinity (3)
   - PSY A313 Psychology of Women (3)
   - SOC A242 An Introduction to Marriage, Family and Intimate Relationships (3)
   - SOC A342 Sexual, Marital and Family Lifestyles (3)
   - SOC A352 Women and Social Action (3)
   - SOC A377 Men, Women and Change (3)
   - WS/PS A355 Women in Politics (3)
   - WS A401 Seminar in Women’s Studies (3)*
   *WS A401: May be taken a second time with a change of subtitle as an elective.
   **Counts for Women’s Studies minor only when focus is on Women’s Autobiography. Taught every other year with this focus.

Note: Other courses may apply to the minor with approval of Women’s Studies chair.

FACULTY
Tara Lampert, Instructor, AFTL1@uaa.alaska.edu
Kimberly Pace, Director, AIFJ@uaa.alaska.edu

COLLEGE OF BUSINESS AND PUBLIC POLICY

The College of Business and Public Policy serves Alaska and global communities primarily by training and educating the workforce and also promoting excellence in public, private, and nonprofit management and related business disciplines; providing professional assistance to public, private and nonprofit organizations; and conducting basic applied and pedagogical research.

The College of Business and Public Policy has six departments: (1) Accounting, (2) Business Administration, (3) Computer Information Systems, (4) Economics, (5) Logistics, and (6) Public Administration. A certificate, an Associate of Applied Science, a Bachelor of Business Administration, a Bachelor of Arts in Economics, a Master of Business Administration, a Master of Public Administration, and a Master of Science in Global Supply Chain Management are offered by the College. The College operates the Small Business Development Center, Center for Economic Development, Center for Economic Education, Business Enterprise Institute, and the Institute of Social and Economic Research. The Dean’s Executive Advisory Council includes over 10 top executives representing the leading employers in the state. Many local firms offer scholarships, internships, and job opportunities for College of Business and Public Policy students. The College has over 40 full-time faculty with graduate degrees from many of the best universities in the country and extensive business experience. The College maintains a small-school atmosphere with high academic standards. The baccalaureate, Master of Business Administration, and Master of Science in Global Supply Chain Management degree programs are accredited by the AACSB International (The Association to Advance Collegiate Schools of Business). The College of Business and Public Policy offers degree planning sheets that provide a suggested sequence for taking courses within the degree(s); they are not intended to take the place of the degree requirements listed in this catalog. These sheets are available in the CBPP Student Information Office (RH 203).

The College of Business and Public Policy embraces the University’s mission to serve Alaska and the global community (with specific focus on the North Pacific Rim) by providing business education leading to associate, baccalaureate, and graduate education, and research/outreach services. The College provides professional training through occupational endorsement and certificate programs in addition to degree programs. The College maintains an environment that values, promotes, and fosters equal treatment of cultural and ethnic groups. Students are trained to meet the ethical, environmental, and moral challenges facing future business leaders. The programs are designed to advance critical thinking and behavioral and communication skills. The faculty strives to stay abreast of advances in modern information technology for educating business students, and we are committed to maintaining state-of-the-art computer laboratory facilities. We serve a student body that is diverse in terms of social and educational background, business experience, learning motives, and career ambitions. The College seeks to meet the needs of our constituents by staying current with emerging trends, by training and educating a competent workforce in management and business-related disciplines, and by providing pedagogical, basic and applied research, training, and technical assistance.

ACCOUNTING

Edward & Cathryn Rasmuson Hall (RH), Room 203, (907) 786-4100
www.cbpp.uaa.alaska.edu

The Department of Accounting offers two programs: an Associate of Applied Science (AAS) degree with a major in Accounting and the Bachelor of Business Administration (BBA) degree with a major in Accounting. The programs are designed to prepare students for a career in business, government, or other types of organizations. BBA graduates will generally pursue professional accounting careers, while AAS graduates will be qualified for vocationally oriented accounting positions. The
Department of Accounting is also committed to enhancing the lifelong learning opportunities for responsible citizenship and personal satisfaction where accounting and business dimensions are critical ingredients. The AAS degree in Accounting is available at UAA, Kenai Peninsula College, Kodiak College, and Matanuska-Susitna College campuses.

**Associate of Applied Science, Accounting**

**Admission Requirements**

Satisfy the Admission to Certificate and Associate Degree Programs Requirements in Chapter 7, Academic Standards and Regulations.

**General University Requirements**

1. Complete the General University Requirements for Associate Degrees located at the beginning of this chapter.

2. Complete the Associate of Applied Science General Degree Requirements (15 credits) located at the beginning of this chapter. 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.

**Major Requirements**

1. Complete the following required courses (36 credits) with a grade of C or better:
   - 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 Introduction to Business 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

2. 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 use more than 6 credits from one discipline.

3. Students using CIOS A260A to meet an AAS Written Communication Skills General Course Requirement may not also apply it as an elective course for this major.

4. Students using an ECON course to meet an AAS General Course Requirement in the Social Sciences discipline may not also apply it as an elective course for this major.

5. Students must complete 6 credits selected from Humanities, Mathematics and Natural Sciences, or Social Sciences from the AAS General Course Requirement Classification List, other than BA A151, ECON A201, and MATH A105.

6. A total of 60 credits is required for the degree.

**Bachelor of Business Administration, Accounting**

**Admission Requirements**

Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.

**Admission Requirements to Upper Division Courses**

1. Completion of at least 39-40 credits with a cumulative GPA of 2.25 or higher.

2. Completion of each of the following courses with a grade of C or better:
   - ACCT A201 Principles of Financial Accounting 3
   - ACCT A202 Principles of Managerial Accounting 3
   - BA A273 Introduction to Statistics for Business and Economics 3
   - CIS A110 Computer Concepts in Business 3
   - ECON A201 Principles of Macroeconomics 3
   - ECON A202 Principles of Microeconomics 3
   - MATH A107 College Algebra (4) 3-4
   - MATH A172 Applied Finite Mathematics (3) or
     - COMM A111 Fundamentals of Oral Communications (3)
     - or
   - COMM A241 Public Speaking (3)

3. Completion of any combination of at least 9 credits in the following General Education disciplinary areas:
   - Fine Arts
   - Humanities
   - Natural Sciences

**Admission to Upper Division Status**

BBA students in Accounting who do not meet the above standards may not take upper division courses in ACCT, BA, CIS, or LOG.

Other students who meet course prerequisites may take up to 15 upper division ACCT, BA, CIS 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 Student Information Office for assistance in applying for admission to upper division standing within the College of Business and Public Policy.

**Conditional Admission to Upper Division Status**

A student classified as being conditionally admitted to upper division status may take upper division ACCT, BA, CIS, and LOG courses for one semester only, while completing lower division deficiencies.

**Graduation Requirements**

Students must complete the following graduation requirements:

- **A. General University Requirements**
  Complete the General University Requirements for All Baccalaureate Degrees listed at the beginning of this chapter.

- **B. General Education Requirements**
  Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

- **C. College of Business and Public Policy Requirements for Accounting Majors**
  Students earning a BBA degree must complete at least 50 percent of their required business credits at the University of Alaska Anchorage. All ACCT, BA, CIS, ECON, LGOP, and LOG courses are considered business credits for the purpose of this requirement.

  1. Complete the BBA core requirements:
     - The following courses must be completed with a grade of C or better.
     - ACCT A201 Principles of Financial Accounting 3
     - ACCT A202 Principles of Managerial Accounting 3
     - BA A273 Introduction to Statistics for Business and Economics 3
     - CIS A110 Computer Concepts in Business 3
     - ECON A201 Principles of Macroeconomics 3
     - ECON A202 Principles of Microeconomics 3

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requirements. A total of 18 credits is required for the minor. Students who wish to minor in Accounting must complete the following:

Minor, Accounting*

Students who wish to minor in Accounting must complete the following requirements. A total of 18 credits is required for the minor.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT A201</td>
<td>Principles of Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT A202</td>
<td>Principles of Managerial Accounting</td>
<td>3</td>
</tr>
</tbody>
</table>

*Not available to BBA Accounting majors.

**FACULTY**

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**BUSINESS ADMINISTRATION**

Edward & Cathryn Rasmuson Hall (RH), Room 203, (907) 786-4100  
www.cbpp.uaa.alaska.edu

The Department of Business Administration offers a Certificate in Small Business Management at the Kenai campus; an AAS degree in General Business at the Kenai and Kodiak campuses; an AAS degree in Small Business Administration at the Anchorage, Kenai, and Mat-Su campuses; as well as a BBA degree in Economics, Finance, Global Logistics and Supply Chain Management, Management, and Marketing on the Anchorage campus. A Business Administration minor is also available on the Anchorage campus. These are professional programs designed to meet the challenges of a dynamic and changing business environment. Graduates in business find job opportunities in Alaska, throughout the United States and in many foreign countries.

The BBA in Finance prepares students for entry-level financial management jobs in corporations, nonprofit organizations, and financial institutions; financial analysis with brokerage and money management firms; financial planning services; real estate; and financial consulting to small business. Furthermore, it prepares a student for graduate studies in finance.

Students will gain knowledge in the concepts of financial planning, analysis and management in a global context; the functions, structures, delivery systems, efficiency and performance of financial markets and institutions; the concepts, techniques and strategies of investment in financial and real assets; the creation of values for the stockbrokers, stakeholders and society; and the value of financial securities and the enterprise.

The BBA in Management prepares students for entry-level general management jobs in corporations, nonprofit organizations, and government; personnel and benefits management; recruitment and career planning services; conflict resolution and arbitration; and management consulting to small business. Furthermore, it prepares a student for graduate studies in management.

Students will gain knowledge in the concepts of organizational theory, design and development in a global context; the study of human behaviors and interactions within an organization; the management of human resources of an organization; negotiations, conflict resolutions and arbitrations; the formulation of strategies for the management of total organization in an ever-changing environment; and the value of ethics and social responsibility.

The BBA in Marketing prepares students for entry-level marketing jobs in corporations and retail organizations, promotion and advertising, purchasing and distribution, market research and sales forecasting, and marketing consulting to small businesses. Furthermore, it prepares students for graduate studies in marketing.

Students will gain knowledge in the principles of marketing and its essential role in business and society; the process of planning and executing the conception, pricing, promotion, and distribution of ideas, goods, and services in local, national and global markets; and designing, executing and analyzing marketing research for sales forecasting; through focused studies in consumer behavior, international marketing, retail, promotional and marketing management.

**Undergraduate Certificate, Small Business Management**

**Kenai Peninsula College (KPC)**  
156 College Drive Soldotna, Alaska 99669, (907) 262-0300  
www.kpc.alaska.edu

The Small Business Management Certificate program is offered only at Kenai Peninsula College. Advising for this program is only available from the Business faculty at Kenai Peninsula College. Please call (907) 262-0344 for more information.
Graduates of the UAA Small Business Management program will have the ability to:

1. Explain basic accounting reports, cash flow, and budgets;
2. Demonstrate basic supervision skills and identify important human behavioral traits;
3. Describe fundamental marketing functions and strategy, basic selling principles, and necessary interpersonal skills for customer relations;
4. List and explain economics terms and concepts from a macro and micro perspective;
5. Use computers for word processing and spreadsheets for data analysis;
6. Communicate ideas in a variety of modes; and
7. Identify the impact of business from ethical, legal, and social responsibility points of view.

Admission Requirements
Complete university admissions requirements for certificates found in Chapter 7, Academic Standards and Regulations.

General University Requirements
Complete the General University Requirements for Undergraduate Certificates located at the beginning of this chapter.

1. Complete the following communication requirements:
   - ENGL A111 Methods of Written Communication 3
   - Select 3 credits from the following: 3
   - ENGL A211 Academic Writing About Literature (3)  
   - *ENGL A212 Technical Writing (Recommended) (3)  
   - ENGL A213 Writing in the Social and Natural Sciences (3)  
   - ENGL A214 Persuasive Writing (3)  
   - CIOS A260A Business Communications (3)  
   *Note: ENGL A212 is required for a UAA four-year degree in Business.

2. Complete the following major requirements:
   - BA A166 Small Business Management 3  
   - BA A231 Fundamentals of Supervision 3  
   - **ACCT A101 Principles of Financial Accounting I (3) 3  
   - or
   - ACCT A120 Bookkeeping for Business I (Not offered at KPC) (3)  
   - **ACCT A201 Principles of Financial Accounting (Not offered at KPC) (3)  
   - **ACCT A102 Principles of Financial Accounting II (3) 3  
   - or
   - ACCT A202 Principles of Managerial Accounting (3)  
   - or
   - ACCT A222 Introduction to Computerized Accounting (3)  
   **Students taking ACCT A101 & ACCT A102 cannot use ACCT A201 for credit toward certificate.

3. Complete 9 credits from the following departments: 9
   - ACCT, BA, CIOS, CIS, ECON  
   - The following are recommended:
   - ECON A201 Principles of Macroeconomics (3)  
   - ECON A202 Principles of Microeconomics (3)  
   - CIOS A101 (A, B or C) Keyboarding (1-3)  

4. Complete 3 elective credits. 3

5. A total of 30 credits is required for the certificate.

FACULTY
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Ray Zagorski, Associate Professor, IFRZ@uaa.alaska.edu

Associate of Applied Science, General Business

Kenai Peninsula College (KPC)  
156 College Drive Soldotna, Alaska, 99669, (907) 262-0300  
www.kpc.alaska.edu

Kodiak College (KOC)  
117 Benny Benson Drive, Kodiak, Alaska 99615, (907) 745-9711  
www.koc.alaska.edu

Matanuska-Susitna College (MSC)  
Mile Two Trunk Road, Palmer, Alaska 99645, (907)745-9774  
www.matsu.alaska.edu

This is a flexible two-year degree program providing a solid business foundation and preparation for career advancement. It prepares graduates to apply principles and skills relating to accounting, management, marketing, finance, economics, and business law to businesses of all sizes. 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, and communicate effectively and manage their business affairs with professionalism, integrity, and a spirit of inquiry.

The graduates of the UAA General Business program will have the ability to:

1. Apply the principles and skills relating to accounting, management, marketing, finance, economics and business law to businesses of all sizes;
2. Practice the business skills relevant to the specific company or industry of their present or future employment;
3. Manage or supervise specialists with consideration for all aspects of business;
4. Integrate the diverse needs of a business to achieve organizational goals;
5. Start and manage their own small businesses;
6. Communicate effectively orally and in writing;
7. Effectively deal with subordinates, superiors, customers, and other stakeholders in professional matters; and
8. Manage their business affairs with professionalism, integrity, and a spirit of inquiry.

Admission Requirements
Complete university admissions requirements for associate degrees found in Chapter 7, Academic Standards and Regulations.

General University Requirements

1. Complete the General University and the General Course Requirements for Associate of Applied Science Degrees located at the beginning of this chapter.
2. Complete the Associate of Applied Science General Course Requirements (15 credits) located at the beginning of this chapter. Of the courses needed to satisfy the General Course Requirements, one must be MATH A105 or higher.

Communication and General Course Requirements

Oral Communications Courses
Select 3 credits from the following: 3  
- COMM A111 Fundamentals of Oral Communication (3)  
- COMM A235 Small Group Communication (3)  
- COMM A237 Interpersonal Communication (3)  
- COMM A241 Public Speaking (3)

Written Communication Courses
Select 6 credits from the following: 6  
- ENGL A111 Methods of Written Communication (required) (3)  
- ENGL A211 Academic Writing About Literature (3)  
- ENGL A212 Technical Writing (3)
ENGL A213  Writing in the Social and Natural Sciences (3)
CIOS A260A  Business Communications (3)

Humanities* Social Sciences, Mathematics, Natural Sciences
Select 6 credits from approved General Course Requirements:
MATH A105  Intermediate Algebra or higher level (required) (3)
and 3 more credits from an approved course

*Note: Any English courses used to satisfy humanities General Course Requirements must be different from the written communications requirement and have a course number higher than ENGL A111.

Major Requirement Courses
1. Complete the following required courses:
   ACCT A101  Principles of Financial Accounting I  3
   ACCT A102  Principles of Financial Accounting II  3
   ACCT A202  Principles of Managerial Accounting  3
   BA A151  Introduction to Business  3
   BA A231  Fundamentals of Supervision  3
   BA/JUST A241  Business Law I  3
   BA A260  Marketing Practices  3
   BA A264  Personal Selling  3
   CIS A110  Computer Concepts in Business  3
   ECON A201  Principles of Macroeconomics  3
   Note: MATH A105 will not satisfy the quantitative skills General Education Requirement for the baccalaureate degree.

2. Complete the required BA core courses:
   BA A151  Introduction to Business  3
   BA A166  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

3. Complete 9-12 credits of electives from the following:
   BA A131  Personal Finance (3)
   BA/JUST A242  Business Law II (3)
   BA A273  Introduction to Statistics for Business and Economics (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)
   or any 300-level business course provided the prerequisites have been met. All ACCT, BA, CIS, ECON, LGOP, and LOG are considered business courses.*

   *Students who may decide to pursue a Bachelor of Business Administration degree can maximize transferability of their credits by taking MATH A107 or MATH A172, BA A273, and any 300-level business course as long as prerequisites have been completed.

4. Students must complete 6 credits selected from Humanities, Mathematics and Natural Sciences, or Social Sciences from the AAS General Course Requirement Classification List, other than BA A151 and MATH A105, or MATH A107/MATH A172.

5. A total of 60 credits is required for the degree.

Note: Students planning to go on to a BBA degree must have a grade of C or better in all business courses.

FACULTY
Steve Gillon, Assistant Professor, IFSIG@uaa.alaska.edu
Ray Zagorski, Associate Professor, IFRZ@uaa.alaska.edu

Bachelor of Business Administration

Major areas:  Economics  Finance  Global Logistics and Supply Chain Management  Management  Marketing

The Bachelor of Business Administration (BBA) is a professional degree offered through the College of Business and Public Policy. It is designed to prepare students to pursue meaningful and rewarding careers in management. The curriculum for the BBA degree is management-oriented rather than highly specialized. Concepts that are relevant to both small and large firms and both the public and private sectors are emphasized.

The five majors — Economics, Finance, Global Logistics and Supply Chain Management, Management, and Marketing are designed to prepare students to pursue careers in the private and public sectors. Local, state, national, and international firms, and not-for-profit organizations provide a ready market for graduates in each of these five major areas of concentration.

Admission Requirements
Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.

Admission Requirements to Upper Division Courses
1. Completion of at least 39-40 credits with a cumulative GPA of 2.25 or higher.
2. Completion of each of the following courses with a grade of C or better:
   ACCT A201  Principles of Financial Accounting  3
   ACCT A202  Principles of Managerial Accounting  3

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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
ENGL A111 Methods of Written Communication 3
ENGL A212 Technical Writing 3
MATH A107 College Algebra (4) 3-4
or MATH A172 Applied Finite Mathematics (3)
Oral Communication Skills GER 3
COMM A111 Fundamentals of Oral Communications (3) or
COMM A241 Public Speaking (3)
3. Completion of any combination of at least 9 credits in the following General Education disciplinary areas: 9
   Fine Arts
   Humanities
   Natural Sciences

Admission to Upper Division Status
BBA students in Economics, Finance, Global Logistics and Supply Chain Management, Management, and Marketing who do not meet the above standards may not take upper division courses in ACCT, BA, CIS, or LOG.

Other students who meet course prerequisites may take up to 15 upper division ACCT, BA, CIS, 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 Student Information Office for assistance in applying for admission to upper division standing within the College of Business and Public Policy.

Conditional Admission to Upper Division Status
A student classified as being conditionally admitted to upper division status may take upper division ACCT, BA, CIS, and LOG courses for one semester only, while completing lower division requirements.

Graduation Requirements
Students must complete the following graduation requirements:

A. General University Requirements
   Complete the General University Requirements for All Baccalaureate Degrees listed at the beginning of this chapter.

B. General Education Requirements
   Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

C. College of Business and Public Policy Requirements

Economics, Finance, Management, Global Logistics and Supply Chain Management and Marketing Majors
Students earning a BBA degree must complete at least 50 percent of their required business credits at the University of Alaska Anchorage. All ACCT, BA, CIS, ECON, LGOP and LOG courses are considered business credits for the purpose of this requirement.

1. Complete the Business core requirements. The following courses must be completed with a C or better:
   ACCT A201* Principles of Financial Accounting 3
   ACCT A202 Principles of Managerial Accounting 3
   BA/JUST A241 Business Law I 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
   ENGL A212 Technical Writing 3
   MATH A107 College Algebra (4) 3-4
   or MATH A172 Applied Finite Mathematics (3)
   Oral Communication Skills GER 3
   COMM A111 Fundamentals of Oral Communications (3) or
   COMM A241 Public Speaking (3)
   ECON A201 Principles of Macroeconomics 3
   ECON A202 Principles of Microeconomics 3
   ENGL A212 Technical Writing 3
   MATH A107 College Algebra (4) 3-4
   or MATH A172 Applied Finite Mathematics (3)
   Applied Calculus (3)
   *The ACCT A101 Principles of Financial Accounting I and ACCT A102 Principles of Financial Accounting II sequence may be used to satisfy the ACCT A201 requirement for this degree.
   Note: Students who plan to attend graduate school are encouraged to take MATH A107 and MATH A200 instead of MATH A172 and MATH A272. MATH A108 Trigonometry is a prerequisite for MATH A200.

2. Complete these upper division core courses. The following courses must be completed with a C or better prior to graduating:
   BA A300 Organizational Theory and Behavior 3
   BA A325 Corporate Finance 3
   BA A343 Principles of Marketing 3
   BA A377 Operations Management 3
   BA A462 Strategic Management 3
   CIS A376 Management Information Systems 3
   (Integrative Capstone)

D. Major Requirements

Economics Major
1. Complete the following requirements. The following courses must be completed with a C or better prior to graduating:
   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
   Upper division Economics electives* 12
   *Note: No more than a total of 6 credits earned in an independent study, or ECON A454 Economics Internship, 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).

2. A total of 120 credits is required for the degree, of which a minimum of 45 credits must be upper division.

Finance Major
All courses must be completed with a C or better prior to graduating.

1. Investment Concentration (30 credits)
   A. Complete the following:
      BA/JUST A242 Business Law II 3
      BA A375 Statistics for Business and Economics (3) or
      ECON A312 Econometrics for Business and Economics (3) or
      ECON A429 Business Forecasting (3)
      BA A380 Investment Management 3
      BA A385 Advanced Corporate Finance 3

   B. Complete at least 12 credits from the following: 12-18
      BA A426 Financial Institutions (3)
      BA A427 International Finance (3)
      BA A451 Advanced Investment Strategies (3)
      BA A452 Financial Derivatives (3)
      BA A453 Bond Market Analysis (3)
      BA A491A Student Managed Portfolio (3)

   C. Complete 0 to 6 credits of upper division business electives. 0-6


2. **Real Estate and Property Management Concentration**
   
   **(30 credits)**
   
   **A.** Complete the following:
   - BA A131 Personal Finance 3
   - BA/JUST A242 Business Law II 3
   - BA A306 Real Estate Principles 3
   - BA A315 Property Management and Marketing 3
   - BA A320 Real Estate Finance 3
   
   **B.** Complete at least 9 credits from the following: 9-15
   - BA A385 Advanced Corporate Finance (3)
   - BA A395 Property Management Internship (3)
   - BA A426 Financial Institutions (3)
   - BA A431 Real Estate Appraisal (3)
   - BA A432 Real Estate Law (3)
   
   **C.** Complete 0 to 6 credits upper division business electives 0-6
   
3. A total of 120 credits is required for the degree, of which a minimum of 45 credits must be upper division.

**Global Logistics and Supply Chain Management Major**

1. Complete the following requirements. The following courses must be completed with a grade of C or better prior to graduating:
   - 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
   
   **2.** Complete LOG A495 Internship in Global Logistics and Supply Chain Management* 3
   
   *The internship 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.
   
   **3.** Complete 9 credits of upper division program electives approved by the student's advisor with a grade of C or better. These may include, but are not limited to the following: 9
   - ACCT A342 Managerial Cost Accounting (3)
   - AT A420 Air Transportation System (3)
   - ATP A332 Transport Aircraft Systems (3)
   - BA A375 Statistics for Business and Economics (3)
   - BA A420 Marketing Research (3)
   - BA A447 International Marketing (3)
   - BA A487 International Management (3)
   - CIS A310 Analysis of Business Systems (3)
   - CIS A330 Database Management Systems (3)
   - CIS A410 Project Management (3)
   - CIS A489 Systems Design, Development and Implementation (3)
   - ECON A312 Econometrics for Business and Economics (3)
   - ECON A363 International Economics (3)
   - ECON A429 Business Forecasting (3)
   
4. A total of 120 credits is required for the degree, of which a minimum of 45 credits must be upper division.

**Management Major**

1. Complete the following requirements. The following courses must be completed with a C or better prior to graduating:
   - BA A361 Human Resource Management 3
   - BA A461 Negotiations and Conflict Management 3
   - BA A481 Applications in Management 3
   - BA A488 Environment of Business 3

2. A total of 120 credits is required for the degree, of which a minimum of 45 credits must be upper division.

**Marketing Major**

1. Complete the following requirements. The following courses must be completed with a C or better prior to graduating:
   - BA A264 Personal Selling 3
   - BA A381 Consumer Behavior 3
   - BA A420 Marketing Research 3
   - BA A460 Marketing Management 3
   - BA A375 Statistics for Business and Economics (3)
   - ECON A312 Econometrics for Business and Economics (3)
   - ECON A429 Business Forecasting (3)
   
2. Complete an additional 6 credits of upper division courses with a grade of C or better prior to graduating: 6
   - Upper division Business electives recommended:
     - BA A447 International Marketing (3)
     - BA A463 Promotion Management (3)
   
3. A total of 120 credits is required for the degree, of which a minimum of 45 credits must be upper division.

**Minor, Business Administration**

Students majoring in another subject who wish to minor in Business Administration must complete the following requirements. A total of 21 credits is required for the minor. Prerequisites for these courses must also be satisfied.

- 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

*Not available to BBA majors.

**Minor, 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.

A. Complete the following:
   - BA A131 Personal Finance 3
   - BA/JUST A241 Business Law I 3
   - BA/JUST A242 Business Law II 3
   - BA A306 Real Estate Principles 3
   - BA A320 Real Estate Finance 3
   
B. Complete 6 credits from the following: 6
   - BA A315 Property Management and Marketing (3)
   - BA A395 Property Management Internship (3)
   - BA A426 Financial Institutions (3)
   - BA A431 Real Estate Appraisal (3)
   - BA A432 Real Estate Law (3)

*Not available to BBA Finance majors.

**FACULTY**

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www.uaa.alaska.edu
Associate of Applied Science, Business Computer Information Systems

Admission Requirements
Satisfy the Admission to Certificate and Associate Degree Program Requirements in Chapter 7, Academic Standards and Regulations. English and math placement tests are given by the Advising and 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 Keyboarding A: Basic Keyboarding. Students must be able to read and comprehend technical manuals and texts.

Academic Progress
A grade of C or better is required to continue in each higher CIS course. To take upper division Information Systems program courses, students must complete lower division degree requirements and apply for upper division standing.

General University Requirements
1. Complete the General University Requirements for Associate Degrees located at the beginning of this chapter.
2. Complete the Associate of Applied Science General Course Requirements in Chapter 7, Academic Standards and Regulations. Courses involving computer instruction, as well as many other business school courses, are supported by seven computerized classrooms and state-of-the-art open laboratory facilities. These computer classrooms and labs provide students with hands-on learning experiences using the latest Intel workstations supported by state-of-the-art network servers. Our computer environment features several state-of-the-art software and tools for business information systems integration, development, and management.

College of Business and Public Policy students have the opportunity to use the computer facilities to help them with their coursework. Laboratories include special business presentation facilities, and an experimental multimedia and a decision-support room.

Computer courses are taught using both structured instructor-led and self-guided tutorial approaches in the traditional classroom as well as online discussions.

Computer Information Systems Degree Programs
The College of Business and Public Policy prepares students for computer careers in computer programming and systems design, network administration and database administration through our Associate of Applied Science in Business Computer Information Systems (BCIS). Students are prepared for computer careers in systems analysis and design, e-commerce, web design, end-user computing, managing information systems, databases and networks, and associated occupations through the Management Information Systems (MIS) major in the Bachelor of Business Administration. Both degrees are based on the Association of Information Technology Professionals (AITP) model curriculum and are linked so that the diligent student can move from the two-year to the four-year degree without losing credits.

Both degrees emphasize using computers within business and public sector settings through hands-on teaching methods. The student is prepared for the technical and security aspects of the computer environment as well as the techniques and issues of managing information resources through the introduction of the theories followed by hands-on experience with the associated application.

Computer career education in the College of Business and Public Policy is enhanced by work and internship opportunities both within our own laboratories and with business and government facilities.

Computer Information Systems
Edward & Cathryn Rasmuson Hall (RH), Room 203, (907) 786-4100 www.ccpp.uaa.alaska.edu

The Computer Information Systems Department provides educational opportunites in computer information systems through degree programs, courses for all students, and career-enrichment opportunities.

Courses involving computer instruction, as well as many other business school courses, are supported by seven computerized classrooms and state-of-the-art open laboratory facilities. These computer classrooms and labs provide students with hands-on learning experiences using the latest Intel workstations supported by state-of-the-art network servers. Our computer environment features several state-of-the-art software and tools for business information systems integration, development, and management.

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Computer Information Systems Degree Programs
The College of Business and Public Policy prepares students for computer careers in computer programming and systems design, network administration and database administration through our Associate of Applied Science in Business Computer Information Systems (BCIS). Students are prepared for computer careers in systems analysis and design, e-commerce, web design, end-user computing, managing information systems, databases and networks, and associated occupations through the Management Information Systems (MIS) major in the Bachelor of Business Administration. Both degrees are based on the Association of Information Technology Professionals (AITP) model curriculum and are linked so that the diligent student can move from the two-year to the four-year degree without losing credits.

Both degrees emphasize using computers within business and public sector settings through hands-on teaching methods. The student is prepared for the technical and security aspects of the computer environment as well as the techniques and issues of managing information resources through the introduction of the theories followed by hands-on experience with the associated application.

Computer career education in the College of Business and Public Policy is enhanced by work and internship opportunities both within our own laboratories and with business and government facilities.

Undergraduate Programs, College of Business and Public Policy

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Associate of Applied Science, Business Computer Information Systems

Admission Requirements
Satisfy the Admission to Certificate and Associate Degree Program Requirements in Chapter 7, Academic Standards and Regulations. English and math placement tests are given by the Advising and 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 Keyboarding A: Basic Keyboarding. Students must be able to read and comprehend technical manuals and texts.

Academic Progress
A grade of C or better is required to continue in each higher CIS course. To take upper division Information Systems program courses, students must complete lower division degree requirements and apply for upper division standing.

General University Requirements
1. Complete the General University Requirements for Associate Degrees located at the beginning of this chapter.
2. Complete the Associate of Applied Science General Course Requirements (15 credits) located at the beginning of this chapter. ENGL 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 meet both the AAS and the baccalaureate General Education Requirements.

Major Requirements
1. Complete the 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 A107 College Algebra (4) 3-4 or
   - MATH A172 Applied Finite Mathematics (3) 3
   - General Education Requirement elective** 3
   *The ACCT A101 Principles of Financial Accounting I and ACCT A102 Principles of Financial Accounting II sequence may be used to satisfy the ACCT A201 requirement for this degree.
   **Choose humanities or natural sciences course that meets both AAS and General Education Requirements for baccalaureate degrees.

2. Complete the Business core requirement:
   - BA A273 Introduction to Statistics for Business and Economics 3

3. Complete 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

4. Complete elective credits approved by a CIS Department advisor.
   - No more than 3 credits of internship can be used to fulfill program electives.
   - A minimum of 12 credits from Major Requirements, items 3 and 4 above, must be earned at the University of Alaska Anchorage.
   - A total of 60-61 credits is required for the degree.
Bachelor of Business Administration, Management Information Systems

Admission Requirements
Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.

Admission Requirements to Upper Division Courses
1. Completion of at least 39-40 credits with a cumulative GPA of 2.25 or higher.
2. Completion of each of the following courses with a grade of C or better:
   - ACCT A201 Principles of Financial Accounting 3
   - ACCT A202 Principles of Managerial Accounting 3
   - BA/JUST A241 Business Law I 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
   - ENGL A111 Methods of Written Communication 3
   - ENGL A212 Technical Writing 3
   - MATH A107 College Algebra (4) 3-4
   - or MATH A172 Applied Finite Mathematics (3)
   - Oral Communication Skills GER 3
   - COMM A111 Fundamentals of Oral Communications (3)
   - or COMM A241 Public Speaking (3)
3. Completion of any combination of at least 9 credits in the following General Education disciplinary areas:
   - Fine Arts
   - Humanities
   - Natural Sciences

Admission to Upper Division Status
BBA students in Management Information Systems who do not meet the above standards may not take upper division courses in ACCT, BA, CIS, or LOG.

Other students who meet course prerequisites may take up to 15 upper division ACCT, BA, CIS, 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 Student Information Office for assistance in applying for admission to upper division standing within the College of Business and Public Policy.

Conditional Admission to Upper Division Status
A student classified as being conditionally admitted to upper division status may take upper division ACCT, BA, CIS and LOG courses for one semester only, while completing lower division deficiencies.

Graduation Requirements
Students must complete the following graduation requirements:

A. General University Requirements
   Complete the General University Requirements for All Baccalaureate Degrees listed at the beginning of this chapter.

B. General Education Requirements
   Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

C. College of Business and Public Policy Requirements: Management Information Systems Major
   Students earning a BBA degree must complete at least 50 percent of their required business credits at the University of Alaska Anchorage. All ACCT, BA, CIS, ECON, LGOP, and LOG courses are considered business credits for the purpose of this requirement.
   1. Complete the Business core requirements with a grade of C or better:
      - ACCT A201 Principles of Financial Accounting 3
      - ACCT A202 Principles of Managerial Accounting 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
      - ENGL A212 Technical Writing 3
      - MATH A107 College Algebra (4) 3-4
      - or MATH A172 Applied Finite Mathematics (3)
      - MATH A200 Calculus I (4) 3-4
      - or MATH A272 Applied Calculus (3)
   *The ACCT A101 and ACCT A102 sequence may be used to satisfy the ACCT A201 requirement for this degree.

   Note: Students who plan to attend graduate school are encouraged to take MATH A107 and MATH A200, MATH A201 Calculus II, MATH A202 Calculus III instead of MATH A172 and MATH A272. MATH A108 Trigonometry is a prerequisite for MATH A200.
   2. Complete the following requirements. The following courses must be completed with a grade of C or better prior to graduating:
      - BA A300 Organizational Theory and Behavior 3
      - BA A325 Corporate Finance 3
      - BA A343 Principles of Marketing 3
      - BA A377 Operations Management 3
      - BA A462 Strategic Management 3
      - CIS A376 Management Information Systems (Integrative Capstone)

D. Major Requirements
   1. Complete the following required courses with a grade of C or better:
      - 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
   2. Complete 12 credits of upper division program electives approved by the department with a grade of C or better. These may include, but are not limited to:
      - CIS A360 Object-Oriented Programming in .Net (3)
      - CIS A361 Advanced Programming for Business Applications (3)
      - CIS A365 Object-Oriented Programming (3)
      - CIS A390 Selected Topics in Management Information Systems (1-6)
      - CIS A395 Programmer/Analyst Internship (3)
      - CIS A420 Consulting and Training End Users (3)
      - CIS A421 Multimedia Authoring (3)
      - CIS A430 Client-Server Programming for Business Applications (3)
      - CIS A445 Advanced Network Management (3)
CIS A460  Web Development in the .Net Environment (3)
CIS A495  Systems Analyst/User Support Internship (3)
CIS A498  Individual Research Project (1-6)
ECON A312  Econometrics for Business and Economics (3)
ECON A429  Business Forecasting (3)

3. A minimum of CIS A489 Systems Design, Development, and Implementation and 9 credits from Major Requirements, items 1 and 2, must be earned at the University of Alaska Anchorage.

4. A total of 120 credits is required for the degree, of which a minimum of 45 credits must be upper division.

**Minor, Computer Information Systems**

Students majoring in another subject who wish to minor in Computer Information Systems (CIS) must complete the following requirements. A total of 18 credits is required for the minor, 12 of which must be upper division.

- CIS A210  Contemporary Business Applications Development 3
- CIS A330  Database Management Systems 3
- CIS A376**  Management Information Systems (Integrative Capstone) 3

Upper division CIS electives** 6

*Not available to BBA Management Information Systems majors.

**BBA degree students must take CIS A310 Analysis of Business Systems, and 3 credits of upper division CIS electives instead of CIS A376 and CIS A305 Managerial Presentations to meet the requirements for the minor (CIS A376 and CIS A305 are already required in the business core).

All students pursuing a minor in CIS must apply to the College of Business and Public Policy for upper division standing prior to taking any upper division course in CIS. Students pursuing a baccalaureate degree outside the College of Business and Public Policy with a minor in CIS can establish upper division standing by going to the College of Business and Public Policy Student Information Office and certifying they have completed at least 54 credits in their degree program and have completed the General Education Requirements of 6 credits of written communications, 3 credits of oral communication, 3 credits of college algebra (MATH A107 College Algebra or MATH A172 Applied Finite Mathematics or equivalent), and 12 credits in GER courses in fine arts, humanities, social sciences, or natural sciences.

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**ECONOMICS**

Edward & Cathryn Rasmuson Hall (RH), Room 203, (907) 786-4100
www.cbpp.uaa.alaska.edu/economics.asp

Economics provides students with a systematic way of understanding activity in the world around them. Economics is a social science that studies how individuals, organizations, and governments make choices about the use of resources. A degree in Economics gives students career opportunities in many fields and provides excellent preparation for those who wish to pursue advanced study in a variety of disciplines. The Economics Department 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 or Bachelor of Business Administration degree. A minor in Economics is also offered.

**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 Seminar in Economic Research 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.
5. Students not meeting all these requirements may be awarded honors through a vote of the faculty.

**Bachelor of Arts, Economics**

**Admission Requirements**

Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.

**Graduation Requirements**

Students must complete the following graduation requirements:

**A. General University Requirements**

Complete the General University Requirements for All Baccalaureate Degrees listed at the beginning of this chapter.

**B. General Education Requirements**

Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

**C. Major Requirements**

1. Complete the following required courses with a grade of C or better:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA A273</td>
<td>Introduction to Statistics for Business and Economics</td>
</tr>
<tr>
<td>ECON A201</td>
<td>Principles of Macroeconomics</td>
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<tr>
<td>ECON A202</td>
<td>Principles of Microeconomics</td>
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<tr>
<td>ECON A312</td>
<td>Econometrics for Business and Economics</td>
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<tr>
<td>ECON A321</td>
<td>Intermediate Microeconomics</td>
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<td>ECON A324</td>
<td>Intermediate Macroeconomics</td>
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<tr>
<td>ECON A492</td>
<td>Seminar in Economic Research</td>
</tr>
<tr>
<td>MATH A200</td>
<td>Calculus I (4)</td>
</tr>
<tr>
<td>MATH A272</td>
<td>Applied Calculus (3)</td>
</tr>
</tbody>
</table>

   Upper division Economics electives 12

   *Note: No more than a total of 6 credits earned in an independent study, or ECON A454 Economics Internship, 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).

   Note: 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 A200, MATH A201, and MATH A202). MATH A108 Trigonometry is a prerequisite for MATH A200.

2. Students must complete at least 12 credits of their Economics courses in residence at UAA.

3. A total of 120 credits is required for the degree, of which 48 credits must be upper division.
Minor, Economics*

Students majoring in another subject who wish to minor in Economics must complete the following requirements. A total of 18 credits is required for the minor, 12 of which must be upper division.

- ECON A201 Principles of Macroeconomics 3
- ECON A202 Principles of Microeconomics 3
- Upper division Economics electives 12

* Not available to BA and BBA Economics majors.

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LOGISTICS

Edward & Cathryn Rasmuson Hall (RH) Room 203, (907) 786-4100
www.cbpp.uaa.alaska.edu

The Logistics Department offers four undergraduate programs: the Occupational Endorsement Certificate in Logistics and Supply Chain Operations, the Undergraduate Certificate in Logistics and Supply Chain Operations, the Associate of Applied Science in Logistics and Supply Chain Operations, and a major in Global Logistics and Supply Chain Management for the Bachelor of Business Administration.

Logistics refers to the complex systems of the movement of material, component parts, and information within a business firm, and the distribution of final products to customers. Logistics and supply chain management are an essential function that adds value to the final product. The goal of logistics and supply chain management is timely delivery, competitive pricing, mobility, and flexibility, together with innovative transportation services. Today, competitive advantages in global markets exceed the realm of manufacturing. Companies that master information technology and logistics are setting global standards for overall supply chain performance. Firms with a virtual worldwide logistics system view that carries out dynamic and continuous distribution are gaining the competitive edge.

Every organization is engaged in logistics if it has a purchasing function and/or a delivery process. Prospective employers include business firms, nonprofit organizations, and government agencies.

Anchorage and Alaska are strategically located relative to the great markets of Europe, Asia, and the mainland United States. More freight in tonnage passes through the Ted Stevens Anchorage International Airport on a daily basis than any other airport in the United States. Truck and marine transportation is crucial to supplying Alaska with goods. The state owns a railroad, and pipelines move oil and other fuels. The military establishment of Alaska is located here largely because of the logistical advantages obtained from Alaska's strategic location. Effective development of the logistics sector depends on the availability of a labor force that understands and can manage logistics systems.

Occupational Endorsement Certificate, Logistics and Supply Chain Operations

The Occupational Endorsement Certificate in Logistics and Supply Chain Operations, which is awarded by the Logistics Department, 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 15 credits earned toward the occupational endorsement certificate are transferable to both the Undergraduate Certificate in Logistics and Supply Chain Operations and the Associate of Applied Science degree in Logistics and Supply Chain Operations.

At the completion of an Occupational Endorsement Certificate in Logistics and Supply Chain Operations, students are able to demonstrate:

1. Proficiency in adapting to a variety of logistics employment settings with an understanding of the common terminology, equipment, regulations, and information systems used.
2. Entry-level employability skills in the following areas: logistics operations, logistics customer service, purchasing, supply chain operations, warehouse operations, inventory control, transportation services, and transport operations management.

Admission Requirements

See Occupational Endorsement Certificate admissions in Chapter 7, Academic Standards and Regulations.

Graduation Requirements

Students must achieve a grade of C or better in all courses required for the certificate.

Major Requirements

1. See General University Requirements for Occupational Endorsement Certificates at the beginning of this chapter.
2. Complete the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LGOP A110</td>
<td>Logistics, Information Systems and Customer Service</td>
<td>3</td>
</tr>
<tr>
<td>LGOP A120</td>
<td>Warehouse and Inventory</td>
<td>3</td>
</tr>
<tr>
<td>LGOP A125</td>
<td>Transportation Services</td>
<td>3</td>
</tr>
<tr>
<td>LGOP A160</td>
<td>Purchasing and Supply Management</td>
<td>3</td>
</tr>
<tr>
<td>LGOP A235</td>
<td>Transport Operations Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Undergraduate Certificate, Logistics and Supply Chain Operations

The 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 Admission to Certificate and Associates Degree Program Requirements in Chapter 7, Academic Standards and Regulations.

Graduation Requirements

Students must achieve a grade of C or better in all courses required for the certificate.

Major Requirements

1. Complete the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA A151</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BA A231</td>
<td>Fundamentals of Supervision</td>
<td>3</td>
</tr>
</tbody>
</table>
Major Requirements

1. Complete the following courses:
   - BA A151: Introduction to Business 3
   - BA A231: Fundamentals of Supervision 3
   - BA JUST A241: Business Law I 3
   - ECON A201: Principles of Macroeconomics 3
   - LGOP A110: Logistics, Information Systems and Customer Service 3
   - LGOP A120: Warehouse and Inventory Control Systems 3
   - LGOP A160: Purchasing and Supply Management 3
   - LGOP A235: Transport Operations Management 3
   - MATH A107: College Algebra (4) 3-4
   - or MATH A172: Applied Finite Mathematics (3)

2. Complete four of the following courses:
   - BA A273: Introduction to Statistics for Business and Economics (3)
   - BA A295: Internship in Business Administration (3)
   - BA A375: Statistics for Business and Economics (3)
   - BA A377: Operations Management (3)
   - ECON A312: Econometrics for Business and Economics (3)
   - ECON A429: Business Forecasting (3)
   - Any 300- or 400-level LOG course (3)
   - OSH A101: Introduction to Occupational Safety and Health (3)
   - OSH A108: Injury Prevention and Risk Management (4)
   - OSH A250: Hazardous Material Operation (3)
   - TECH A295: Technical Internship (1-6)
   - TECH A302: Operational Safety (3)

3. Students must complete 6 credits selected from Humanities, Mathematics and Natural Sciences, or Social Sciences from the AAS General Course Requirement Classification List, other than BA A151, ECON A201, and MATH A107/MATH A172.

4. A total of 60-61 credits is required for the degree.

Bachelor of Business Administration

The requirements for the Bachelor of Business Administration with a major in Global Logistics and Supply Chain Management are listed with the BBA located earlier in this chapter.

FACULTY

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Philip Price, Professor, philipp@cbpp.uaa.alaska.edu
Darren Prokop, Professor/Chair, AFDJP1@cbpp.uaa.alaska.edu
College 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 College of Education for a copy of the completed report.

The College of Education comprises a community of educators dedicated to improving the quality of education. The mission of the College 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. Our 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. We are confident that this preparation will result in educators’ significant contributions to society.

The College 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 peoples’ 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.

We believe that learning must be designed, delivered, and evaluated within the contexts of these core values and program outcomes.

The College 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 College of Education is accredited by the National Council for Accreditation of Teacher Education (NCATE). Our professional preparation programs are approved by the Alaska Department of Education and Early Development and are based on NCATE 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 dean of the College of Education is authorized to recommend candidates for the appropriate certificate or endorsement.

In each of the college’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 college offers high-quality, distance-delivered coursework in order to improve access for rural students and provide flexible scheduling for practicing educators. Additionally, the college 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 College of Education. 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 College 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 College 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 College of Education website. 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 College 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) 786-4481
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) 786-6317
3. The Department of Educational Leadership with programs in educational leadership (principal, superintendent, and teacher leadership preparation). (907) 786-4450

Undergraduate Program Options

The College of Education offers several program options for candidates interested in working with children.

School Age Care Occupational Endorsement Certificate: Practitioner
School Age Care Occupational Endorsement Certificate: Administrator
Early Childhood Development Certificate
Associate of Applied Science in Early Childhood Development
Bachelor of Arts in Early Childhood Education*
Bachelor of Arts in Elementary Education*
Post-Baccalaureate Certificate in Elementary Education*
Post-Baccalaureate Certificate in Early Childhood Pre-K-Third Grade*
*Programs fulfill Alaska Department of Education and Early Development teacher certification or endorsement requirements. Refer to Chapter 11, Post-Baccalaureate Certificate Programs, for more information.

High School Preparation

All programs in the College of Education build upon the candidates’ strong high school preparation in the following areas:

a. English composition and writing
b. Oral communication
c. World languages
d. Algebra
e. Computer literacy
f. Social sciences
g. Natural sciences

Field Placements

All College of Education undergraduate programs require field experiences in school or agency settings.

The College of Education requires compliance with specific background clearance policies and procedures for candidates participating in university-sponsored fieldwork. There are two types of background clearance:...
clearances required. In general, Alaska Public Safety Information Network (APSIN), also known as an Interested Person Report (IRP), clearance is required for lecture courses that include a fieldwork component as part of the course. Courses that are primarily field-based, such as practica or internships, require fingerprinting and a national (FBI) criminal history background check. Various agencies and centers may have additional requirements. In some cases, criminal history background clearance is required for admission to a department or program.

Failure to comply with the College 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 at http://coe.uaa.alaska.edu/background.cfm.

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 College 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.

PROFESSIONAL AND CONTINUING EDUCATION (PACE)

Professional Studies Building (PSB), Room 221, (907) 786-1934
http://coe.uaa.alaska.edu/pace

Quality professional learning enriches the knowledge and skills of educators and improves the educational experiences of all students. Therefore, the Office of Professional and Continuing Education (PACE) 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.

SCHOOL-AGE CARE

Professional Studies Building (PSB), Room 220, (907) 786-4481

The Department of Teaching and Learning offers two occupational endorsement certificates: School-Age Care: Practitioner and School-Age Care: Administrator. These certificates are designed to prepare individuals with the knowledge and skills to provide quality before-and after-school care for school-age children. The certificates fulfill the municipal requirements for a child development leader designation.

Occupational Endorsement Certificate, School-Age Care: Practitioner

The School-Age Care: Practitioner Certificate provides students with the opportunity to develop dispositions, knowledge and skills necessary to provide high quality care for children in an out-of-school environment (before-and after-school programs). Out-of-school care is a growing element of the spectrum of child care and education available to today’s families. School-age care programs offer recreation, creative arts, social development and community engagement to support the healthy growth of children as they move toward adolescence. Relationships with engaged, caring, culturally sensitive and responsive adults further support optimal child development in the school-age years.

Student Outcomes

Upon completing this introductory program students will:

- Demonstrate emerging cultural competence
- Use child development knowledge to support individual children and plan programs
- Provide effective group management
- Exhibit professionalism
- Use effective communications techniques to create positive parent and community relations.

This program draws upon best practices and standards established by the National Afterschool Association and the School-Age Care Environmental Rating Scale. Students completing this certificate will find employment in programs operated by school districts, nonprofit organizations, and summer camps. Active participation in a school-age care program as a staff member or a volunteer is integrated into each of the required 12 credits. Coursework includes child development, program planning, group leadership, parent and community relations, and professional conduct.

Admission Requirements

Satisfy the UAA admissions requirements for Occupational Endorsement Certificates found in Chapter 7, Academic Standards and Regulations.

Academic Progress

A grade of C or better is required in each program course with an overall GPA of 2.00 or better.

Program Requirements

1. Satisfy the General University Requirements for Occupational Endorsement Certificates found at the beginning of this chapter.

2. Complete the following required courses:
   EDSE A212 Human Development and Learning 3
   EDSA A101 Program Management for School-Age Care 2
   EDSA A102 Positive Learning Environments in School-Age Care 2
   EDSA A202 School-Age Care Program Planning 3
   EDSA A295A Practicum for School-Age Care 2

3. A total of 12 credits is required for this certificate.

Occupational Endorsement Certificate, School-Age Care: Administrator

The School-Age Care: Administrator Certificate provides students the opportunity to acquire leadership, advocacy, program development, and community relations skills. Students who earn this certificate will find employment as site supervisors, mid-level program managers and directors.
at camps, after-school programs and other youth development programs. Required courses are enhanced by practicum experiences that reinforce skills, knowledge, and leadership qualities.

**Student Outcomes**
Upon completion, students will be able to:
- Demonstrate cultural competence with staff and community members
- Foster increasing community engagement
- Approach parents, staff and community with professionalism
- Use varied approaches to foster program development
- Enhance parent and community relations
- Employ sound administration and personnel management strategies.

**Admission Requirements**
Satisfy the UAA admissions requirements for Occupational Endorsement Certificates found in Chapter 7, Academic Standards and Regulations.

**Academic Progress**
A grade of C or better is required in each program course with an overall GPA of 2.50 or better.

**Program Requirements**
1. Satisfy the General University Requirements for Occupational Endorsement Certificates found at the beginning of this chapter.
2. Satisfy the prerequisite course requirement of EDSE A212 Human Development and Learning (or equivalent) with a grade of C or better.
3. Complete the following required courses:
   - EDEC A242: Family and Community Partnerships 3
   - EDSA A212: Program Development for School-Age Care 3
   - EDSA A234: Administration and Supervision for School-Age Care 3
   - EDSA A290: Special Topics in School-Age Care 2
   - EDSA A295B: Advanced Practicum for School-Age Care 1
4. A total of 12 credits is required for this certificate.

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**EARLY CHILDHOOD**
*Professional Studies Building (PSB), Room 220, (907) 786-4481*
*http://coe.uaa.alaska.edu/earlychildhood*

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 8 years.

Within the Early Childhood program are four options:
- Early Childhood Development Certificate
- 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 (see Chapter 11).

**Program Description and Outcomes**
The Early Childhood Development Certificate program and the Associate of Applied Science in Early Childhood Development program prepare paraeducators 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 8. 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 8 years in preschool/primary school settings. Successful completion of either the Bachelor of Arts in Early Childhood Education or the Post-Baccalaureate Certificate in Early Childhood Pre-K-Third Grade program 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.

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. 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. The students will demonstrate the following outcomes:
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 knowledge of professional practice in early childhood education practices.
7. 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 Undergraduate Certificate and 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. Students who complete the Bachelor of Arts in Early Childhood Education or the equivalent 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.

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**Undergraduate Certificate, Early Childhood Development**

**Admission Requirements**
Applicants must satisfy the Admission to Certificate and Associate Degree Programs Requirements in Chapter 7, Academic Standards and Regulations. In order to be admitted to the Early Childhood Development program, applicants must complete an application to the Early Childhood Development Certificate Program. Applications may be obtained from the Director of the Early Childhood Development program. To be admitted to the Early Childhood Development Practicum course (EDEC A295), applicants must meet all requirements for and be admitted by an advisor into the practicum course and have earned a grade of C or above in all EDEC courses.

**Academic Progress**
All candidates in the Early Childhood Development Certificate program must maintain a cumulative GPA of 2.00 or above in all EDEC courses.

**Background Check Requirements**
See Field Placements located at the beginning of the College of Education section of this chapter.

**Certificate Requirements**
1. Complete the following required courses:
   - DN A145: Child Nutrition 3
   - EDEC A105: Introduction to the Field of Early Childhood 3
   - EDEC A106: Creativity and the Arts in Early Childhood 3
Major Requirements

1. Complete the following required courses:
   - DN A145 Child Nutrition 3
   - EDEC A105 Introduction to the Field of Early Childhood 3
   - EDEC A106 Creativity and the Arts in Early Childhood 3
   - EDEC A201 Early Childhood Practitioner Roles and Responsibilities 2
   - EDEC A206 Integrated Curriculum for Young Children 3
   - EDEC A241 Infant and Toddler Development 3
   - EDEC A242 Family and Community Partnerships 3
   - EDEC A292 Early Childhood Practicum Seminar 1
   - EDEC A295 Early Childhood Practicum 3
   - EDEC A303 Young Children in Inclusive Settings 3
   - EDSE A212 Human Development and Learning (3) or
     - PSY A245 Child Development (3)
   - EDSE A212L Human Development and Learning Lab (1) or
     - PSY A245L Child Development Laboratory (1)

2. Complete 12 credits of electives. EDEC A100 Fundamentals in Early Childhood is recommended. Candidates are encouraged to discuss elective choices with an advisor.

3. A total of 61 credits is required for the degree.

Bachelor of Arts, 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 Chapter 11, Post-Baccalaureate Certificate Programs, 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(s) in early childhood settings. Admission to the program occurs in two stages (see below) and admission to the internship requires academic achievement, written and oral communication skills, and community involvement. See Field Placements located at the beginning of the College of Education section of this chapter.

Admission Requirements

Admission to the University of Alaska Anchorage: Early Childhood Major

Applicants must complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations. Application forms are available at www.uaa.alaska.edu/admissions.

Admission to the Department of Teaching and Learning, College of Education: Early Childhood Major

Admission to the Department of Teaching and Learning is a prerequisite for all upper division coursework in early childhood. In order to be admitted to the Department of Teaching and Learning, applicants must:

1. Complete the application to the Department of Teaching and Learning, Early Childhood major.
2. Complete Tier 1: Basic College-Level Skills General Education Requirements (transfer credits may be used).
3. Complete a minimum of 9 lower division credits from the Early Childhood Major Requirements with a grade of C or higher.

Background Check Requirements

See Field Placements located at the beginning of the College of Education section of this chapter.
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Undergraduate Programs, College of Education

4. Have a cumulative GPA of 2.75.
5. Successfully complete the Praxis I: Pre-Professional Skills Test (PPST). Contact the Department of Teaching and Learning for current passing scores.

Note: Admission to the Department of Teaching and Learning is competitive. Qualified applicants are accepted on a space-available basis. Admission to the university as an Early Childhood major does not guarantee admission to the department.

Admission to Early Childhood Internship
1. Meet all the requirements for and be admitted to the Department of Teaching and Learning as an Early Childhood major.
2. Submit an application form for admission to internship. Contact the Office of Clinical Services and Certification for appropriate deadlines.
3. Submit one letter of recommendation from someone who can speak to the applicant’s potential as a future early childhood educator.
4. Demonstrate general content knowledge competency through successful completion of 70 percent of required coursework with a 2.75 GPA and a passing score on Praxis II: Elementary Education: Content Knowledge (0014) or Elementary Education: Curriculum, Instruction and Assessment (0011).
5. Submit a resume that provides evidence of working with children.
6. Interview for placement.
7. Initiate fingerprinting and criminal background check process.
8. Provide evidence of a current physical examination. This service is available free at the UAA Student Health Center.
9. Maintain student health insurance throughout internship. Candidates may purchase this insurance through UAA.

Note: Qualified applicants are accepted on a space-available basis. Admission to the Department of Teaching and Learning does not guarantee admission to the internship.

Academic Progress
Internship(s) must be completed successfully and all Early Childhood Major Requirements, the Alaska Studies requirement, MATH A205, and Foundation Requirements in Child Development and Social Relationships and Inclusive Environments must be completed with a grade of C or higher in order to obtain an institutional recommendation for teacher certification.

Graduation Requirements
Candidates must complete the following requirements:

A. General University Requirements
   Complete the General University Requirements for All Baccalaureate Degrees listed at the beginning of this chapter.

B. General Education Requirements
   Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

C. Background Check Requirements
   See Field Placements located at the beginning of the College of Education section of this chapter.

D. 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.

<table>
<thead>
<tr>
<th>Child Development (6 credits)</th>
<th></th>
<th>Social Relationships and Inclusive Environments (11–12 credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DN A145 Child Nutrition</td>
<td>3</td>
<td>EDEC A242 Family and Community Partnerships 3</td>
</tr>
<tr>
<td>EDSE A212 Human Development and Learning (3) 3</td>
<td></td>
<td>EDEC A303 Young Children in Inclusive Settings 3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td>Select two courses from the following:</td>
</tr>
<tr>
<td>PSY A245 Child Development (3)</td>
<td></td>
<td>CEL A292 Introduction to Civic Engagement (3)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EDEL A327 Teaching Social Studies in Elementary Schools (2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EDSE A474 Special Children from Birth through Five (3)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EDSE A482 Inclusive Classrooms for All Children (3)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SWK A342 Human Behavior in the Social Environment (3)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SWK A409 Introduction to Child Welfare (3)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liberal Studies Humanities and Social Sciences Core* (18 credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Students must meet General Education Requirements (GER) for Baccalaureate Degrees including 6 credits of social science (SS), from two different disciplines, and 6 credits of humanities (HUM).</td>
</tr>
</tbody>
</table>

   Complete the following courses:

   Select one course from GER fine arts list (3 credits)
   - EDEC A105 Introduction to the Field of Early Childhood (SS GER) 3
   - LSSS A111 Cultural Foundations of Human Behavior (SS GER) (3) 3
   - or
   - SWK A243 Cultural Diversity and Community Service Learning (SS GER) (3)
   - HIST A132 History of United States II (HUM GER) 3

   Select one Alaska Studies course from the following:
   - ANTH A200 Natives of Alaska (SS GER) (3)
   - EDEN A478 Issues in Alaska Native Education, K-12 (3)
   - HIST A341 History of Alaska (HUM GER) (3)

   Select one course from the following:
   - ANTH A250 The Rise of Civilization (SS GER) (3)
   - GEOG/ INTL A101 Local Places/Global Regions: Introduction to Geography (SS GER) (3)
   - HIST A131 History of United States I (HUM GER) (3)
   - HNRS A292 Honors Seminar in Social Science (SS GER) (3)
   - LSIC A331 Power, Authority, and Governance (3)
   - PS A101 Introduction to American Government (SS GER) (3)
   - PS A102 Introduction to Political Science (SS GER) (3)

<table>
<thead>
<tr>
<th>Liberal Studies Integrated Sciences Core (10 credits)</th>
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</thead>
<tbody>
<tr>
<td>LSIS A102 Origins: Earth-Solar System-Life (NS GER) 5</td>
</tr>
<tr>
<td>LSIS A201 Life on Earth (NS GER) 5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mathematical Skills (6-7 credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one course from GER quantitative skills list 3-4</td>
</tr>
<tr>
<td>MATH A205 Communicating Mathematical Ideas 3</td>
</tr>
</tbody>
</table>
E. Major Requirements

1. Complete the following core courses (29 credits). Field experience in early childhood programs may be required as part of the courses.
   - 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 A407: Observation and Documentation in Early Childhood (2)
   - EDEC A408: Children’s Literature: Early Childhood (4)
   - EDFN A300: Philosophical and Social Context of American Education (GER Capstone) (3)
   - EDFN A304: Comparative Education (GER Capstone) (3)
   - EDFN A301: Foundations of Literacy and Language Development (3)
   - EDFN A302: Foundations of Educational Technology (2)
   - PEP A345: Incorporating Health and Physical Activity into the Pre-K-6 Classroom (2)

2. Complete the following methodology requirements (6 credits):
   - EDEC A403: Mathematics and Science in Early Childhood (3)
   - EDEC A404: Literacy for Young Children (3)

3. Complete the following internship and seminar requirements (14 credits):
   - EDEC A492: Early Childhood Seminar (1+1) (2)
   - EDEC A495: Early Childhood Internship (3+9) (12*)
   - *Special note: Completion of 12 credits required for degree and certification.

4. Complete an additional 12 credits of electives.

5. A total of 121-123 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 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:

1. Major Requirements completed with a grade of C or higher.
2. Alaska Studies requirement, MATH A205, and Foundation Requirements in Child Development and Social Relationships and Inclusive Environments completed with a grade of C or higher.
3. Cumulative GPA of 2.75.
4. Cumulative GPA of 2.75 in all Major Requirements.
5. Passing scores on the Praxis I (PPST) and Praxis II (0011 or 0014) exams.
6. Internships satisfactorily completed.
7. Bachelor of Arts in Early Childhood Education degree conferred.
2. Complete the Tier I Basic College-Level Skills General Education Requirements.
3. Have a cumulative GPA of 2.75.
4. Have a GPA of 3.00 in Major Requirements.
5. Successfully complete the Praxis I: Pre-Professional Skills Test (PPST). Contact the Department of Teaching and Learning for current passing scores.
6. Successfully complete the following courses with a grade of C or higher: EDEL A205 Becoming an Elementary Teacher and EDSE A212 Human Development and Learning or PSY A245 Child Development.
7. Submit Interested Person Report.

Note: Admission to the Department of Teaching and Learning is competitive. Qualified applicants are accepted on a space-available basis. Admission to the university as an Elementary Education major does not guarantee admission to the department.

### Admission to Field Experiences
Admission to field experiences is separate from admission to the program and may be limited by community partners. See Field Placements located at the beginning of the College of Education section of this chapter.
Applications for practica and internship courses must be submitted by February 15 or October 15. Qualified applicants are accepted on a space-available basis. Admission to the Department of Teaching and Learning does not guarantee admission to the field experiences.

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.

### Elementary Practicum I Admission Criteria
Practicum I includes blocked courses in literacy and social studies methodology, a seminar in culturally responsive teaching, and a supervised experience in an elementary classroom with a diverse student population.
1. Meet all the requirements for and be admitted to the Department of Teaching and Learning as an Elementary Education major.
2. Submit an application form for Practicum I by the department's published deadline.
3. Complete EDFN A301 with a minimum grade of C.
4. Have a cumulative GPA of 2.75.
5. Have a GPA of 3.00 in Major Requirements.

### Elementary Practicum II Admission Criteria
Practicum II includes blocked courses in mathematics and science methodology, a seminar in designing learning environments, and a supervised experience in an elementary classroom.
1. Meet all requirements for Practicum I.
2. Submit an application form for Practicum II, including a resume and letter of introduction, by the department’s published deadline.
3. Complete EDFN A300 or EDFN A304, EDFN A302, and EDFN A392 with a minimum grade of C and EDEL A395 with a P.
4. Participate in a screening interview.
5. Apply for the Student Teaching Authorization Certificate. This application includes fingerprinting and a criminal background check. Contact COE Clinical Services and Certification for more information.
6. Provide evidence of current physical examination. This service is available free at the UAA Student Health Center.
7. Maintain student health insurance throughout Practicum II. Candidates may purchase this insurance through UAA.

### Elementary Internship Admission Criteria
The Elementary Internship includes a capstone seminar and extensive, supervised teaching experiences in an elementary classroom. Emphasis will be placed on meeting the Alaska Beginning Teacher Standards.
1. Meet all the requirements for and be admitted to the Department of Teaching and Learning as an Elementary Education major.
2. Submit an application form for internship by the department’s published deadline.
3. Complete all degree courses with the exceptions of EDEL A492B and EDEL A495B.
4. Successfully complete the Praxis II: Elementary Content Knowledge (0014). Contact the Department of Teaching and Learning for current passing score.
5. Have a cumulative GPA of 2.75.
6. Have a GPA of 3.00 in Major Requirements.
7. Submit a current Student Teaching Authorization Certificate.

### Academic Progress
Satisfactory progress in the practicum courses (EDEL A395 and EDEL A495A) is required for enrollment in the internship (EDEL A495B). All Major Requirements, EDSE A212/PSY A245, and MATH A205 must be completed with a grade of C or higher in order to obtain an institutional recommendation for elementary teacher certification.

### Graduation Requirements
Candidates must complete the following graduation requirements:

#### A. General University Requirements
Complete the General University Requirements for All Baccalaureate Degrees listed at the beginning of this chapter.

#### B. General Education Requirements
Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

#### C. Background Check Requirements
See Field Placements located at the beginning of the College of Education section of this chapter.

#### D. Liberal Studies Area
Complete the liberal studies area. These courses are selected to provide future elementary teachers 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 liberal studies courses may also be used to meet General Education Requirements (GERs).

**Liberal Studies Integrated Sciences Core (15 credits)**
- LSIS A201 Life on Earth 5
- LSIS A202 Concepts and Processes: Natural Sciences 5

**Liberal Studies Integrative Core (9 credits)**
- LSIC/PHIL A231 Truth, Beauty, and Goodness 3
- LSIC A331 Power, Authority, and Governance 3
- LSIC A332 Science, Technology, and Culture 3

**Liberal Studies Social Sciences (SS) and Humanities (HUM) Core (27 credits)**
Students must meet GERs for Baccalaureate Degrees including 6 credits of social sciences (SS) from two different disciplines and 6 credits of humanities (HUM).
- ANTH A250 The Rise of Civilization (SS GER) 3
- HIST A131 History of United States I (HUM GER) (3) or
- HIST A132 History of United States II (HUM GER) (3) or
- HIST A355 Major Themes in US History (3)
E. Major Requirements

It is recommended that students complete EDFN A101 Introduction to Education prior to enrolling in the following major courses. Field experiences in public schools are required as part of most courses.

1. Complete the following core courses (20 credits)
   - EDEC A242 Family and Community Partnerships 3
   - EDEL A205 Becoming an Elementary Teacher 2
   - EDFN A206 Introduction to Assessment in Education 1
   - EDFN A300 Philosophical and Social Context of American Education (3) 3
   - EDFN A304 Comparative Education (3)
   - EDFN A301 Foundations of Literacy and Language Development 3
   - EDFN A302 Foundations of Educational Technology 2
   - EDFN A478 Issues in Alaska Native Education, K-12 3
   - EDSE A482 Inclusive Classrooms for All Children 3

2. Complete the following method courses (18 credits)**
   - EDEC A106 Creativity and the Arts in Early Childhood Education 3
   - EDEL A325 Teaching Literacy in Elementary Schools 6
   - EDEL A327 Teaching Social Studies in Elementary Schools 2
   - EDEL A426 Teaching Mathematics in Elementary Schools 3
   - EDEL A428 Teaching Science in Elementary Schools 2
   - PEP A345 Incorporating Health and Physical Activity into the Pre-K-6 Classroom 2

   **Concurrent enrollment in a seminar and a practicum or internship may be required.

3. Complete the following internships (21 credits)
   - EDEL A392 Elementary Education Seminar I: Culturally Responsive Teaching 2
   - EDEL A395 Elementary Education Practicum I: Diversity, Literacy, Social Studies 2
   - EDEL A492A Elementary Education Seminar II: Learning Environment 2
   - EDEL A492B Elementary Education Seminar III: Teaching Capstone 3
   - EDEL A495A Internship I 3
   - EDEL A495B Elementary Education Internship 9

4. A total of 128-132 credits is required for the degree, of which 42 credits must be upper division.

Institutional Recommendation, Elementary Teacher Certification (K-6)

Following are the requirements for an institutional recommendation:

1. Major requirements completed with a grade of C or higher.
2. Cumulative GPA of 2.75.
3. Cumulative GPA of 3.00 in all Major Requirements, EDSE A212/PSY A245, and MATH A205.
4. Passing scores on the Praxis I (PPST) and Praxis II (0014) exams.
5. Internship satisfactorily completed.
6. BA in Elementary Education degree conferred.

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COLLEGE OF HEALTH AND SOCIAL WELFARE

The College of Health and Social Welfare comprises the Department of Health Sciences, the Department of Human Services, the Justice Center, the School of Nursing and the School of Social Work. The Gerontology minor is also housed in the college. The college offers a variety of certificates, 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, the Center for Human Development, the Alaska Area Health Education Center, the Justice Center, the Institute for Circumpolar Health Studies 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

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 a baccalaureate Civic Engagement Certificate, 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.

Undergraduate Certificate, Civic Engagement

The Certificate in Civic Engagement prepares undergraduates and people with bachelor's degrees to become active, effective, ethical citizens in their professional and personal lives. Students from any major degree program develop the reflective, analytic, and practical skills to link curricular and co-curricular learning to civic engagement outside the academy through service-learning classes, internships, and community-engaged scholarship and creative activity. The certificate is intended for motivated students committed to action for the greater good.

Civic, personal, and academic growth are equally important in this program. Civic and personal growth are best accomplished through experiential education in the community together with critical reflection. Community-based service-learning is defined as a course or competency-based, credit-bearing educational experience in which students:

1. Participate in an organized service activity that meets identified community needs;
2. Gain an enhanced sense of civic responsibility; and
3. Reflect on the service activity in such a way as to gain further understanding of course content and a broader appreciation of the discipline.

Critical reflection entails describing activities, examining them in light of specific learning objectives, and articulating lessons and action plans from them. Reflection is widely recognized as a key means of linking scholarly ideas with the empirical world in everyday life.

Certificate Learning Outcomes & Competencies

Students who earn the Certificate in Civic Engagement will gain competencies in three domains: academic, personal, and civic.

Academically, students will achieve the outcomes of their majors and will be able to:

- Relate service and professional ethics to civic engagement frameworks;
- Identify and analyze social, cultural, economic, environmental, technical, and political aspects of public problems;
- Translate theoretical perspectives and frameworks of their disciplinary majors into actions solving concrete public problems affecting Alaskan, U.S. and international communities, with substantive emphases on ethics, community building or public policy, human and civil rights or sustainability; and
- Apply critical thinking skills and empirical evidence to make judgments regarding public problems outside the classroom.

Personally, students will be able to:

- Develop moral dispositions of judgment, civic participation and public commitments related to their personal values;
- Enter unfamiliar situations with confidence and participate effectively;
- Identify the disciplinary, societal, and cultural values that shape their own and others' commitments to human and civil rights and sustainability; and
- Assume responsibility for enacting public uses of their education and civic engagement in their anticipated vocational and personal trajectories.

Civically, students will be able to:

- Utilize communication and problem-solving skills in addressing public problems at multiple levels;
- Evaluate the places, interests and competing demands of others in the community and consider ethical implications to resolving them;
- Demonstrate commitment to resolving public problems beyond their college careers and to fostering others' involvement;
- Transform civic imaginations to enhance abilities of individuals, groups, and communities to embrace a vision for the future; and
- Assume leadership roles in groups and organizations capable of taking action on matters of common concern.

Admission Requirements

A student must satisfy the Admission to Certificate Requirements in Chapter 7, Academic Standards and Regulations.

A student must be enrolled in a major or pre-major baccalaureate degree program or have completed a baccalaureate degree.

A student must submit a plan of study demonstrating integration of the certificate with her/his major course of study, formulated in conjunction with certificate and departmental advisors. Regular advising is a crucial component of the certificate program. Although the CEL Curriculum Committee approves courses as meeting certificate criteria, the certificate faculty advisor approves courses with and for individual students.

Graduation Requirements

1. Meet all General University Requirements for undergraduate certificates.
2. Concurrent completion of a baccalaureate degree program or completed baccalaureate degree.
3. Submission of a final Program of Study, which indicates all approved classes, to the certificate faculty advisor, the director of the Center for
Community Engagement and Learning, and the dean of the College of Health & Social Welfare. The program of study must be forwarded to Degree Services at least two semesters prior to graduation.

4. Completion of the following according to the student's individual Program Plan:

Certificate core courses:
- CEL A292 Introduction to Civic Engagement 3
- CEL A395 Civic Engagement Internship* (3-9) 9
- CEL A450 Civic Engagement Capstone* 3

*Special note: Students in the Certificate for Civic Engagement may substitute a major-departmental internship and/or capstone course if specified civic engagement instructional goals are achieved, the minimum number of hours are realized, and the certificate faculty advisor approves.

Area concentration courses, approved for certificate by CEL Curriculum Committee, approved for student by certificate faculty advisor:
- Course with human and civil rights or environmental sustainability as a substantive focus. A course that has a community-based learning component is required. 3
- Course with community-building or public policy as a substantive focus. A course that has a community-based learning component is required. 3
- Course with ethics as a substantive focus. Course must have a community-based learning component. 3

Electives (must have community-based learning component), approved for certificate by CEL Curriculum Committee, approved for student by certificate faculty advisor:
- 1 lower division course (100-299) 3
- 1 upper division course (300-499) 3

5. A total of 30 credits is required for the certificate.


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CENTER FOR HUMAN DEVELOPMENT
2702 Gambell Street, Suite 103, Anchorage, AK 99503, (907) 272-8270 or (800) 243-2199
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Occupational Endorsement Certificate, Children's Behavioral Health

The Occupational Endorsement Certificate, Children's Behavioral Health is a 16-credit occupational endorsement for paraprofessionals currently working or planning to work with children and youth in therapeutic residential settings. By completing the endorsement certificate requirements, students gain skills essential to become effective members of therapeutic treatment teams.

Student Outcomes:
Students who successfully complete this program will be able to:
- Blend concepts and skills to develop trauma-informed practices in children's behavioral health services.

Admission Requirements
Complete the Admission to Occupational Endorsement Certificates requirements in Chapter 7, Academic Standards & Regulations.

Academic Progress Requirements:
In order to earn the occupational endorsement, all courses must be completed with a grade of C or better. Students who audit a course in Disability & Long Term Supports or who are unable to earn a grade of a C or better in the course may repeat it following the procedures outlined in Chapter 7, Academic Standards & Regulations.

Certificate Requirements
Complete 16 credits in the following courses:
- DLS A101 Introduction to Children's Behavioral Health 3
- DLS A201 Skill Basics in Children's Behavioral Health 3
- DLS A205 Teaching Social Skills to Youth in Children's Behavioral Health 4
- DLS A206 Positive Behavioral Supports in Children's Behavioral Health 3
- DLS A385 Working with Traumatized Children 3

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GERONTOLOGY
Social Sciences Building (SSB), Room 374, (907) 786-1955
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Gerontology is the study of the aging process as individuals mature from middle age through later life. It includes the study of physical, mental, emotional, and social changes in older people as they age. Gerontology investigates changes in society that result from an aging population and applies this knowledge to policies and programs. This field is multidisciplinary and the study of aging combines and/or integrates information from academic and applied areas of study.

The field of gerontology is diverse and offers many different employment opportunities. Jobs may be found in:
- Community, human service, and religious organizations
- Health care and long-term care institutions
- Federal, state, and local government agencies
- Retirement communities
- Academic and other educational and research settings
- Professional organizations
- Business organizations

The minor is comprised of a selection of courses that specifically relate to issues concerning the aging process. Because of its multidisciplinary emphasis, there is no one preferred student major background necessary for working towards a minor. Please also read the policy section regarding Minors at the beginning of this chapter.

Minor, Gerontology

The undergraduate Minor in Gerontology is comprised of a selection of courses that specifically relate to issues concerning the aging process. A total of 18 credit hours is required for the minor.

1. Complete required minor core courses:
   - SOC A110 Introduction to Gerontology: Multidisciplinary Approach 3
   - SOC A310 Sociology of Aging 3
   - PSY A450 Adult Development and Aging 3
Physician assistants practice in primary care medicine - family medicine, health care, assist in surgery, and can write prescriptions in most states. and treat illnesses, order and interpret tests, counsel on preventive

Physician

year of clinical and family practice clerkships.

year of clinical and didactic instruction at approved training sites, and a

Medex curriculum requirements. The Medex curriculum includes one

The UAA BSHS degree program consists of a minimum of two years

The Physician Assistant Track provides a BS degree for students who

Health Sciences

Bachelor of Science, Health Sciences

The Bachelor of Science in Health Sciences degree (BSHS) offers the Physician Assistant Track; and two tracks for Allied Health professionals: the Pre-Professional Track, and the Allied Health Education Track. The Physician Assistant Track provides a BS degree for students who have completed a physician assistant program. The Pre-Professional Track provides education for Allied Health professionals preparing for graduate or professional health career educational programs. The Allied Health Education Track provides education for Allied Health professionals wishing to teach in Allied Health education programs.

Physician Assistant Track

The Physician Assistant Track provides a BS degree for students who have completed the required education and clinical experience to work as a physician assistant.

The UAA BSHS degree program consists of a minimum of two years of pre-major coursework and health care experience in addition to the Medex curriculum requirements. The Medex curriculum includes one year of clinical and didactic instruction at approved training sites, and a year of clinical and family practice clerkships.

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 can write prescriptions in most states. Physician assistants 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, physician assistants exercise autonomy 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 LPN, RN, paramedic, corpsman, and community health practitioners.

Program Outcomes

Graduates of the BSHS Physician Assistant Track will:

• 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.

Physician Assistant Students Enrolled at MEDEX

Completion of the BSHS degree requires a year of intense didactic instruction that will be taught in Alaska through the University of Washington (UW) MEDEX program starting in 2009. 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 degree, with a 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 summer year clerkship to meet the UAA degree requirements. Students must complete both their junior year courses and their senior year clerkship courses at UAA to receive the certificate from UW and their BSHS from UAA.

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 under-served 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 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 University of Washington School of Medicine grants a Physician Assistant Certificate upon successful completion of the MEDEX PA program. Upon successful completion of degree requirements (see below), the University of Alaska Anchorage awards a Bachelor of Science in Health Sciences.

For more information about the MEDEX Northwest Physician Assistant Program go to www.washington.edu/medicine/som/depts/medex.
Practicing PAs of other programs may contact the BSHS Department to obtain details about entering this degree pathway.

BSHS Physician Assistant Track Admission Requirements

Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations. 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 Note below, under Full Admission). Students should meet with an advisor in the Health Sciences Department to discuss what type of work experience will meet this admission requirement.

For more information about the MEDEX Northwest Physician Assistant Program admission requirements visit 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.

Note: Students seeking admission to the MEDEX program must complete the following UAA BSHS pre-major courses: ENGL A111, ENGL A212, BIOL A111/L, BIOL A112/L and CHEM A103/L or BIOL A102 or BIOL A240. PSY A111 or PSY A150 is also highly recommended. (The MEDEX program requires a minimum grade of B- in each course applied toward the UW admission requirements.)

Academic Progress

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 degree program. MEDEX students who do not successfully complete or are dismissed from the MEDEX program may be removed from the BSHS program.

Certified Physician Assistant’s Degree Completion Admission Requirements

Students who have graduated from the UW MEDEX program or another accredited PA program, and hold current NCCPA certification may be admitted to the UAA BSHS degree program to complete their degrees. They must meet the Baccalaureate Degree Programs Admission Requirements in Chapter 7 of this catalog 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 may be awarded credits for the certificate and apply those credits toward the BSHS. Contact the Health Sciences Department for details.

BSHS Physician Assistant Track Graduation Requirements

Students must complete the following requirements:

A. General University Requirements

All students, with the exception of the following, must complete all General University Requirements for All Baccalaureate Degrees at the beginning of this chapter.

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.

B. General Education Requirements

Complete the General Education Requirements for Baccalaureate Degrees at the beginning of this chapter.

C. Major Requirements

1. Complete the following course:
   HS A491 Health Issues in Alaska 3

2. 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

3. A total of 120 credits is required for the degree, of which 42 must be upper division.

FACULTY

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HUMAN SERVICES

Professional Studies Building (PSB), Room 212, (907) 786-6437
http://hums.uaa.alaska.edu

The Department of Human Services offers both an Associate of Applied Science degree in Human Services, which prepares students for entry-level employment, and a Bachelor of Human Services practitioner’s degree, which holds as its mission preparing human service generalists through competency-based, community-oriented programs encompassing classroom and practical learning opportunities. 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 a conceptual and skill foundation suitable for successful human service practice in both urban and rural settings. Human service practice requires multicultural understanding and respect of clients through a collaborative relationship founded upon a developmental model. Specific skill courses combined with practica are strengthened through conceptual coursework in Human Services, Social Work, Sociology and Psychology. The program also offers specialized areas in substance abuse, disabilities, diversity issues, general human services, and family and youth. These are coordinated with practicum placements to give students firsthand experience in their desired specialty.

An important part of the Human Services program is advising. Prospective students should contact a Human Services advisor before entering the program. Students are assigned an academic advisor when they declare the Human Services major. Entrance into the Human Services practicum requires admission to the degree, successful completion of specified courses and recommendation by the academic advisor. Call the Human Services Department at 786-6437 for an appointment with an advisor.
Both the Human Services AAS and BHS are accredited by the Council for Standards in Human Services Education.

**Occupational Endorsement Certificate, Conflict Resolution**

The Human Services 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.

**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.

**Admission Requirements**

Satisfy the admission requirements for Occupational Endorsements found in Chapter 7, Academic Standards and Regulations.

**Certificate Requirements**

1. Complete the General University Requirements for Occupational Endorsement Certificates found at the beginning of this chapter.

2. Complete the following required courses:

   - 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 A434 Group Facilitation for Human Service Professionals 3

3. A total of 18 credits is required for the occupational endorsement certificate.

**Associate of Applied Science, Human Services**

Graduates of this program are able to:

- Analyze and navigate community-based human services agencies and service delivery systems and secure a variety of community resources.
- Utilize a strengths-based approach to working with people and their problems in living.
- Effectively use intervention and core paraprofessional counseling skills.
- Apply their acquired human services skills in a service agency, to include assessment, interviewing, treatment planning, service delivery, and paraprofessional counseling.
- Demonstrate consolidation of knowledge through three areas of learning including:
  - Understanding of an agency, its target population and services delivered, and interaction with their community partners.
  - Development of their professional selves and identities with appropriate use of supervision.
  - Application of client/community intervention skills.
- Qualify for employment in the human services workforce.
- Build on their human services degrees as a foundation for further education.

**Admission Requirements**

Satisfy the Admission Requirements for Certificate and Associate Degree programs found in Chapter 7, Academic Standards and Regulations.

**General University Requirements**

1. Complete the General University Requirements for Associate of Applied Science Degrees found at the beginning of this chapter.

2. Complete the General Course Requirements for Associate of Applied Science General Degrees located at the beginning of this chapter.

**Major Requirements**

1. Complete the following required courses:

   - ANTH A200 Natives of Alaska (3)
   - ANTH A202 Cultural Anthropology (3)
   - HUMS A101 Introduction to Human Services (3)
   - HUMS/ SWK A106 Introduction to Social Welfare (3)
   - HUMS A223 Introduction to Paraprofessional Counseling I (3)
   - HUMS A295A Human Services Practicum I (3)
   - HUMS A295B Human Services Practicum II (3)
   - HUMS A324 Introduction to Paraprofessional Counseling II (3)
   - PSY A111 General Psychology (3)
   - PSY A150 Lifespan Development (3)

2. Complete 6 credits from one of the emphasis areas: 6

   **Note: Each Human Service degree (Associate of Applied Science and Bachelor of Human Services) requires a 6-credit emphasis area. BHS students may complete 6 credits from a different emphasis area or an additional 6 credits from the emphasis area used for the AAS.**

**General Human Services Emphasis**

Complete 6 credits from the following: 6

   - HUMS/ PSY A153 Human Relations (3)
   - HUMS A256 Groups and Organizations (3)
   - HUMS A350 Men and Masculinity (3)
   - PSY A245 Child Development (3)
   - PSY A261 Research Methods in Psychology (4)
   - PSY A345 Abnormal Psychology (3)
   - SOC A202 Social Institutions (3)
   - SOC A242 An Introduction to Marriage, Family and Intimate Relationships (3)
   - SOC A246 Adolescence (3)
   - SOC/PSY A453 Application of Statistics to the Social Sciences (3)

**Substance Abuse Emphasis**

Complete 6 credits from the following: 6

   - HUMS A122 Substance Abuse as a Contemporary Problem (3)
   - HUMS A123 Public Education and Prevention in Substance Abuse (3)
   - HUMS A124 Introduction to Physiology and Pharmacology of Substance Abuse (3)
   - HUMS A226 Intervention Continuum in Substance Abuse Counseling (3)
   - HUMS A416 Substance Abuse and the Older Adult (3)
   - SWK A471 Addictions and Social Work (3)

**Family and Youth Emphasis**

Complete 6 credits from the following: 6

   - HUMS A350 Men and Masculinity (3)
   - HUMS A416 Substance Abuse and the Older Adult (3)
   - PSY A245 Child Development (3)
   - SOC A242 An Introduction to Marriage, Family and Intimate Relationships (3)
   - SOC A246 Adolescence (3)

**Disabilities Emphasis**

Complete 6 credits from the following: 6
Graduation Requirements

Complete the General Education Requirements for Baccalaureate Degree programs in Chapter 7 of this catalog. Students must complete an Associate of Applied Science, Human Services degree from an accredited institution recognized by UAA. See the Human Services website at www.uaa.alaska.edu or the Human Services Student Handbook for the Bachelor of Human Services admission process.

Baccelor of Human Services

Admission Requirements

Complete the General University Requirements for All Baccalaureate Degrees listed at the beginning of this chapter.

Graduation Requirements

Students must complete the following graduation requirements:

A. General University Requirements

Complete the General University Requirements for All Baccalaureate Degrees listed at the beginning of this chapter.

B. General Education Requirements

Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

C. Major Requirements

1. Complete the following Bachelor of Human Services core requirements:*  
   HUMS A321 Diversity Issues in Human Services Practice 3  
   HUMS A322 Service Coordination in Human Services Practice 3  
   HUMS A333 Alternative Dispute Resolution 3  
   HUMS A412 Ethical Issues in Human Services Practice 3  
   HUMS A414 Rural Treatment Strategies for Human Service Professionals 3  
   HUMS A417 Substance Abuse Counseling for Human Service Professionals 3  
   HUMS A424 Advanced Counseling for Human Service Professionals 3  
   HUMS A434 Group Facilitation for Human Service Professionals 3  
   HUMS A461 Crisis Intervention 3  
   HUMS A495A Human Services Practicum III 3  
   HUMS A495B Human Services Practicum IV 3

   * Note: Cannot be used in emphasis areas.

2. Complete an additional 6 credits (to total 12 credits) from the AAS Major Requirements Emphasis Areas.  

3. A total of 120 credits is required for the degree.

Minor, Addiction Studies

The Addiction Studies Minor, coordinated by the Human Services Department, provides students with the opportunity to gain knowledge about the process and effects of addictive behaviors, and their treatment. By providing students with contemporary information, and an opportunity to select from an array of courses that meet their professional interests and goals, the minor prepares students for entry-level positions in treatment programs, substance abuse agencies, or for graduate study in this or related areas. The minor also enhances the capabilities of students in human service fields, such as human services, social work, nursing, justice, and psychology, to acquire knowledge about substance abuse, a major factor in many human dilemmas. Coursework may also apply toward certification from the state of Alaska as a substance abuse counselor. Please note that additional coursework and practicum hours may be required for this certification.

The Addiction Studies minor requires a total of 18 credits, of which a minimum of 9 must be upper division.

1. Complete 6 credits from the following courses:  
   HUMS A122 Substance Abuse as a Contemporary Problem (3)  
   HUMS A226 Intervention Continuum in Substance Abuse Counseling (3)

2. Complete 12 credits from the following:  
   HS A480 Contemporary Issues in Addiction Studies (1-3)  
   HUMS A123 Public Education and Prevention in Substance Abuse (3)  
   HUMS A124 Introduction to Physiology and Pharmacology of Substance Abuse (3)  
   HUMS A416 Substance Abuse and the Older Adult (3)  
   HUMS A417 Substance Abuse Counseling for Human Services Professionals (3)  
   JUST A110 Introduction to Justice (3)  
   NS A428 Nursing the Chemically Dependent Client (3)  
   SWK A471 Addictions and Social Work (3)

FACULTY

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JUSTICE

Consortium Library (LIB), Room 213, (907) 786-1810  
http://justice.uaa.alaska.edu

The Justice Center has statewide responsibility for higher education and research related to the areas of crime, law, and the administration of justice. The center offers a baccalaureate degree program for students interested in the justice area. In addition, a Paralegal Studies Certificate is available for qualified students who wish to pursue a paralegal career.

Justice faculty have professional research and service obligations beyond classroom teaching. The center is an organized research unit which, at its own initiative or in response to requests from outside the university, conducts research and public education programs. Efforts are made to ensure that all undergraduate students who major in Justice have opportunities to work with faculty members on Justice Center research and service projects.
Justice Research Honors

The Justice Center recognizes those undergraduate students who develop exceptional social science research skills by awarding them Justice Research Honors. Students majoring in Justice are eligible to graduate with Justice Research Honors upon satisfactory completion of all of the following requirements:

1. Meet the requirements for a BA degree in Justice.
2. Meet the requirements for membership in the national justice honor society, Alpha Phi Sigma (including, 3.20 GPA in UAA Justice courses, 3.00 overall).
3. Complete the following courses with a grade of B or better:
   - JUST A400  Advanced Research Methods
   - JUST A401  Inferential Data Analysis in Justice
   - JUST A488  Research Practicum
4. Students intending to graduate with Justice Research Honors must notify the Justice Center undergraduate program coordinator, in writing, on or before the date they file their Application for Graduation with the Office of the Registrar.

Bachelor of Arts, Justice

The Bachelor of Arts degree in Justice satisfies the educational prerequisites for a variety of administrative, operational, research, and planning positions related to crime, law and the administration of justice. Those graduates with records of high achievement in the Justice undergraduate program are prepared to pursue advanced education in graduate and professional degree programs at the University of Alaska Anchorage and other universities.

Graduates who receive a Bachelor of Arts degree in Justice have both broad educational preparation for productive citizenship and the specialized knowledge and skills required for the evaluation, administration and improvement of police, court, and correctional policies and organizations.

Admission Requirements

Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.

Graduation Requirements

Students must complete the following graduation requirements:

A. General University Requirements

Complete the General University Requirements for All Baccalaureate Degrees listed at the beginning of this chapter.

B. General Education Requirements

Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

C. Major Requirements

1. Complete the following required courses:
   - JUST A110  Introduction to Justice 3
   - JUST A200  Introduction to Research Methods 3
   - JUST A201  Justice Data Analysis 3
   - JUST A221  Justice Organization and Management 3
   - JUST A250  Development of Law 3
   - JUST/SOC A251  Crime and Delinquency 3
   - JUST A330  Justice and Society 3
   - JUST A360  Justice Processes 3
   - *Upper division Justice electives 15
   - *Justice electives, any level 6

   *Paralegal Studies courses can be counted as Justice electives. Only 6 credits of JUST A490 may be counted toward the Justice electives required for the minor in Justice.

2. Complete a university-approved minor in another discipline. Specific requirements for minors are listed in the catalog by school or department. 18-21

3. All Justice majors must take the Justice Exit Examination. There is no minimum score required for graduation.

4. A total of 120 credits is required for the degree of which 42 credits must be upper division.

Minor, Justice

Students majoring in another subject who wish to minor in Justice must complete the following requirements. A total of 18 credits is required for the minor, 9 of which must be upper division.

- JUST A110  Introduction to Justice 3
- JUST/SOC A251  Crime and Delinquency 3
- *Upper division Justice electives 9
- *Justice electives, any level 3

*Paralegal Studies courses can be counted as Justice electives. Only 6 credits of JUST A490 may be counted toward the Justice electives required for the minor in Justice.

FACULTY

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PARALEGAL STUDIES

Consortium Library (LIB), Room 213, (907) 786-1810
http://justice.uaa.alaska.edu

Undergraduate Certificate, Paralegal Studies

The Paralegal Studies Certificate Program is approved by the American Bar Association.

Program Goals

1. Broad-based knowledge achieved through general college education.
2. Exceptionally strong competency in critical thinking and in written and oral communication skills.
3. Comprehensive understanding of ethical responsibilities as assistants to attorneys, governed by the rules of professional responsibility.
4. Legal vocabulary and understanding of procedure required to perform paralegal duties in a civil practice.
5. Operational knowledge of the interviewing and investigatory techniques required for paralegal performance.
6. Command of skills required for both law library and computerized legal research, and for memoranda of legal analysis.
7. Knowledge of the variety of legal specialties performed by paralegals.
8. Practical experience in a law office or agency that allows students to apply classroom skills.

Admission Requirements

Students must have completed a total of 6 credits in ENGL A111 (or equivalent), ENGL A211, ENGL A212, ENGL A213, ENGL A311, ENGL A312, or ENGL A414 with a minimum grade of B in each class. Students must have a 2.00 overall GPA to be admitted to the Paralegal Studies Certificate program. Students must apply and be admitted to the program at the Anchorage campus before completing 12 credits of the paralegal core curriculum.
Note: Special admission requirements for this certificate are enforced and certificates cannot be completed at extended campuses. Certain courses required for the certificate must be taken only at the Anchorage campus.

Students are encouraged to complete a BA or Associate of Arts in conjunction with the Paralegal Certificate. Paralegal courses fulfill the Justice elective requirements for the Justice BA and the General Elective requirements for the Associate of Arts. Students who have already completed a degree at an accredited institution whose composition courses meet UAA's written communication and program admission requirements need only complete the Paralegal core courses. Transfer credit for some core courses may be determined at the departmental level.

Students interested in the Paralegal Studies Certificate program should consult a faculty advisor in the Justice Center before enrolling in paralegal courses.

**Certificate Requirements**

1. Complete 6 credits in written communications (ENGL A111, ENGL A211, ENGL A212, ENGL A213, ENGL A214, ENGL A311, ENGL A312, or ENGL A414) with a minimum grade of B in each class. 6
2. Complete the following required core courses:
   - PARL A101 Introduction to Law 3
   - PARL A215 Paralegal Studies 3
   - PARL A235 Factual Investigation and Interviewing 2
   - PARL A236 Ethics and Paralegals 1
   - PARL A238 Civil Procedure 3
   - PARL A256 Legal Research I 3
   - PARL/JUST A340 Family Law (3) or
   - PARL/JUST A352 Substantive Criminal Law (3) or
   - PARL/JUST A354 Criminal Procedure (3) or
   - PARL A362 Commercial Law (3) or
   - Other upper division law course from Justice curriculum with paralegal coordinator approval (3)
   - PARL A375 Litigation 3
   - PARL A456 Advanced Legal Analysis and Writing 4
   - PARL A470 Law of Government Regulation 3
   - JUST A495 Internship (1-6) 3
3. Complete at least 20 credits, in addition to the preceding core courses, from the General Education Requirements for Baccalaureate Degrees list or from courses that meet the general requirements in humanities, social sciences, and math/natural sciences for the associate degree. 20
4. Complete 3 credits of any elective at the 100-level or above. 3
5. Students must achieve a minimum grade of C in each paralegal core course to receive the certificate. Courses may be repeated to improve grades according to university or program policy.
6. A total of 60 credits is required for the certificate.

Note: Graduates are not authorized to provide direct legal services to the public. The Paralegal Studies Certificate program is a training program for paralegals who are authorized to perform substantive legal work under the supervision of an attorney. The program does not train lawyers or legal administrators.

**FACULTY**

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**SCHOOL OF NURSING**

**Professional Studies Building (PSB), Room 103, (907) 786-4550**

http://nursing.uaa.alaska.edu

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 degree in Nursing and the Bachelor of Science degree 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 nursing programs are approved by the Alaska Board of Nursing and accredited by the National League for Nursing Accreditation Commission (61 Broadway, New York, NY 10006; (212) 363-5555, ext 153). 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.

**Undergraduate Certificate, Practical Nursing**

Admission to the Practical Nursing Certificate program has been suspended. Please contact the department for information.

**Associate of Applied Science, Nursing**

Graduates of the Associate of Applied Science, 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**

Students may complete the Associate of Applied Science, 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 corequisite 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 grades of C or above: 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 are: MATH A055, BIOL A102 and BIOL A103, CHEM A055.

2. Student attends an advising session with the coordinator of student affairs, School of Nursing. Call (907) 786-4560 for a recorded message.

3. School of Nursing Application and Confidential Required Information Form sent to the coordinator of student affairs, School of Nursing.

4. Three letters of reference sent to the coordinator of student affairs, School of Nursing.

5. Upon completion of items 1-4, student has an interview with a member of the AAS Admissions Committee.

6. Take the Nurse Entrance Test (NET) through Advising and Testing. Call (907) 786-4500 for specific dates and to sign up.

7. Upon completion of items 1-6, 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 associate's degree clinical nursing courses, students are required to provide the following before beginning clinical coursework:

1. Evidence of:
   a. Immunity to rubella and rubeola, 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 HIV testing annually (results not required).

2. Current Health Provider Certification in Cardiopulmonary Resuscitation 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 Progress**

In order to progress within the Associate of Applied Science, Nursing program, 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; NURS A220 and NURS A220L; NURS A222 and NURS A222L; NURS A225 and NURS A225L; NURS A250 and NURS A250L). The four-semester clinical course sequence, which begins with NURS A120/120L must be completed within four years.

**General University Requirements**

1. Complete the General University Requirements for Associate Degrees located at the beginning of this chapter.

2. Complete the Associate of Applied Science General Degree Requirements (15 credits) located at the beginning of this chapter. At least 3 of the 6 credits of general requirements must be a social science course.

**Major Requirements**

1. Complete the following required 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
   - DN A203 Nutrition for Health Sciences 3
   - NURS A120 Nursing Fundamentals 3
   - NURS A120L Nursing Fundamentals Lab 4
   - NURS A125 Adult Nursing I 3
   - NURS A125L Adult Nursing I Lab 4
   - NURS A180 Basic Nursing Pharmacology 3
   - NURS A220 Perinatal Nursing 3
   - NURS A220L Perinatal Nursing Lab 1
   - NURS A221 Advanced Parenteral Therapy Lab 1
   - NURS A222 Pediatric Nursing 3
   - NURS A222L Pediatric Nursing Lab 1
   - NURS A225 Adult Nursing II 3
   - NURS A225L Adult Nursing II Lab 3
   - NURS A250 Psychiatric Nursing 3
   - NURS A250L Psychiatric Nursing Lab 1
   - NURS A255 Staff Nurse: Legal, Ethical, and Organizational Issues 1
   - PSY A150 Lifespan Development 3

2. A total of 70 credits is required for the degree.

**Associate of Applied Science, 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 ranking process. Students are encouraged to complete corequisite 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:
   - BIOL A111 Anatomy and Physiology I
   - ENGL A111 Methods of Written Communication
   - PSY A150 Lifespan Development

3. Current active Alaska LPN license.

4. Completed School of Nursing Application and Confidential Information Form sent to the coordinator of student affairs, School of Nursing.
5. Three letters of references mailed directly to the coordinator of student affairs, School of Nursing.

6. Interview with a member of the AAS Admissions Committee (scheduled after items 1-5 above 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's degree clinical courses, students are required to provide documentation of health, CPR, and liability insurance before actually 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 and rubeola, 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 HIV testing annually (results not required).

2. Current Health Provider certification in Cardiopulmonary Resuscitation 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.

**General University Requirements**

1. Complete the General University Requirements for Associate Degrees.

2. Complete the Associate of Applied Science General Degree Requirements (15 credits). At least 3 of the 6 credits of general requirements must be earned in a social science course.

**Major Requirements**

Within the LPN Option, licensed practical nurse students returning to school to complete the AAS degree 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/A125L of the AAS nursing program. Upon successful completion of NURS A125 with a C or higher grade, and NURS A125L with a “pass,” the student would 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.

*Note: Any direct articulation LPN student not passing NURS A125/A125L would not receive credit for NURS A120/A120L, and would need to take these courses to continue toward the AAS degree in Nursing.*

1. Complete the following required courses:
   - BIOL A111 Human Anatomy & Physiology I 4
   - BIOL A112 Human Anatomy & Physiology II 4
   - BIOL A240 Introductory Microbiology for Health Sciences 4
   - DN A203 Nutrition for Health Sciences 3
   - NURS A180 Basic Nursing Pharmacology 3
   - NURS A220 Perinatal Nursing 3
   - NURS A220L Perinatal Nursing Lab 1
   - NURS A221 Advanced Parenteral Therapy Lab 1
   - NURS A222 Pediatric Nursing 3
   - NURS A222L Pediatric Nursing Lab 1
   - NURS A225 Adult Nursing II 3
   - NURS A225L Adult Nursing II Lab 3
   - NURS A250 Psychiatric Nursing 3
   - NURS A250L Psychiatric Nursing Lab 1
   - NURS A255 Staff Nurse: Legal, Ethical, and Organizational Issues 1
   - PSY A150 Lifespan Development 3

2. Complete electives to total 70 credits.

3. A total of 70 credits is required for the degree.

**Bachelor of Science, Nursing Science**

Students pursuing the baccalaureate degree in Nursing Science are provided both the theory and clinical base to enable them to assess, plan, implement, and evaluate health care to meet the needs of individuals, families, groups, and communities whose health status varies qualitatively and quantitatively. Students working on a degree in Nursing Science may choose from two options: the Basic Student Option and the Registered Nurse Option.

**Honors in Nursing**

Students majoring in Nursing are eligible to graduate with departmental honors by satisfying the following requirements:

1. Meet the requirements for Graduation with Honors as listed in Chapter 7, Academic Standards and Regulations.

2. Meet the requirements for a BS in Nursing Science.

3. Earn a grade point average of 3.50 or higher in courses within the School of Nursing (courses with NS prefix).

4. Complete the following process
   a. Obtaining written support for the intent to graduate with honors from the individual's faculty advisor.
   b. Notifying 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. Obtaining approval to enroll in the honors electives from the baccalaureate program and the Baccalaureate Curriculum Committee prior to enrolling for first semester of senior year classes.

5. Satisfactorily complete the two honors electives* courses during the senior year of the baccalaureate Nursing program.

   - NS A440 Nursing Honors I - Project Exploration
   - NS A441 Nursing Honors II - Project Implementation

   * These courses satisfy the required 3 hours of Nursing electives in the baccalaureate Nursing program.

**Basic Student Option**

**Admission Requirements**

Students who apply to the baccalaureate nursing major and who qualify for admissions to baccalaureate nursing majors are admitted as pre-nursing majors. Admissions 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 (see No. 6 below). Applications
must be submitted prior to October 1 in the fall semester, and February
1 in the spring semester. The School of Nursing strongly recommends
that students submit their university application up to six months prior
to the School of Nursing deadlines to ensure complete processing of the
application and transcript evaluation. The process for advancement to the
major and the formal admission to the Nursing program are:
1. UAA Certificate of Admission and transcript evaluations (if any)
from the Office of Admissions.
2. Advising sessions with a School of Nursing advisor. The student
attends a group advising session (call 907-786-4560 for pre-recorded
information on group advising session).
3. An extracted minimum grade point average of 2.70 for courses
required for the Bachelor of Science, 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.
4. A grade of C or higher in all specified courses required for the
nursing major.
5. Completion of specified prerequisite courses:
(GER refers to UAA General Education Requirement)
   - BIOL A111/L Human Anatomy and Physiology I 8
     with Laboratory (4) and
   - BIOL A112/L Human Anatomy and Physiology II 8
     with Laboratory (4)
   - CHEM A103/L Survey of Chemistry with Laboratory (4) 8
     and
   - CHEM A104/L Introduction to Chemistry and
     Biochemistry with Laboratory (4)
   - ENGL A111 Methods of Written Communication (3) 6
     and
   - ENGL A213 Writing in the Social and Natural Sciences (3)
     (ENGL A120, PHIL A101 or PHIL A201) or PSY A150 3
     Oral communication GER 3
   - Humanities or fine arts or social science GER 3
   - PSY or SOC from GER social science list 3
   For students not required to take ENGL A111, another GER
   written communication course must be completed to total 6
   credits. For transfer students, grades from equivalent courses
   are substituted.
6. Enrollment in, or credit for,
   - BIOL A240/L 4
   - PSY A150 or (ENGL A120, PHIL A101 or PHIL A201) 3
     ANTH or ECON from social science GER list 3
   - Humanities or fine arts or social science GER 6
7. Applicants may not repeat any prerequisite course more than once.
8. Application to the baccalaureate nursing major. After completion of
the first 34 credits, as outlined in No. 5, and during enrollment in
courses outlined in No. 6, the student meets with the coordinator of
student affairs to verify course completion and GPA and completes
the application to the nursing major. The student may call (907) 786-
4550 to set up an appointment.
9. School of Nursing Application and Confidential Required
   Information Form on file in the school.
11. A current Plan of Study signed by a School of Nursing advisor on
file with the School of Nursing.
12. After completion of all the above steps, the student's file is
forwarded to the school's Admissions Committee for acceptance
into the nursing major. Formal admission to the nursing program
is based on the student's relative standing on the minimum
requirements outlined above. There are two deadlines for
consideration by the committee: October 1 in the following fall
semester and February 1 in the following spring semester.
13. Achievement of a C or higher in the specified courses for the major
that are in progress when admission is sought (i.e., PSY A150, BIOL A240),
and maintenance of a minimum 2.70 GPA until the semester of
enrollment in beginning nursing courses (NS A204 and NS A216).
14. Preference will be given to residents of the State of Alaska as
defined by the university's policy on residency for tuition purposes.

**Clinical Requirements**

All students who are admitted to clinical nursing courses are required
to provide copies of documentation of health, CPR and personal liability
insurance 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:
1. Evidence of:
   a. Immunity to rubella and rubeola 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. Diphtheria/tetanus vaccination within the last 10 years
      (booster required at time of expiration);
   d. Freedom from active tuberculosis, documented annually by
      negative PPD skin test or by health examination by a nurse
      practitioner, physician, or physician's assistant.*
   e. Immunity to chicken pox confirmed by health history, titer, or
      immunization;
   f. Documentation of HIV testing annually (results not required).
2. Current Health Provider Certification in Cardiopulmonary
   Resuscitation 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.

**Academic Progress**

In order to progress within the baccalaureate nursing program, students
must earn a satisfactory grade (C or higher or P) in all Nursing Sciences
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.

Concurrent enrollment: Students enrolled in one course must be
concurrently enrolled in all courses with that common number
(NS A313, NS A313L; NS A315, NS A315L; NS A401, NS 401L; NS A406,
NS A406L; NS A411, NS A411L, NS A416, NS A416L).

Basic student option progress: The four-semester clinical sequence must
be completed in seven semesters and no more than a one-semester delay
between sequential clinical courses will be permitted without validation
of continued competence and currency.

**Graduation Requirements**

Students must complete the following graduation requirements:

A. **General University Requirements**

Complete the General University Requirements for All
Baccalaureate Degrees listed at the beginning of this chapter.

B. **General Education Requirements**

Complete the General Education Requirements for Baccalaureate
Degrees listed at the beginning of this chapter. In the nursing
program, some required prerequisite courses fulfill general
education requirements.
C. Major Requirements

1. Complete all 44 credits of support courses for the Nursing Science major with a grade of C or better. Courses marked with an asterisk (*) must be completed prior to admission to clinical nursing courses:
   - ANTH or ECON General Education Requirement 3
   - 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/L Survey of Chemistry with Laboratory 4
   - CHEM A104/L Introduction to Organic Chemistry and Biochemistry with Laboratory 4
   - DN A203 Nutrition for the Health Sciences 3
   - ENGL A213 Writing in the Social and Natural Sciences 3
   - PHIL A302 Biomedical Ethics 3
   - PSY A150** Lifespan Development 3
   - PSY or SOC General Education Course 3
   - Reasoning Skills** 3
   - ENGL A120, or PHIL A101, or PHIL A201 STAT A252 Elementary Statistics (3) 3
   - or
   - STAT A307 Probability and Statistics (3)
   **Must be in addition to the required General Education Requirements.

2. Nursing Courses: Complete required nursing courses for the Nursing Science major (64 credits).
   - NS A204 Technology and Nursing Informatics 3
   - NS A216 Pathophysiology 4
   - NS A300 Foundations of Nursing I 4
   - NS A303 Foundations of Nursing II 3
   - NS A303L Foundations of Nursing II Lab 5
   - NS A309 Pharmacology in Nursing 3
   - NS A313 Health Disruptions I 3
   - NS A313L Health Disruptions I Lab 3
   - NS A315 Health I: Nursing Therapeutics 3
   - NS A315L Health I: Nursing Therapeutics Lab 3
   - NS A400 Research in Nursing 3
   - NS A401 Health Disruptions II 3
   - NS A401L Health Disruptions II Lab 2.5
   - NS A406 Nursing Therapeutics in Complex Health Disruptions 2
   - NS A406L Nursing Therapeutics in Complex Health Disruptions Lab 2.5
   - NS A411 Health II: Nursing Therapeutics 3
   - NS A411L Health II: Nursing Therapeutics Lab 3
   - NS A415 Nursing Management and Legal Perspectives 4
   - NS A416 Concentration in Clinical Nursing 0.5
   - NS A416L Concentration in Clinical Nursing Lab 3.5
   Nursing elective (upper division) 3

3. A total of 126 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 General Education Requirements. 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 A204. The deadlines for RN admission are twice a year on November 1 and March 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. UAA Certificate of Admission and transcript evaluations from the Office of the Registrar.
2. Current licensure as a Registered Professional Nurse in the state of Alaska. Copy of licensure on file with the school.
3. A current Plan of Study signed by a nursing advisor and the RN student on file with the School of Nursing and Health Sciences. The student may call (907) 786-4550 to set up an advising session.
4. An extracted minimum grade point average of 2.00. The grade point average will be calculated using grades from all courses which are required for the nursing major that have completed at the time of application to the major.
5. A grade of C or better in all specified courses required for the nursing major.
6. Completion of or credit for specified prerequisite courses (17 credits):
   - BIOL A111 Human Anatomy and Physiology I 4
   - CHEM A103/L Survey of Chemistry with Laboratory 4
   - ENGL A111 Methods of Written Communication 3
   - COMM A111, ENGL A120, PHIL A101, PHIL A201, or PSY A150 3
   - General Education Requirement 3

   For students not required to take ENGL A111, another English composition course will be substituted. For transfer students, grades from equivalent courses will be substituted.

7. Enrollment in, or credit for,
   - BIOL A112 Human Anatomy and Physiology II 4
   - CHEM A104/L Introduction to Organic Chemistry and Biochemistry with Laboratory 4
   - ENGL A120, PHIL A101, or PHIL A201 3
   - ENGL A213 Writing in the Social and Natural Sciences 3

   at the time of application to the major, on achieving a C in the specified courses for the major that are in progress when admission is sought (i.e., CHEM A104/L, BIOL A112), and on maintaining a minimum 2.00 grade point average until beginning nursing courses.

8. A School of Nursing and Health Sciences application on file in the school.

9. Three letters of reference, one of which must be a professional reference.

Registered Nurse students not formally admitted by UAA as a baccalaureate seeking student in the nursing program or admitted as pre-nursing majors are eligible to take the following courses:

Nursing electives for which prerequisites have been met.

RN Clinical Requirements

See Clinical Requirements under the Basic Student Option.

RN Academic Progress

See Academic Progress under the Basic Student Option.

Graduation Requirements

Students must complete the following graduation requirements:

A. General University Requirements

   Complete the General University Requirements for All Baccalaureate Degrees listed at the beginning of this chapter.

B. General Education Requirements

   Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter. In the Nursing program, some required prerequisite courses fulfill general education requirements.
C. Major Requirements

1. Support Courses: Complete support courses for the Nursing Science major (44 credits). All support courses must be completed with a grade of C or better prior to admission to 300-level clinical nursing courses:
   - ANTH or ECON* General Education Requirement 3
   - BIOL A111 Human Anatomy & Physiology I 4
   - BIOL A112 Human Anatomy & Physiology II 4
   - BIOL A240 Introductory Microbiology for Health Sciences 4
   - CHEM A103/L Survey of Chemistry/Lab 4
   - CHEM A104/L Introduction to Organic Chemistry and Biochemistry/Lab 4
   - DN A203 Nutrition for the Health Sciences 3
   - ENGL A213 Writing in the Social and Natural Sciences 3
   - PHIL A302 Biomedical Ethics 3
   - PSY A150 Lifespan Development 3
   - PSY or SOC General Education Requirement 3
   - Reasoning Skills* 3
   - ENGL A120, or PHIL A101, or PHIL A201
   - STAT A252 Elementary Statistics (3)
   - STAT A307 Probability and Statistics (3)

   *Must be in addition to the required 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 (26.5 credits) upon admission to the nursing major:

- NS A216 Pathophysiology 4
- NS A309 Pharmacology in Nursing 3
- NS A303 Foundations of Nursing II 3
- NS A303L Foundations of Nursing II Lab 5
- NS A313 Health Disruptions I 3
- NS A313L Health Disruptions I Lab 3
- NS A401 Health Disruptions II 3
- NS A401L Health Disruptions II Lab 2.5

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.

2. Nursing courses for academic credit: Complete the following required nursing courses within the Nursing Science major (34 credits). Courses marked with an asterisk (*) must be completed with a grade of C or better prior to admission to 400-level clinical nursing courses:
   - *NS A205 Nursing Informatics 3
   - *NS A305 Health Assessment of Individuals 2
   - *NS A305L Health Assessment of Individuals Laboratory 1
   - *NS A308 Dimensions of Professional Nursing Practice 3
   - *NS A314 Health I for Registered Nurses 2
   - *NS A314L Health I for Registered Nurses Laboratory 2
   - NS A400 Nursing Research 3
   - NS A408 Complex Health Disruptions: Nursing Therapeutics 2
   - NS A408L Complex Health Disruptions: Nursing Therapeutics Lab 2
   - NS A411 Health II: Nursing Therapeutics 3
   - NS A411L Health II: Nursing Therapeutics Lab 3
   - NS A417 Management in Nursing 3
   - Nursing electives (upper division) 6

Three credits of nursing elective may be met with a current recognized nursing certification.

3. Complete elective credits to total 126 credits.

4. A total of 126 credits is required for the degree, 42 credits of which must be upper division.

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SCHOOL OF SOCIAL WORK

Gordon Hardie Hall (GHH), Room 106, (907) 786-6900
http://socialwork.uaa.alaska.edu

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 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 Bachelor of Social Work degree program at University of Alaska Anchorage 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 Bachelor of Social Work degree program is accredited by the Council on Social Work Education (CSWE). BSW program admission and curriculum requirements are consistent with CSWE licensing requirements for the state of Alaska.

**Bachelor of Social Work**

**Mission and Goals of the BSW Program**

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.

Based upon the mission established for the BSW program, the program goals are to prepare generalist social work practitioners who are:

- Competent in multiple entry-level practice roles across client systems, particularly within the state of Alaska.
- Committed to the enhancement of human well-being.
- Committed to the promotion of social and economic justice for people of all backgrounds, particularly those in Alaska.
- Guided by the values and ethical standards of the social work profession.
- Prepared to enhance the quality of service delivery systems.
- Knowledgeable, skillful, and sensitive with people from diverse backgrounds.

**Admission Requirements**

When students declare Social Work as their major they are assigned to the current catalog year. Declaration of Social Work as a major does not guarantee admission to the Social Work program. Students must apply for admission to the Social Work program during the fall semester of their junior year. Full admission to the Social Work program is based upon the requirements listed below.

Social work credits earned through other CSWE-accredited social work programs may be transferred to UAA and applied toward the Bachelor of Social Work degree. Approval from the UAA School of Social Work is required for acceptance of social work transfer credits.

**Requirements for Full Admission to the Social Work Program**

To apply for full admission to the Social Work program, students must have completed, prior to entering practicum the following:

1. General Education Requirements for Baccalaureate Degrees.

2. Specified Liberal Arts Foundation courses (see Major Requirements) with a grade of C or better.

3. The following Social Work courses with a grade of C or better (25 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 I 4
   - SWK A331 Social Work Practice II: Organizations and Communities 3
   - SWK A342 Human Behavior in the Social Environment 3
   - SWK A424 Social Work Research 3
   - SWK A481 Case Management in Social Work Practice 3

Students must submit the following application materials to the School of Social Work by the last Friday in October prior to intended entry into field work:

1. The School of Social Work Application for Admission to the BSW degree and practicum for fall enrollment.
2. Admissions statement.
3. Social Work faculty advisor’s approval to apply.
4. A Student Practicum Interest sheet.
5. A Change of Major Form indicating change of status from pre-major to full major.

The Admission Committee reserves the right to request additional information if necessary.

Students participate in an admission interview with faculty and community members to assess the student’s 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 15.

Admission to the Social Work program is based on 1) successful completion of the requirements listed above; 2) beginning competence in client-centered communication skills as demonstrated in SWK A330; and 3) professional judgment of Social Work faculty.

Many 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 the courses with a grade of C or better prior to the fall semester in which they plan to enter practicum.

**Field Practicum**

Placements may become competitive if the number of applicants exceeds the number of spaces. The program and agencies also 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.

Only students eligible to receive state licensure will be admitted to the BSW degree program. Please contact the School of Social Work for further information.

The BSW program does not grant Social Work course credit for life experience or previous work experience.

**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. Complete all requirements for the BSW degree. A minimum of 30 credits applicable to the BSW degree must be completed at UAA.
2. Have a GPA of 3.75 or higher in upper division (300- and 400-level) Social Work courses.
3. Completion of:
   SWK A363 Great Books in Social Work
   SWK A463 Social Work Senior Honors Research Project

4. One course in applied statistics, with a grade of C or better.

5. Notify the BSW program coordinator in writing, on or before the date of submitting the Application for Graduation with the Office of the Registrar, of the intent to graduate with departmental honors.

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 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.

**Academic Progress**

Students in the Social Work program must earn a grade of C or better in the required liberal arts and the required Social Work courses. Adherence to the Code of Ethics established by the National Association of Social Workers is required.

**Course Content Currency Requirement**

All upper division courses with a Social Work subject code (SWK) must be completed within seven years prior to graduation.

**Graduation Requirements**

Students must complete the following graduation requirements:

**A. General University Requirements**

Complete the General University Requirements for All Baccalaureate Degrees listed at the beginning of this chapter.

**B. General Education Requirements**

Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

**C. Major Requirements**

1. Complete the following liberal arts foundation courses, with a grade of C or better:
   - ANTH A200 Natives of Alaska (3)
   - ANTH A202 Cultural Anthropology (3)
   - ANTH A215 Introduction to Business (3)
   - BIOL A102 Principles of Microeconomics (3)
   - BIOL A103 Introductory Biology (3)
   - BIOL A111 Human Anatomy and Physiology I (4)
   - BIOL A112 Human Anatomy and Physiology II (4)
   - BIOL A115 Fundamentals of Biology I (4)
   - BIOL A116 Fundamentals of Biology II (4)
   - ENGL A311 Advanced Composition (3)
   - ENGL A313 Professional Writing (3)
   - ENGL A414 Research Writing (3)
   - ENGL A419 Critical Thinking (3)
   - PHIL A101 Introduction to Logic (3)
   - PHIL A201 Introduction to Philosophy (3)
   - PHIL A301 Ethics (3)
   - PHIL A421 Philosophy of the Sciences (3)
   - PSY A150 Life Span Development (3)
   - SOC A101 Introduction to Sociology (3)
   - SWK A423 Cultural Diversity and Community Service Learning (3)
   - SWK A330 Social Work Practice I (3)
   - SWK A331 Social Work Practice II: 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 A430 Social Work Practice III: Groups and Families (3)
   - SWK A431 Social Work Practice IV: Integrative Capstone (3)
   - SWK A481 Case Management in Social Work Practice (3)
   - SWK A495A Social Work Practice I (3)
   - SWK A495B Social Work Practice II (3)
   - Upper division Social Work electives (6)
   - Sociology (3)
   - Psychology (3)
   - Critical Thinking (3)
   - Human Behavior in the Social Environment (3)
   - Public Policy and Social Analysis (3)
   - Social Work Practice I (3)
   - Social Work Practice II (3)
   - Social Work Practice III (3)
   - Social Work Practice IV (3)
   - Social Work Research (3)
   - Social Work Electives (6)

2. Complete the following required core courses, with a grade of C or better:
   - SWK A406 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 I (3)
   - SWK A331 Social Work Practice II: 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 A430 Social Work Practice III: Groups and Families (3)
   - SWK A431 Social Work Practice IV: Integrative Capstone (3)
   - SWK A481 Case Management in Social Work Practice (3)
   - SWK A495A Social Work Practice I (3)
   - SWK A495B Social Work Practice II (3)
   - Upper division Social Work electives (6)

3. Complete electives to total 120 credits.

4. A total of 120 credits is required for the degree, of which 42 must be upper division.

5. Note: It is recommended that students take one or two 3-credit electives each semester to bring total credits to 120.

**Minor, Social Welfare Studies**

Students majoring in another subject who wish to minor in Social Welfare Studies must complete the following requirements. A total of 18 credits is required for the minor.

- 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 Social Work electives (3)

**FACULTY**

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COMMUNITY & TECHNICAL COLLEGE

The UAA Community & Technical College (CTC) is dedicated to the development and delivery of quality career and technical, community, and continuing education programs. CTC strives to meet community and industry demand for these types of education and training.

In keeping with the mission of the University of Alaska Anchorage, the Community & Technical College has a commitment to innovation and flexibility that makes high-quality education and training available to all who have the ability and interest to pursue an education or profession. To accomplish this, the college delivers career and technical education to both non-degree-seeking and certificate- or degree-seeking students; continuing education courses to professionals and the community; instruction and services for under-prepared, linguistically diverse, or at-risk students; as well as cultural and community service programs for all.

CTC provides educational and learning support opportunities through the student success units: College Preparatory & Developmental Studies, Learning Resources Center, Military Programs, and Chugiak-Eagle River. These units support students in all colleges and in all majors. CTC provides training for personal and professional development through specialized training units: Community Education, Workforce Development, and the North Pacific Fisheries Observer Training Center.

Faculty within the college are highly trained professionals, many with years of experience in the technical specialties related to their teaching areas. Career and Technical Education Advisory Committees help ensure that programs are closely linked to the needs of the state economy. Graduates of CTC programs generally find immediate employment in their chosen field of study.

CTC's career and technical education leads to Occupational Endorsement Certificates, Undergraduate Certificates, Associate of Applied Science degrees, and Bachelor of Science degrees in a total of over 20 program areas. CTC Career and Technical programs focus on eight areas: Allied Health Sciences; Aviation Technologies/AFROTC; Career & Technical Education; Construction & Design Technology; Computers & Electronics Technologies; Culinary Arts, Hospitality, and Restaurant Management; Health, Physical Education, & Recreation; and Transportation & Power.

Advising
Prospective students should call the CTC academic advisor at (907) 786-6480 for more information on CTC programs.

Articulation with High School Programs
The Community & Technical College has a close and positive working relationship with Alaska school districts that eases the transition from high school to college. Students may earn college credit for Tech Prep courses while still in high school. For more information on this program, call the Community & Technical College Tech Prep Office at 786-6464, refer to Tech Prep Program in Chapter 9, or visit http://techprep.uaa.alaska.edu.

Regional Coordination
The Community & Technical College serves as a resource to the Southcentral region extended campuses in the area of career and technical education. The dean of the college serves as regional career and technical education coordinator and provides assistance to the campus directors and faculty in coordinating the development and delivery of career and technical education programs and coursework in Kenai, Kodiak, and Palmer. The goal of regional coordination of career and technical education is to allow the student maximum flexibility within acceptable academic guidelines. Many courses are offered between UAA and the Southcentral extended campuses, and may be easily transferred from one campus to another.

College Preparatory & Developmental Studies
The College Preparatory & Developmental Studies Department (CPDS) helps under-prepared, linguistically diverse, and nontraditional students develop the academic and language skills necessary to successfully pursue their lifelong learning goals.

The CPDS department offers composition, English as a Second Language (ESL), mathematics, reading, and study skills courses that prepare students to advance to the next academic level. The department uses placement and retention advising, tutoring, and a developmental teaching philosophy to help students succeed.

College Preparatory & Developmental Studies focuses on academic and professional English as a Second Language at the intermediate and advanced levels. These courses strengthen ESL students' usage of Standard American English and build ESL students' confidence in their English abilities.

Developmental math courses (MATH A050, MATH A054, MATH A055, and MATH A105) are taught to ensure mastery of the required course material. Classes incorporate in-class lectures, work in the math lab with instructors and certified tutors, untimed testing in the math lab with flexible hours, and the opportunity to retake examinations. Computer supplements, videotapes, CD-ROMs, workshops, web courses, and graphing calculators are available. CDPS math courses are found under the MATH prefix, and are identified with the “_S_” in the section number. Example: MATH A054 section 080, or MATH A055 section 685.

Developmental English classes (grammar, reading, study skills, vocabulary, and writing) are found under the PRPE prefix (Preparatory English). They offer traditional classroom instruction as well as individualized reading labs. Students are supported through use of a computer-assisted writing lab staffed with certified tutors.

The Math Lab and Writing Center are staffed by certified tutors for composition and math. CPDS and the Learning Resource Center operate these labs.

CPDS offers an interdisciplinary learning community called “Smart Start.” Collaborative instruction in math, writing, reading, and academic success skills provides a high degree of support for at-risk students. These classes are team-taught by developmental faculty with the help of certified tutors.

AIR FORCE ROTC

Aviation Complex (AV/NC) 2811 Merrill Field Drive, Room 116, (907) 786-7266

Air Force ROTC educates and trains UAA students to serve as officers in the United States Air Force. Air Force ROTC has two-, three-, and four-year programs that lead to a commission as a second lieutenant.

The curriculum consists of academic courses and a leadership laboratory. Air Force ROTC is not a degree- or certificate-granting program. The academic courses cover the history, organization, and mission of the Air Force, as well as leadership, management, and national security affairs. Any UAA student may take these academic courses (except AIRS A150) without joining the Cadet Corps or the Air Force. However, certain courses require prerequisites or faculty permission.

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 Corps 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 four years in the Air Force. Those who successfully complete Air Force pilot training must serve 10 years after training.

Two hours of mandatory physical training (PT) are required each week. Times and location of PT sessions to be announced.

Two-Year Program

1. 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.

<table>
<thead>
<tr>
<th>AIRS Courses</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIRS A301</td>
<td>US Air Force Leadership and Management I</td>
<td>3</td>
</tr>
<tr>
<td>AIRS A302</td>
<td>US Air Force Leadership and Management II</td>
<td>3</td>
</tr>
<tr>
<td>AIRS A401</td>
<td>National Security Affairs I</td>
<td>3</td>
</tr>
<tr>
<td>AIRS A402</td>
<td>National Security Affairs II/ Preparation for Active Duty</td>
<td>3</td>
</tr>
<tr>
<td>AIRS A150</td>
<td>US Air Force Leadership Laboratory (1)</td>
<td>4</td>
</tr>
</tbody>
</table>

2. Cadets take AIRS A150 (US Air Force Leadership Laboratory) 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

1. 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.

<table>
<thead>
<tr>
<th>AIRS Courses</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIRS A201</td>
<td>Evolution of Air and Space Power I</td>
<td>2</td>
</tr>
<tr>
<td>AIRS A202</td>
<td>Evolution of Air and Space Power II</td>
<td>2</td>
</tr>
<tr>
<td>AIRS A301</td>
<td>US Air Force Leadership and Management I</td>
<td>3</td>
</tr>
<tr>
<td>AIRS A302</td>
<td>US Air Force Leadership and Management II</td>
<td>3</td>
</tr>
<tr>
<td>AIRS A401</td>
<td>National Security Affairs I</td>
<td>3</td>
</tr>
<tr>
<td>AIRS A402</td>
<td>National Security Affairs II/ Prep for Active Duty</td>
<td>3</td>
</tr>
<tr>
<td>AIRS A150</td>
<td>US Air Force Leadership Laboratory (1)</td>
<td>6</td>
</tr>
</tbody>
</table>

2. Cadets take AIRS A150 US Air Force Leadership Laboratory 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

1. 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.

<table>
<thead>
<tr>
<th>AIRS Courses</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIRS A101</td>
<td>Foundations of the US Air Force I</td>
<td>1</td>
</tr>
<tr>
<td>AIRS A102</td>
<td>Foundations of the US Air Force II</td>
<td>1</td>
</tr>
<tr>
<td>AIRS A201</td>
<td>Evolution of Air and Space Power I</td>
<td>2</td>
</tr>
<tr>
<td>AIRS A202</td>
<td>Evolution of Air and Space Power II</td>
<td>2</td>
</tr>
<tr>
<td>AIRS A301</td>
<td>US Air Force Leadership and Management I</td>
<td>3</td>
</tr>
<tr>
<td>AIRS A302</td>
<td>US Air Force Leadership and Management II</td>
<td>3</td>
</tr>
<tr>
<td>AIRS A401</td>
<td>National Security Affairs I</td>
<td>3</td>
</tr>
<tr>
<td>AIRS A402</td>
<td>National Security Affairs II/ Preparation for Active Duty</td>
<td>3</td>
</tr>
<tr>
<td>AIRS A150</td>
<td>US Air Force Leadership Laboratory (1)</td>
<td>8</td>
</tr>
</tbody>
</table>

2. Cadets must take AIRS A150 (US Air Force Leadership Laboratory) 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 Corps 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 the Air Force ROTC (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 pilot training can compete for slots in other career fields. The Air Force has a variety of operations, administrative, engineering, and scientific assignments. Cadets compete for and receive career assignments during the 400-level year and will serve four years 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.

FACULTY

Captain Troy Basnett, Assistant Professor
Major Richard Maze, Assistant Professor, AFROTC@uaa.alaska.edu
Lt. Colonel Doug Smith, Professor/Chair

APPRENTICESHIP TECHNOLOGIES

University Center (UC), Room 130, (907) 786-6423
www.uaa.alaska.edu/ctc/career/apt.cfm

The Apprenticeship Technologies program is a 60-credit Associate of Applied Science degree coordinated and delivered collaboratively by UAA, UAF, and UAS. The curriculum specifically reflects the commitment of the university to provide high-quality instruction and service to the public through a practical integration of general coursework and training for career and technical occupations. Individuals receiving this degree must complete a formal apprenticeship program and hold journeyworker 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 transcripted following completion of the apprenticeship. Students are encouraged to begin the courses listed below while participating in the apprenticeship program in order to expand the quality and breadth of training. Students who complete this
program will be eligible to enroll in the Bachelor of Science, Technology program at UAA, the Bachelor of Technology program at UAF, or other appropriate degree programs.

**Associate of Applied Science, Apprenticeship Technologies**

**Degree Outcomes**

At the completion of this program, students will be able to:

- Demonstrate effective communication skills needed in the workplace.
- Display human relations skills.
- Show proficiency in computational skills needed for the occupation.

**Admission Requirements**

1. See Associate of Applied Science admissions requirements in Chapter 7, Academic Standards and Regulations.
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 faculty for assistance with course planning toward the Associate of Applied Science degree.

**A. General University Requirements**

Complete the Associate of Applied Science Degree Requirements located at the beginning of this chapter.

**B. Major Requirements**

1. Complete the following required courses:
   - ENGL A111  Methods of Written Communication  3
   - ENGL A212  Technical Writing  3
   - MATH A105  Intermediate Algebra (or higher)  (3)  3
   - STAT A252  Elementary Statistics (or higher)  (3)
2. Complete one of the following:
   - HUMS/PSY A153  Human Relations (3)
   - CIOS A261A  Interpersonal Skills in Organizations* (3)
   - Social sciences General Education Requirement (3)
3. Complete one 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)
4. Complete 6 credits of safety, computer, business, technical or other advisor-approved courses linked to an identified education or career pathway.  6
   - *Complete 3 credits General Course Requirements if CIOS A261A is taken for 2 above.
5. Technical credits from approved apprenticeship program. See Chapter 8, Educational Delivery Methods & Nontraditional Credit.
   - Up to 38
6. Electives to complete 60 credits as needed.
7. Keep a portfolio of required work.
8. A total of 60 credits is required for the degree.

**FACULTY**

**Sally Spieker, Assistant Professor, AFSAS3@uaa.alaska.edu**

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**ARCHITECTURAL AND ENGINEERING TECHNOLOGY**

Division of Construction and Design Technology (CDT)

University Center (UC), Room 130, (907) 786-6465

www.uaa.alaska.edu/ctc/programs/ctd/aet/index.cfm

The Architectural and Engineering Technology (AET) program provides entry-level skills, continuing education, and advanced technical skills in several specialized fields, including computer-aided design and drafting (CADD), 3-D modeling, and rendering. The AET program offers an Occupational Endorsement Certificate in CAD for Building Construction, four Undergraduate Certificates in the specialized areas of Architectural Drafting, Civil Drafting, Mechanical & Electrical Drafting, and Structural Drafting, and an Associate of Applied Science (AAS) degree in Architectural and Engineering Technology which encompasses all of these fields.

Students are trained to become skilled workers on architectural and engineering design teams. AET certificate and degree graduates are employed as drafters or technicians and work in private industry as well as municipal, state, or federal agencies. Drafters and technicians work in support of professional architects and engineers to produce the technical drawings used by construction workers to build everything from roads and bridges, to homes and office buildings, to oil and gas pipelines. Their drawings provide the visual guidelines that show the technical details of the products and structures to be constructed. These drawings specify dimensions, materials to be used, and procedures to be followed. Drafters and technicians fill in technical details using drawings, rough sketches, specifications, codes, and calculations previously made by engineers, surveyors, or architects. Drafters and technicians use technical handbooks, tables, calculators, and computers to do this. Because many drafters and technicians may assist in design work, creativity is desirable. Good communication skills and the ability to work well with others are also important since they are part of a team of architects, engineers, and other technicians.

The AET AAS degree requires four to five semesters to complete. AET Undergraduate Certificates require two to three semesters to complete. The AET Occupational Endorsement Certificate requires one to two semesters to complete.

The AET faculty can assist students with curriculum planning to prepare for the Associate Technician Qualifying Examination offered by the National Institute for the Certification of Engineering Technicians (NICET), and for Construction Specification Institute (CSI) certification examinations. Courses are also available through the CDT Department to help intern architects prepare for the Architects Registration Examination.

Although courses taken may apply to the first two years of a four-year degree program (i.e., BS in Technology), the AET AAS degree should not be considered preparatory or a substitute for professional degree programs in architecture or engineering. Students pursuing a four-year degree in engineering should contact the School of Engineering at UAA. Those students who anticipate pursuing a degree in architecture should contact the AET program for academic counseling prior to registration.

In addition to tuition and fees, student should expect to purchase books and equipment required for each course.

**Advising**

All students should meet with an academic advisor prior to their first semester and each subsequent semester for the purpose of reviewing their academic status and planning future courses. Attention should be specifically directed to the proof of eligibility for placement in MATH A105 and ENGL A111 as a non-coded registration restriction, checked during the first day of class, for the introductory classes within the programs. It is particularly important for students to meet with their advisor whenever academic difficulties arise.
Students are encouraged to consult the faculty in the AET program 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.

Subject to scheduling, students may select either 5-week or 15-week blocks of instruction for each AET course. The content is the same; only the amount of time a course meets per week is different. Students should expect to spend at least one hour on outside work for each hour in the class. Computer lab facilities are available for students' use five days a week. Course offerings vary between fall and spring semesters with occasional short courses offered during the summer. Certain courses require prerequisites or faculty permission. Call (907) 786-6465 for further information.

**Occupational Endorsement Certificate, CAD For Building Construction**

Attention should be specifically directed to the proof of eligibility for placement in MATH A105 and ENGL A111 as a registration restriction for the introductory classes within the programs.

**Occupational Endorsement Certificate Outcomes**

At the completion of this program students are able to demonstrate:

1. Proficiency in the use of computer-aided design and drafting software in the creation and modification of construction documentation.
2. Proficiency in the management of the computer-aided design and drafting software environment for the accurate application and integration of industry standards.

**Admission Requirements**

See Occupational Endorsement Certificate Admission Requirements in chapter 7, Academic Standards and Regulations.

**Occupational Endorsement Certificate Requirements**

In order to receive the occupational endorsement certificate offered by the Architectural and Engineering Technology program, students must achieve a grade of C or better in all courses required for the occupational endorsement certificate.

1. Complete the following courses:
   - AET A101 Fundamentals of CADD for Building Construction 4
   - AET A181 Intermediate CADD for Building Construction 4
   - AET A282 Advanced CADD Techniques (4) or AET A283 CADD Software Customization (3)
   - A minimum of 11 credits are required for the occupational endorsement certificate.

The choice of AET A282 Advanced CADD Techniques is for students who wish to pursue skills for advanced rendering and animation within the software environment, while the AET A283 CADD Software Customization is for students who wish to pursue skills for developing and managing unique software environments, tools, and solutions outside of the default capabilities of the software.

**Undergraduate Certificates**

The AET program offers four Undergraduate Certificates in the specialized areas of Architectural Drafting, Civil Drafting, Mechanical & Electrical Drafting, and Structural Drafting. While the introductory coursework for all certificates is the same to establish a common theoretical foundation, the majority of the coursework is specific and focused for standards and professional practice of each industry.

**Admission Requirements**

Satisfy the Admission to Certificate and Associate Degree Programs Requirements in Chapter 7, Academic Standards and Regulations.

**Course Requirements**

Certain courses require prerequisites or faculty permission. Call (907) 786-6465 for further information.

**Graduation Requirements**

In order to receive a certificate offered by the AET Department, students must achieve a grade of C or better in all courses required for the certificate.

**Undergraduate Certificate, Architectural Drafting**

**Program Outcomes**

The specific educational outcomes that support the program objectives are to produce graduates who are able to:

- Demonstrate skill and proficiency in computer-aided drafting and design.
- Demonstrate knowledge of drafting conventions including symbols, linetypes, lineweights, and dimension styles as applicable to architectural drafting.
- Visualize and translate drawing information to actual physical objects and completed architectural projects.
- Understand the role and purpose of building codes and standards as they pertain to the life, health, and safety of the public.
- Understand the role, duties, and responsibilities of the members of the design team, including the working relationship between technicians and architects.
- Understand the architectural elements of the construction document set and the role of construction documents as communication tools for the construction contract.
- Understand the construction process from the transformation of an idea or need into a completed architectural project.
- Demonstrate communication skills to be successful in the employment environment.
- Demonstrate critical thinking and problem solving skills in the employment environment.

**Architectural Drafting Certificate Requirements**

1. Complete the following required courses:
   - AET A101 Fundamentals of CADD for Building Construction 4
   - AET A102 Methods of Building Construction 3
   - AET A121 Architectural Drafting 3
   - AET A123 Codes and Standards 3
   - AET A181 Intermediate CADD for Building Construction 4
   - AET A286 Design Project 4
   - ENGL A111 Methods of Written Communication 3
   - MATH A105 Intermediate Algebra 3
   - Oral communication course 3
   - Choose from one of the following:
     - COMM A111, COMM A235, COMM A237, or COMM A241

2. A total of 30 credits is required for the certificate.

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Undergraduate Certificate, Civil Drafting

Program Outcomes
The specific educational outcomes that support the program objectives are to produce graduates who are able to:

- Demonstrate skill and proficiency in computer-aided drafting and design.
- Demonstrate knowledge of drafting conventions including symbols, linetypes, lineweights, and dimension styles as applicable to civil drafting.
- Visualize and translate drawing information to actual physical objects and completed civil construction projects.
- Understand the role and purpose of building codes and standards as they pertain to the life, health, and safety of the public.
- Understand the role, duties, and responsibilities of the members of the design team, including the working relationship between technicians and civil engineers.
- Understand the civil elements of the construction document set and the role of construction documents as communication tools for the construction contract.
- Understand the construction process from the transformation of an idea or need into a completed civil project.
- Demonstrate communication skills to be successful in the employment environment.
- Demonstrate critical thinking and problem solving skills in the employment environment.

Civil Drafting Certificate Requirements
1. Complete the following required courses:
   - AET A101 Fundamentals of CADD for Building Construction 4
   - AET A102 Methods of Building Construction 3
   - AET A111 Civil Drafting 3
   - AET A181 Intermediate CADD for Building Construction 4
   - AET A213 Civil Technology 4
   - AET A286 Design Project 4
   - ENGL A111 Methods of Written Communication 3
   - MATH A105 Intermediate Algebra 3
   - Oral communication course 3
   Choose from one of the following:
   - COMM A111, COMM A235, COMM A237, or COMM A241
2. A total of 31 credits is required for the certificate.

Undergraduate Certificate, Structural Drafting

Program Outcomes
The specific educational outcomes that support the program objectives are to produce graduates who are able to:

- Demonstrate skill and proficiency in computer-aided drafting and design.
- Demonstrate knowledge of drafting conventions including symbols, linetypes, lineweights, and dimension styles as applicable to structural drafting.
- Visualize and translate drawing information to actual physical objects and completed structural construction projects.
- Understand the role and purpose of building codes and standards as they pertain to the life, health, and safety of the public.
- Understand the role, duties, and responsibilities of the members of the design team, including the working relationship between technicians and structural engineers.
- Understand the structural elements of the construction document set and the role of construction documents as communication tools for the construction contract.
- Understand the construction process from the transformation of an idea or need into a completed structural project.
- Demonstrate communication skills to be successful in the employment environment.
- Demonstrate critical thinking and problem solving skills in the employment environment.

Structural Drafting Certificate Requirements
1. Complete the following required courses:
   - AET A101 Fundamentals of CADD for Building Construction 4
   - AET A102 Methods of Building Construction 3
   - AET A131 Structural Drafting 3
   - AET A181 Intermediate CADD for Building Construction 4

Mechanical and Electrical Drafting Certificate Requirements
1. Complete the following required courses:
   - AET A101 Fundamentals of CADD for Building Construction 4
   - AET A102 Methods of Building Construction 3
   - AET A142 Mechanical & Electrical Technology 4
   - AET A143 Mechanical & Electrical Drafting 3
   - AET A181 Intermediate CADD for Building Construction 4
   - AET A286 Design Project 4
   - ENGL A111 Methods of Written Communication 3
   - MATH A105 Intermediate Algebra 3
   - Oral communication course 3
   Choose from one of the following:
   - COMM A111, COMM A235, COMM A237, or COMM A241
2. A total of 31 credits is required for the certificate.
Demonstrate critical thinking and problem solving skills in the construction process from the transformation of an object to completed construction components.

Understand the elements of the construction document set and the role of construction documents as communication tools for the design team, including the working relationship between technicians and professionals.

Understand the role, duties, and responsibilities of the members of the design team, including the working relationship between technicians and professionals.

Understand the role and purpose of building codes and standards as they pertain to the life, health, and safety of the public.

Understand the role and purpose of building codes and standards as they pertain to the life, health, and safety of the public.

Understand the role and purpose of building codes and standards as they pertain to the life, health, and safety of the public.

Understand the role and purpose of building codes and standards as they pertain to the life, health, and safety of the public.

Associate of Applied Science, Architectural and Engineering Technology

Program Outcomes
The specific educational outcomes that support the program objectives are to produce graduates who are able to:

• Demonstrate skill and proficiency in computer-aided drafting and design.
• Demonstrate knowledge of drafting conventions including symbols, linetypes, linewidths, and dimension styles as applicable to the design discipline.
• Visualize and translate drawing information to actual physical objects and completed construction components.
• Understand the role and purpose of building codes and standards as they pertain to the life, health, and safety of the public.
• Understand the role, duties, and responsibilities of the members of the design team, including the working relationship between technicians and professionals.
• Understand the elements of the construction document set and the role of construction documents as communication tools for the construction contract.
• Understand the construction process from the transformation of an idea or need into a completed project.
• Demonstrate communication skills to be successful in the employment environment.
• Demonstrate critical thinking and problem solving skills in the employment environment.

Admission Requirements
See Certificate and Associate Degree Program Admission Requirements at the beginning of Chapter 7, Academic Standards and Regulations.

Course Requirements
Certain courses require prerequisites or faculty permission. Call (907) 786-6465 for further information.

Graduation Requirements
In order to receive the AAS degree offered by the AET Department, students must achieve a grade of C or better in all courses required for the AAS degree.

Advising
Certain courses require prerequisites or faculty permission. Call (907) 786-6465 for further information.

Academic Progress
In order to receive the AAS degree offered by the AET Department, students must achieve a grade of C or better in all courses required for the AAS degree.

General University Requirements
1. Complete the General University Requirements for Associate Degrees located at the beginning of this chapter.

2. Complete the Associate of Applied Science General Degree Requirements (15 credits) located at the beginning of this chapter. As part of the general course requirements, GEOL A111 is recommended.

Major Requirements
1. Complete the following required courses (45 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AET A101 Fundamentals of CADD for Building Construction</td>
<td>4</td>
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<tr>
<td>AET A102 Methods of Building Construction</td>
<td>3</td>
</tr>
<tr>
<td>AET A111 Civil Drafting</td>
<td>3</td>
</tr>
<tr>
<td>AET A121 Architectural Drafting</td>
<td>3</td>
</tr>
<tr>
<td>AET A123 Codes &amp; Standards</td>
<td>3</td>
</tr>
<tr>
<td>AET A131 Structural Drafting</td>
<td>3</td>
</tr>
<tr>
<td>AET A142 Mechanical &amp; Electrical Technology</td>
<td>4</td>
</tr>
<tr>
<td>AET A143 Mechanical &amp; Electrical Drafting</td>
<td>3</td>
</tr>
<tr>
<td>AET A181 Intermediate CADD for Building Construction</td>
<td>4</td>
</tr>
<tr>
<td>AET A213 Civil Technology</td>
<td>4</td>
</tr>
<tr>
<td>AET A231 Structural Technology</td>
<td>4</td>
</tr>
<tr>
<td>AET A286 Design Project</td>
<td>4</td>
</tr>
<tr>
<td>MATH A105 Intermediate Algebra*</td>
<td>3</td>
</tr>
</tbody>
</table>

2. Electives

AET A295 is strongly recommended.

3. A total of 60 credits is required for the degree.

* This course satisfies the General Course Requirements

Recommended Course Sequence
Not all AET courses are offered every semester. Students should consult the faculty in the AET program for assistance in designing their course of study to ensure that university and major degree requirements are understood and followed. The sequence for a particular program is based on the semester of admission to the program and is available on the department's webpage at: www.uaa.alaska.edu/ctc/programs/ctd/aet.

FACULTY
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ARMY ROTC

Eugene Short Hall (ESH), Room 211, (907) 786-6094

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 educate, train, and prepare 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 for freshmen and sophomores and the advanced course 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. 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, certain courses require prerequisites or faculty permission.

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 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.

Three hours of mandatory physical training (PT) are required each week along with a one hour lab. Times and location of PT sessions to be announced.

Requirements

Two-Year Program
1. Available to UAA students with two years remaining until graduation. Students must take the courses listed below and complete Leader’s Training Course before starting the 300-level courses and complete Leader Development and Assessment Course before starting the 400-level courses.
   - MILS A301: Adaptive Team Leadership 3
   - MILS A302: Applied Team Leadership 3
   - MILS A401: Adaptive Leadership 3
   - MILS A402: Leadership in a Complex World 3
   - MILS A150: Army ROTC Leadership Laboratory (1) 4

2. Students take MILS A150 Army ROTC Leadership and Physical Training Laboratory each semester for a total of four semesters and 4 credits. Academic courses are taken in the order listed, beginning with MILS A301 Adaptive Team Leadership in the fall semester.

Three-Year Program
1. Available to UAA students with three years remaining until graduation. Cadets must take the courses listed below and complete Leader Development and Assessment Course before starting the 400-level courses.
   - MILS A201: Foundations of Leadership 3
   - MILS A202: Foundations of Tactical Leadership 3
   - MILS A301: Adaptive Team Leadership 3
   - MILS A302: Applied Team Leadership 3
   - MILS A401: Adaptive Leadership 3
   - MILS A402: Leadership in a Complex World 3
   - MILS A150: Army ROTC Leadership Laboratory (1) 6

2. Students take MILS A150 Army ROTC Leadership and Physical Training Laboratory each semester for a total of four semesters and 6 credits. Academic courses are taken in the order listed, beginning with MILS A201 Foundations of Leadership in the fall semester.

Four-Year Program
1. Available to UAA students with four years remaining until graduation. Cadets must take the courses listed below and complete Leader Development and Assessment Course before starting the 400-level courses.
   - MILS A101: Leadership and Personal Development 3
   - MILS A102: Introduction to Tactical Leadership 3
   - MILS A201: Foundations of Leadership 3
   - MILS A202: Foundations of Tactical Leadership 3
   - MILS A301: Adaptive Team Leadership 3
   - MILS A302: Applied Team Leadership 3
   - MILS A401: Adaptive Leadership 3
   - MILS A402: Leadership in a Complex World 3
   - MILS A150: Army ROTC Leadership Laboratory (1) 8

2. Students take MILS A150 Army ROTC Leadership and Physical Training Laboratory each semester for a total of four semesters and 8 credits. Academic courses are taken in the order listed, beginning with MILS A201 Foundations of Leadership in the fall semester.

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 from www.goarmy.com/rotc/scholarships.jsp, the UAA Army ROTC office or from a high school guidance counselor. Applications must be postmarked no later than January 10 of a student’s senior year. High school seniors may also compete for an Army ROTC scholarship locally at the UAA level. Contact UAA Army ROTC for more information.

2. Army ROTC at UAA has several scholarship options for college students. These scholarships cover tuition, fees, and books for freshmen, sophomores, juniors, and seniors. 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.

3. All scholarships and incentives are subject to federally mandated age restrictions. Contact Army ROTC at UAA or go to www.goarmy.com/rotc/scholarships.jsp for more information.

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 Phase II 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 17 branches with multiple careers in each one. Students receive the branch assignments during the 400-level year and will serve four years in the United States Army after commissioning.

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.

FACULTY

Captain Thomas A. Elmore, Assistant Professor/Chair, (907) 786-6093
Master Sergeant Donald G. Ramey, Assistant Professor, (907) 786-6092

AUTOMOTIVE AND DIESEL TECHNOLOGY

Auto & Diesel Technology Building (ADT), Room 207, (907) 786-1485
www.uaa.alaska.edu/ctc/programs/transportation/index.cfm

State of Alaska 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 and equipment industries. Consumer demands for increased performance and fuel economy, coupled with government regulations on vehicle emissions, are driving rapid developments in technology. The Automotive and Diesel Department offers AAS degrees in Automotive Technology and in Heavy Duty Transportation and Equipment that are designed to equip students with the 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 Institute for Automotive Service Excellence.

There are three options for the AAS Automotive Technology degree. The General Automotive Technology option for the AAS degree 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 the National Institute for Automotive Excellence. The Ford ASSET option for the AAS degree is designed to prepare students for a career in Ford and Lincoln-Mercury dealerships. Students train on current technology vehicles and components donated by Ford Motor Company. The General Motors ASE® option for the AAS degree is designed to prepare students for
a career in General Motors dealerships. Students train on current technology vehicles and components donated by General Motors Corporation. Graduates from the two corporate-sponsored AAS degree options receive factory credentials upon graduation. These credentials are recognized by the respective dealerships across the country.

The AAS degree and Undergraduate Certificate in Heavy Duty Transportation and Equipment (HDTE) are designed to prepare students to work as repair and maintenance technicians in the HDTE industry. Much of the curriculum is based on medium and heavy duty maintenance and repair task lists developed by the National Institute for Automotive Service Excellence. Students train on vehicles, equipment, and components provided by or procured from major manufacturers of medium and heavy duty trucks and equipment.

**Occupational Endorsement Certificates, Automotive**

**Certificate Description and Outcomes**

Four occupational endorsement certificate programs are available: Automotive Electrical; Automotive Brakes, Suspension and Alignment; Automotive Power Trains; and Automotive Engine Performance. These programs allow students to develop focused skill sets in high-demand areas of automotive maintenance and repair. At the completion of this certificate program, students are able to demonstrate:

1. Proficiency in diagnosis and repair of electrical/electronic systems OR automotive brakes, suspension, and alignment OR automotive power trains OR automotive engine performance.
2. Specialized employability skills for maintenance and repair technicians.

**Admission Requirements**

See Occupational Endorsement Certificate admissions requirements in Chapter 7, Academic Standards and Regulations.

**Advising**

Students should consult the ADT faculty for assistance in curriculum planning toward the occupational endorsement certificate.

**Computer Competency Requirement**

Automotive Technology Occupational Endorsement Certificates require demonstrated computer competency. Computer competency may be demonstrated in any of the following ways:

1. A 3-credit course in a computer language or an introductory course in data processing or microcomputers.
2. Work-related experience verifying computer competency as approved by the faculty advisor.
3. Self-initiated computer competency as approved by the faculty advisor.

**Occupational Endorsement Certificate Requirements**

1. Satisfy the General University Requirements for Occupational Endorsement Certificates at the beginning of this chapter.
2. Satisfy the program requirements for the emphasis area selected below.

**A. Automotive Electrical**

1) Complete the following courses:
   - ADT A102 Introduction to Automotive Technology 3
   - ADT A121 Basic Electrical Systems 3
   - ADT A131 Auto Electrical II 3
   - ADT A195 Automotive Practicum I (1-6) 6
   - ADT A227 Auto Electrical III 3

2) A total of 18 credits is required for the occupational endorsement certificate.

**B. Automotive Brakes, Suspension and Alignment**

1) Complete the following courses:
   - 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 A162 Suspension and Alignment 4
   - ADT A195 Automotive Practicum I (1-6) 6

2) A total of 23 credits is required for the occupational endorsement certificate.

**C. Automotive Power Trains**

1) Complete the following courses:
   - ADT A102 Introduction to Automotive Technology 3
   - ADT A121 Basic Electrical Systems 3
   - ADT A131 Auto Electrical II 3
   - ADT A195 Automotive Practicum I (1-6) 6

2) A total of 22 credits is required for the occupational endorsement certificate.

**D. Automotive Engine Performance**

1) Complete the following courses:
   - ADT A102 Introduction to Automotive Technology 3
   - ADT A121 Basic Electrical Systems 3
   - ADT A131 Auto Electrical II 3
   - ADT A202 Auto Fuel and Emissions Systems 4
   - ADT A222 Engine Performance 3
   - ADT A295 Automotive Practicum II 3

2) A total of 25 credits is required for the occupational endorsement certificate.

**Automotive Technology**

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.

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.

**Undergraduate Certificate, Automotive Technology**

**Certificate Description and Outcomes**

This certificate program prepares students to understand the theory of, diagnose, and repair engines, transmissions, transaxles, suspension, steering, brake systems, electrical/electronic systems, heating and air
conditioning systems, as well as fuel and ignition systems of modern vehicles. At the completion of this undergraduate certificate program, students are able to:
  1. Demonstrate technical knowledge and skills necessary for success in the automotive maintenance and repair industry.
  2. Demonstrate academic proficiency necessary to pass national examinations.
  3. Demonstrate proficiency in performing occupationally related tasks in a professional setting.
  4. Integrate knowledge from diverse areas to develop effective diagnostic and repair strategies involving complex systems.
  5. Demonstrate effective oral and written communication skills necessary for success in the workplace.

**Admission Requirements**
Satisfy the Undergraduate Certificate Admissions Requirements in Chapter 7, Academic Standards and Regulations.

**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:
  1. A 3-credit course in a computer language or an introductory course in data processing or microcomputers.
  2. Work-related experience verifying computer competency as approved by the faculty advisor.
  3. Self-initiated computer competency as approved by the faculty advisor.

**Undergraduate Certificate Requirements**
1. Satisfy the General University Requirements for Undergraduate Certificates at the beginning of this chapter.
2. Complete the Major Requirements listed below.

**Major Requirements**
1. Complete the following required courses:

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td>ADT A102</td>
<td>Introduction to Automotive Technology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ADT A121</td>
<td>Basic Electrical Systems</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ADT A131</td>
<td>Auto Electrical II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ADT A150</td>
<td>Brake Systems</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>ADT A195</td>
<td>Automotive Practicum (1-6)</td>
<td>2</td>
</tr>
<tr>
<td>Second Semester</td>
<td>ADT A122</td>
<td>Engine Theory and Diagnosis</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ADT A160</td>
<td>Manual Drive Trains and Axles</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>ADT A162</td>
<td>Suspension and Alignment</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>ADT A195</td>
<td>Automotive Practicum (1-6)</td>
<td>2</td>
</tr>
<tr>
<td>Third Semester</td>
<td>ADT A140</td>
<td>Automotive Engine Repair</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ADT A225</td>
<td>Auto Heating and A/C</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ADT A227</td>
<td>Auto Electrical III</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ADT A195</td>
<td>Automotive Practicum (1-6)</td>
<td>2</td>
</tr>
<tr>
<td>Fourth Semester</td>
<td>ADT A202</td>
<td>Fuel and Emissions</td>
<td>4</td>
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<tr>
<td></td>
<td>ADT A222</td>
<td>Engine Performance</td>
<td>3</td>
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<tr>
<td></td>
<td>ADT A260</td>
<td>Electronic &amp; Automatic Transmissions (3)</td>
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<td>or</td>
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<tr>
<td></td>
<td>ADT A295</td>
<td>Automotive Practicum II (3)</td>
<td></td>
</tr>
</tbody>
</table>

2. A total of 49 credits is required for the undergraduate certificate.

**Associate of Applied Science, Automotive Technology**
The Associate of Applied Science in Automotive Technology is offered with three options: General Automotive, Ford ASSET and General Motors ASE. Each option has different admissions requirements based on the policies of the program sponsors.

Students admitted to the degree 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 either the Ford ASSET option or the General Motors ASE option must complete both ADT A260 and ADT A295.

**Degree Description and Outcomes**
This associate’s degree program prepares students to understand the theory of, diagnose, and repair engines, transmissions, transaxles, suspension, steering, brake systems, electrical/electronic systems, heating and air conditioning systems, as well as fuel and ignition systems of modern vehicles. At the completion of this Associate of Applied Science degree program, students are able to:
  1. Demonstrate technical knowledge and skills necessary for success in the automotive maintenance and repair industry.
  2. Demonstrate academic proficiency necessary to pass national examinations.
  3. Demonstrate proficiency in performing occupationally related tasks in a professional setting.
  4. Integrate knowledge from diverse areas to develop effective diagnostic and repair strategies involving complex systems.
  5. Demonstrate effective oral and written communication skills necessary for success in the workplace.

**Admission Requirements**

**General Automotive Option**
Specific admission requirements apply to this option. See department for criteria.

**Automotive Technology Ford ASSET Option**
The ASSET (Automotive Student Services Educational Training) path for the Automotive Technology AAS degree is a joint venture with Ford Motor Company and sponsoring Ford Lincoln-Mercury dealerships. Admission to Ford ASSET is only in odd-numbered years and has specific admission requirements. Please contact the Ford ASSET advisor, the department or sponsoring dealership for details. Students enrolled in Ford ASSET attend class for the first 10 weeks of the semester and complete paid work experience the balance of the semester. General Education courses (English, Communications, etc.) are conducted on a half semester format by special arrangement through the College of Arts and Sciences.

**Admission Requirements**

**Ford ASSET Option**
Specific admission requirements apply to this option. Student selection occurs up to three months prior to the start of the program. Accepted students will have met admission criteria and been selected by a sponsoring Ford Lincoln-Mercury dealership.

**Automotive Technology General Motors ASE 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 General Motors ASE is only in even-numbered years and has specific admission requirements. Please contact the General Motors ASE advisor, the department or sponsoring dealership for details. Students enrolled in General Motors ASE attend class for the first 10 weeks of the semester and paid work experience the balance of the
semester. General Education courses (English, Communications, etc.) are conducted on a condensed semester format by special arrangement through the College of Arts and Sciences.

**Admission Requirements**

**General Motors ASEP Option**

Complete the following application procedures:

1. 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.
2. Admission to UAA GMASEP requires employment by a sponsoring Alaskan General Motors dealership or authorized repair facility.
3. Apply for admission to UAA and to the UAA GMASEP program by contacting the Automotive and Diesel Technology Department, University of Alaska Anchorage, 3211 Providence Drive, Anchorage, Alaska 99508. Telephone (907) 786-1485.
4. 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, Alaska 99508.
5. 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 Advising and Testing Center. Call (907) 786-4500 to make arrangements.
6. 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 ENGL 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 degree.

**Computer Competency Requirement**

The AAS degree in Automotive Technology requires demonstrated computer competency. Computer competency may be demonstrated in any of the following ways:

1. A 3-credit course in a computer language or an introductory course in data processing or microcomputers.
2. Work-related experience verifying computer competency as approved by the faculty advisor.
3. Self-initiated computer competency as approved by the faculty advisor.

**Degree Requirements (All Options)**

1. Complete the General University Requirements for Associate of Applied Science Degrees located at the beginning of this chapter.
2. Complete the General Course Requirements for Associate of Applied Science Degrees listed at the beginning of this chapter.
3. Complete the Major Requirements listed below.

**Major Requirements**

1. Complete the following required courses:

   **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 (1-6) 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 (1-6) 2
   - One AAS General Course Requirement 3

   **Third Semester**
   - ADT A140 Automotive Engine Repair 3
   - ADT A225 Auto Heating and A/C 3
   - ADT A227 Auto Electrical III 3
   - ADT A195 Automotive Practicum I (1-6) 2
   - One AAS General Course Requirement 3

   **Fourth Semester**
   - ADT A202 Auto Fuel and Emission System 4
   - ADT A222 Engine Performance 3
   - *ADT A260 Electronic & Automatic Transmissions (3) 3
   - or
   - *ADT A295 Automotive Practicum II (3) 3
   - Two AAS General Course Requirements 6
   - *Students admitted to the ASSET or the ASEP options must complete both ADT A260 and ADT A295

2. A total of 64 credits is required for the degree.

**Undergraduate Certificate, Heavy Duty Transportation and Equipment**

**Certificate Description and Outcomes**

The Heavy Duty Transportation and Equipment (HDTE) 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 five 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 HDTE 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 undergraduate certificate 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. At the completion of this undergraduate certificate program, students are able to:

- Demonstrate technical knowledge and skills necessary for success in the heavy-duty diesel 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.

**Admission Requirements**

Satisfy the requirements for Admission to Undergraduate Certificate Programs found in Chapter 7, Academic Standards and Regulations.

Students must complete the following admission requirements:
1. Submit UAA Undergraduate Application for Admission for the Heavy-Duty Transportation and Equipment Undergraduate Certificate.
2. Document placement at the MATH A055 entry level or higher. For testing schedule, contact Advising and Testing at (907) 786-4500.
3. Document placement at the ENGL A111 entry level or higher. For testing schedule, contact Advising and Testing at (907) 786-4500.
4. Demonstrate welding competency using one of the following methods:
   a. A course in welding (see faculty advisor for approved courses).
   b. Documented work experience verifying welding competency as approved by the faculty advisor.
   c. Demonstrated competency in welding as approved by the faculty advisor.
5. Demonstrate computer competency using one of the following methods:
   a. A course in computers (see faculty advisor for approved courses).
   b. Documented work experience verifying computer competency as approved by the faculty advisor.
   c. Demonstrated competency in computers as approved by the faculty advisor.

Advising
Students should consult the ADT faculty for assistance in curriculum planning toward the undergraduate certificate.

Certificate Requirements
1. Complete the General University Requirements for Certificates listed at the beginning of this chapter.
2. Complete the Major Requirements listed below.

Major Requirements
1. Complete these required courses:
   - ADT A121 Basic Electrical Systems 3
   - ADT A131 Auto Electrical II 3
   - ADT A151 Medium/Heavy-Duty Engine Repair 3
   - ADT A152 Heavy-Duty Suspension and Steering 4
   - ADT A153 Medium/Heavy-Duty Engine Lab 3
   - ADT A155 Heavy-Duty Brake Systems 4
   - ADT A156 Heavy-Duty Maintenance Inspection 6
   - ADT A195 Automotive Practicum I (1-6) 3
   - ADT A225 Auto Heating and A/C 3
   - ADT A227 Auto Electrical III 3
   - ADT A266 Heavy Duty Power Systems Lab 4
   - ADT A267 Heavy Duty Fuel Systems 4
   - ADT A268 Hydraulics and Pneumatics 4
   - ADT A269 Heavy Duty Drive Trains 4
2. A total of 51 credits is required for the Undergraduate Certificate.

Associate of Applied Science, Heavy Duty Transportation and Equipment

Degree Description and Outcomes
The Heavy Duty Transportation and Equipment (HDTE) AAS degree 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 degree may be completed in five 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 HDTE 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 Associate of Applied Science degree 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. At the completion of this undergraduate certificate program, students are able to:

- Demonstrate technical knowledge and skills necessary for success in the heavy-duty diesel 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.

Admission Requirements
Satisfy the requirements for Admission to Associate’s Degree Programs found in Chapter 7, Academic Standards and Regulations. Students must complete the following admission requirements:
1. Submit UAA Undergraduate Application for Admission for the Heavy-Duty Transportation and Equipment Associate of Applied Science.
2. Document placement at the MATH A055 entry level or higher. For testing schedule, contact Advising and Testing at (907) 786-4500.
3. Document placement at the ENGL A111 entry level or higher. For testing schedule, contact Advising and Testing at (907) 786-4500.
4. Demonstrate welding competency using one of the following methods:
   a. A course in welding (see faculty advisor for approved courses).
   b. Documented work experience verifying welding competency as approved by the faculty advisor.
   c. Demonstrated competency in welding as approved by the faculty advisor.
5. Demonstrate computer competency using one of the following methods:
   a. A course in computers (see faculty advisor for approved courses).
   b. Documented work experience verifying computer competency as approved by the faculty advisor.
   c. Demonstrated competency in computers as approved by the faculty advisor.

Advising
Students should consult the ADT faculty for assistance in curriculum planning toward the Associate of Applied Science degree.

Degree Requirements
1. Complete the General University Requirements for Associate Degrees listed at the beginning of this chapter.
2. Complete the General Course Requirements for Associate of Applied Science Degrees listed at the beginning of this chapter.
3. Complete the Major Requirements listed below.

Major Requirements
1. Complete these required courses:
   - ADT A121 Basic Electrical Systems 3
   - ADT A131 Auto Electrical II 3
   - ADT A151 Medium/Heavy-Duty Engine Repair 3
   - ADT A152 Heavy-Duty Suspension and Steering 4
   - ADT A153 Medium/Heavy-Duty Engine Lab 3
   - ADT A155 Heavy-Duty Brake Systems 4
   - ADT A156 Heavy-Duty Maintenance Inspection 6
   - ADT A195 Automotive Practicum I (1-6) 3
   - ADT A225 Auto Heating and A/C 3
   - ADT A227 Auto Electrical III 3
   - ADT A266 Heavy Duty Power Systems Lab 4
   - ADT A267 Heavy Duty Fuel Systems 4
   - ADT A268 Hydraulics and Pneumatics 4
   - ADT A269 Heavy Duty Drive Trains 4
ADT A155 Heavy Duty Brake Systems 4
ADT A156 Heavy Duty Maintenance Inspection 6
ADT A195 Automotive Practicum I (1-6) 3
ADT A225 Auto Heating and A/C 3
ADT A227 Auto Electrical III 3
ADT A266 Heavy Duty Power Systems Lab 4
ADT A267 Heavy Duty Fuel Systems 4
ADT A268 Hydraulics and Pneumatics 4
ADT A269 Heavy Duty Drive Trains 4

2. A total of 66 credits is required for the AAS degree.

FACULTY
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AVIATION TECHNOLOGY

The Aviation Technology Division (ATD) is a component of the University of Alaska Anchorage Community & Technical College and is located at the Aviation Technology Center 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 five 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) where qualified graduates of the program are eligible for direct hire by the Federal Aviation Administration. The AAS degree provides students with basic entry-level requirements, while the Bachelor of Science in Aviation Technology (BSAT) degree with an Air Traffic Control emphasis is available for students wishing to prepare for management positions in the air traffic career field.

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. This emphasis area includes courses specifically written to familiarize the student with the unique operational and management requirements of airlines, airports, and general aviation support operations.

The Aviation Maintenance Technology (AMT) program is Federal Aviation Administration (FAA) 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 Technology.

The Professional Piloting program prepares graduates for piloting careers in professional aviation. The Aviation Technology Division offers both associate’s (AAS Professional Piloting) and bachelor’s (BSAT, with Professional Piloting emphasis) degrees. The associated knowledge and airborne flight training required for pilots comprise the majority of the Professional Piloting degree core courses. 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 Aviation Minor allows those students pursuing degrees other than aviation the opportunity to minor in Aviation Technology.

Associate of Applied Science, Air Traffic Control

Program Description and Outcomes

ATC professionals utilize knowledge of aircraft operating limitations and performance, weather and atmospheric processes, radar theory and radar systems, federal regulations, the US 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 FAA Academy. 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 phenomenon affects 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.

Admission Requirements

Satisfy Associate Degree Admission Requirements in Chapter 7, Academic Standards and Regulations.

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 (ATSAI) 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 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 Aviation Technology Division office.

**Federal Aviation Administration (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: ATC A143, ATC A144, ATC A147, ATC A241/L, ATC A242/L, ATC A243/L.
2. In order to advance to 200 level ATC classes (ATC 241/L, ATC A242/L, ATC A243/L) students must have a C or better in ATC A143, ATC A144, ATC A147.
3. Students may repeat ATC A143, ATC A144, and ATC A147 only once due to performance.

**General University Requirements**

Complete the General University Requirements for Associate of Applied Science Degrees located at the beginning of this chapter.

**General Course Requirements**

Complete the Associate of Applied Science General Course Requirements located at the beginning of this chapter. ENGL A212 is recommended. Any English course used to satisfy the humanities General Education Requirement must be different from the written communications requirement and have a course number higher than ENGL A111.

**Major Requirements**

1. Complete the following required courses:
   - ATA A102 Introduction to Aviation Technology 3
   - ATA A132 History of Aviation 3
   - ATC A143 ATC Regulations 3
   - ATC A144 ATC Flight Procedures 3
   - ATC A147 Pilot/Controller Techniques 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
   - ATA A325 Tools for Weather Briefing 3
   - ATP A100 Private Pilot Ground School 3
   - ATP A235 Elements of Weather 3
   - ATC A133 Aviation Law and Regulations (3)
   - ATC A134 Principles of Aviation Administration (3)
   - ATA A233 Aviation Safety (3)
   - ATP A231 Search, Survival, and Rescue (3)
   - ATP A232 Advanced Aviation Navigation (3)

   *One of the following:
   - MATH A105 Intermediate Algebra (3) (Note: prerequisite)
   - MATH A107 College Algebra (4) (Note: prerequisite)
   - MATH A108 Trigonometry (3) (Note: prerequisite)
   - MATH A172 Applied Finite Mathematics (3) (Note: prerequisite)
   - MATH A200 Calculus I (4) (Note: prerequisite)
   - MATH A272 Applied Calculus (3) (Note: prerequisite)

   *One of the following not already taken: 3
   - ATA A133, ATA A134, ATA A233, ATA A331, ATA A425, ATP A231, ATP A232

   *Courses may be used to fulfill the Associate of Applied Science General Degree Requirements.

2. A total of 60-61 credits are required for the degree.

3. See the Aviation Technology Division advisor for appropriate sequence of courses.

**Associate of Applied Science, Aviation Administration**

**Program Description and Outcomes**

Aviation administrators require knowledge of aircraft operating limitations and performance, weather and atmospheric processes, federal regulations, and airport operations. The AAS degree in Aviation Administration provides an introduction to administrative duties and requirements as well as the skills necessary to provide administrative support. 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.

**Admission Requirements**

Satisfy the Undergraduate Certificate and Associate’s Degree Program Admission Requirements in Chapter 7, Academic Standards and Regulations.

**Advising**

All students must meet with an academic advisor in the 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 Aviation Technology Division Office.

**General University Requirements**

Complete the General University Requirements for Associate of Applied Science Degrees located at the beginning of this chapter.

**General Course Requirements**

Complete the Associate of Applied Science General Course Requirements located at the beginning of this chapter.

**Major Requirements**

1. Complete the following required courses:
   - ACCT A201 Principles of Financial Accounting 3
   - ATA A102 Introduction to Aviation Technology 3
   - ATA A132 History of Aviation 3
   - ATA A133 Aviation Law and Regulations 3
   - ATA A134 Principles of Aviation Administration 3
   - ATA A233 Aviation Safety 3
   - ATP A100 Private Pilot Ground School 3
   - ATP A235 Elements of Weather 3
   - CIS A105 Introduction to Personal Computers and Application Software (3)
   - CIS A110 Computer Concepts in Business (3)

   *One of the following:
   - MATH A105 Intermediate Algebra (3) (Note: prerequisite)
   - MATH A107 College Algebra (4) (Note: prerequisite)
   - MATH A108 Trigonometry (3) (Note: prerequisite)
   - MATH A172 Applied Finite Mathematics (3) (Note: prerequisite)
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 PRPE A108 or ENGL A109 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 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.

**General University Requirements**
Complete the General University Requirements for Undergraduate Certificates located at the beginning of this chapter.

**Major Requirements**

1. Core courses apply to both certificates: complete the following required courses:

   **General Subject Areas:**
   - AMT A170 Aircraft Ground Operations and Safety 1
   - AMT A171 Basic Aerodynamics 3
   - AMT A172 Aircraft Publications, Regulations and Records 3
   - AMT A174 Fundamentals of Aircraft Electronics 3
   - AMT A174L Fundamentals of Aircraft Electronics Lab 2
   - AMT A175 Drawing and Precision Measurement 2
   - AMT A176 Aircraft Materials and Processes I 2
   - AMT A186 Aircraft Non-Destructive Inspection Methods 3

   **Combined General, Airframe & Powerplant Subject Areas:**
   - AMT A181 Aircraft Fuel Systems 3
   - AMT A181L Aircraft Fuel Systems Lab 1
   - AMT A272 Aircraft Electrical Hardware and Systems 3
   - AMT A274 Aircraft Electronic Systems 5
   - AMT A274L Aircraft Electronic Systems Lab 1

2. For the AMT Powerplant Certificate, complete the above core courses plus the following powerplant courses:
   - AMT A177 Reciprocating Engine Theory 2
   - AMT A178 Turbine Engine Theory 2
   - AMT A187 Aircraft Reciprocating Engine Overhaul 3
   - AMT A187L Aircraft Reciprocating Engine Overhaul Lab 2
   - AMT A279 Aircraft Turbine Engine Repair and Overhaul 3
   - AMT A279L Aircraft Turbine Engine Repair and Overhaul Lab 1
   - AMT A282 Aircraft Propeller Systems 1
   - AMT A284 Aircraft Electrical Machinery 2
   - AMT A284L Aircraft Electrical Machinery Lab 2
   - AMT A287 Reciprocating Engine Installation and Operations 3
   - AMT A287L Reciprocating Engine Installation and Operations Lab 2
   - AMT A289 Turbine Engine Installation and Operations 3
   - AMT A289L Turbine Engine Installation and Operations Lab 2

3. For the AMT Airframe Certificate, complete the above core courses plus the following airframe courses:
   - AMT A185 Aircraft Sheetmetal Structures 3
   - AMT A185L Aircraft Sheetmetal Structures Lab 2
   - AMT A273 Aircraft Fluid Power Systems 2
   - AMT A273L Aircraft Fluid Power Systems Lab 2
   - AMT A283 Aircraft Auxiliary Systems 3
   - AMT A283L Aircraft Auxiliary Systems Lab 1
   - AMT A285 Aircraft Bonded Structures 4
   - AMT A285L Aircraft Bonded Structures Lab 1
   - AMT A286 Aircraft Materials and Processes II 2
   - AMT A364 Aircraft Avionics Systems 3
   - AMT A369 Airframe Assembly and Inspections 3
   - AMT A369L Airframe Assembly and Inspections Lab 2
4. A total of 60 credits is required for the AMT Powerplant Undergraduate Certificate and the AMT Airframe Undergraduate Certificate.

**Associate of Applied Science, Aviation Maintenance Technology Program Description and Outcomes**

Aviation Maintenance Associate of Applied Science degree 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. At the completion of this program, graduates will be able to:

1. Demonstrate proficient, entry-level aviation maintenance skills.
2. Demonstrate proficiency in emphasis area skills: airframe or powerplant.
3. Demonstrate knowledge of aircraft engines, structures, and systems, as well as appropriate FAA regulations.
4. Demonstrate knowledge of industry information: current status, segments and opportunities.
5. Demonstrate critical thinking, problem solving, and communication skills.

**Admission Requirements**

1. Satisfy Undergraduate Certificate and Associate Degree Admission Requirements in Chapter 7, Academic Standards and Regulations.
2. Apply for admission to UAA and to the AMT program by contacting the UAA Aviation Technology Division, Aviation Maintenance Technology program at 2811 Merrill Field Drive, Anchorage, Alaska 99501. Telephone: (907) 786-7200, Fax: (907) 786-7202 or at: http://uua.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 Aviation Technology Division office. See the Aviation Technology Division advisor for appropriate sequence of courses.

The AAS degree 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.

**Academic Progress Requirements**

**Computer Literacy**

This degree requires computer competency, which may be demonstrated by any one of the following:

1. A 3-credit course in computer language or an introductory course in data processing or microcomputers.
2. Work-related experience verifying computer literacy as approved by the faculty advisor.
3. Self-initiated computer literacy as approved by the faculty advisor.

**Mathematics Proficiency**

Demonstrate a proficiency in mathematics at or exceeding intermediate algebra (MATH A105) level, verified through transcripts or ACCUPLACER score.

**General University Requirements**

Complete the General University Requirements for Associate of Applied Science Degrees located at the beginning of this chapter.

**General Course Requirements**

Complete the General Course Requirements for AAS degrees located at the beginning of this chapter.

**Major Requirements**

1. Complete the following core requirements:
   - AMT A170 Aircraft Ground Operations and Safety 1
   - AMT A171 Basic Aerodynamics 3
   - AMT A172 Aircraft Publications, Regulations and Records 3
   - AMT A174 Fundamentals of Aircraft Electronics 3
   - AMT A174L Fundamentals of Aircraft Electronics Lab 2
   - AMT A175 Drawing and Precision Measurement 2
   - AMT A176 Aircraft Materials and Processes I 2
   - AMT A181 Aircraft Fuel Systems 3
   - AMT A181L Aircraft Fuel Systems Lab 1
   - AMT A186 Aircraft Non-Destructive Inspection Methods 3
   - AMT A272 Aircraft Electrical Hardware & Systems 3
   - AMT A274 Aircraft Electric Systems 5
   - AMT A274L Aircraft Electric Systems Lab 1

2. Complete either, A. Powerplant courses or B. Airframe courses:

   **A. Powerplant courses (28 credits)**
   - AMT A177 Reciprocating Engine Theory 2
   - AMT A178 Turbine Engine Theory 2
   - AMT A187 Aircraft Reciprocating Engine Overhaul 3
   - AMT A187L Aircraft Reciprocating Engine Overhaul Lab 2
   - AMT A279 Aircraft Turbine Engine Repair and Overhaul 3
   - AMT A279L Aircraft Turbine Engine Repair and Overhaul Lab 1
   - AMT A282 Aircraft Propeller Systems 1
   - AMT A284 Aircraft Electrical Machinery 2
   - AMT A284L Aircraft Electrical Machinery Lab 2
   - AMT A287 Reciprocating Engine Installation and Operations 3
   - AMT A287L Reciprocating Engine Installation and Operations Lab 2
   - AMT A289 Turbine Engine Installation and Operations 3
   - AMT A289L Turbine Engine Installation and Operations Lab 2

   **B. Airframe courses (28 credits)**
   - AMT A185 Aircraft Sheetmetal Structures 3
   - AMT A185L Aircraft Sheetmetal Structures Lab 2
   - AMT A273 Aircraft Fluid Power Systems 2
   - AMT A273L Aircraft Fluid Power Systems Lab 2
   - AMT A283 Aircraft Auxiliary Systems 3
   - AMT A283L Aircraft Auxiliary Systems Lab 1
   - AMT A285 Aircraft Bonded Structures 4
   - AMT A285L Aircraft Bonded Structures Lab 1
   - AMT A286 Aircraft Materials and Processes II 2
   - AMT A364 Aircraft Avionics Systems 3
   - AMT A369 Airframe Assembly and Inspections 3
   - AMT A369L Airframe Assembly and Inspections Lab 2

3. A total of 75 credits is required for the degree.
Associate of Applied Science, Professional Piloting

Program Description and Outcomes

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. At the completion of this program, students will be able to:

1. Demonstrate proficiency in instrument pilot and commercial pilot knowledge and flight skills.
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 aviation weather and of aviation weather services.

Admission Requirements

Satisfy Undergraduate Certificate and Associate’s Degree Admission Requirements found in Chapter 7, Academic Standards and Regulations.

Special Considerations

The following applies for those students desiring to pursue a professional piloting degree:

1. Costs for flight training are not included in university tuition and fees.
2. Students must pass an FAA Class II medical examination before beginning any flight training.
3. Students 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 Aviation Technology office for information.
4. Once formally registered for aviation classes at UAA, all subsequent flight training must be completed in residence at UAA. Flight training through other programs while enrolled at UAA is not permitted. Enrolled students who receive flight training outside UAA that is required under specific curricula will not receive credit for the corresponding UAA courses.
5. Under certain circumstances, academic credit may be granted for pilot certificates/ratings earned prior to enrolling at UAA. Contact a faculty advisor for determination.
6. Military pilots currently, or within the preceding 12 months, on active flight status may petition to have appropriate curriculum requirements awarded based on FAA pilot certificates without a proficiency check.

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 Aviation Technology Division Office.

See the Aviation Technology Division advisor for appropriate sequence of courses.

Academic Progress Requirements

Once enrolled in any flight training course, students are expected to complete the course requirements within the equivalent of two semesters. Failure to do so will be considered unsatisfactory progress and will result in a failing (F) grade.

General University Requirements

Complete the General University Requirements for Associate of Applied Science Degrees located at the beginning of this chapter.

General Course Requirements

Complete the General Course Requirements for AAS degrees located at the beginning of this chapter.

Major Requirements

1. Complete the following required courses:
   - ATA A102 Introduction to Aviation Technology 3
   - ATA A132 History of Aviation 3
   - ATA A133 Aviation Law and Regulations 3
   - ATA A233 Aviation Safety 3
   - ATA A311 Airline Operations 3
   - ATP A100 Private Pilot Ground School 3
   - 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 A231 Search, Survival, and Rescue 3
   - ATP A235 Elements of Weather 3
   - CIS A110 Computer Concepts in Business 3
   - *ENGL A212 Technical Writing (Note: prerequisite) 3
   - *PHIL A101 Introduction to Logic 3
   - *PHYS A123 Basic Physics I (Note: prerequisite) 3
   - *PHYS A123L Basic Physics I Laboratory (Note: prerequisite) 1

   *One of the following:
   - MATH A105 Intermediate Algebra (3) (Note: prerequisite)
   - MATH A107 College Algebra (4) (Note: prerequisite)
   - MATH A172 Applied Finite Mathematics (3) (Note: prerequisite)
   - MATH A272 Applied Calculus (3) (Note: prerequisite)

   *Courses may be used to fulfill the Associate of Applied Science, General Degree Requirements.

2. A total of 63-65 credits is required for the degree.

3. Students are required to complete a minimum of one pilot certification or rating course in residence.

Bachelor of Science, Aviation Technology

Program Description

The Bachelor of Science degree in Aviation Technology 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 three emphasis areas: Aviation Management, Traffic Control, and Professional Piloting, each having a 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, a common set of core courses, and courses relative to each individual emphasis.

Admission Requirements

1. Satisfy Baccalaureate Degree Admission Requirements in Chapter 7, Academic Standards and Regulations.
2. Emphasis areas may have additional admission requirements or considerations.
3. Students must be able to meet any certification requirements established by applicable government agencies.
Advising
All students must meet with an ATD academic advisor prior to beginning any program of study and are encouraged to meet with 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 Aviation Technology Division office.

See the Aviation Technology Division advisor for appropriate sequence of courses. A strong background in science, math, and reading skills is highly recommended.

Academic Progress
A minimum grade of C in each Aviation Technology course is required to graduate with this degree.

General University Requirements
Complete the General University Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

General Course Requirements
Complete the General Education Requirements (GER) for Baccalaureate Degrees listed at the beginning of this chapter.

Major Requirements
1. Complete the following required common core courses:
   - ATA A102 Introduction to Aviation Technology 3
   - ATA A133 Aviation Law and Regulations 3
   - ATA A233 Aviation Safety 3
   - ATA A331 Human Factors in Aviation 3
   - ATA A415 Company Resource Management 3
   - ATA A425 Civil Aviation Security 3
   - ATA A492 Air Transportation System Seminar 3
   - ATP A100 Private Pilot Ground School 3
   - ATP A235 Elements of Weather 3
   - BA A300 Organizational Theory and Behavior 3
   - BA A361 Human Resource Management 3
   - BA A461 Negotiation and Conflict Management 3
   - BA A488 Environment of Business 3
   - CIS A110 Computer Concepts in Business 3
   - *ECON A201 Principles of Macroeconomics 3
   - *ENGL A212 Technical Writing (Note: prerequisite) 3
   - *MATH A222 Applied Calculus (Note: prerequisite) 3
   - *PHIL A101 Introduction to Logic 3
   - *PHYS A123 Basic Physics I (3) (Note: prerequisite) 4
   - and
   - *PHYS A123L Basic Physics I Laboratory (1) (Note: prerequisite)
   - or
   - *CHEM A105 General Chemistry I (3) (Note: prerequisite)
   - and
   - *CHEM A105/L General Chemistry I Laboratory (1) (Note: prerequisite)
   *Courses may be used to fulfill the Bachelor of Applied Science, General Education Requirements.
2. Select one of the three following BSAT emphasis-related areas and complete the listed required courses.

Aviation Management Emphasis

Emphasis Description and Outcomes
The BSAT with the Aviation Management emphasis is designed to prepare graduates for management positions in all aspects of the aviation industry. The BSAT prepares students not only with the organizational, human relations, and managerial skills required in aviation management, but also with the appropriate technical background. 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.
5. Demonstrate a broad knowledge of the aviation industry.
6. Demonstrate a broad knowledge of aviation management functions and techniques.

Required Emphasis Courses
1. Complete the following required emphasis courses:
   - ACCT A201 Principles of Financial Accounting 3
   - ACCT A202 Principles of Managerial Accounting 3
   - ATA A132 History of Aviation 3
   - ATA A134 Principles of Aviation Administration 3
   - ATA A335 Airport Operations 3
   - ATA A336 Air Service Operations 3
   - ATA A337 Airline Operations 3
   - ATA A431 Aircraft Accident Investigation 3
   - *BA A151 Introduction to Business 3
   - BA A343 Principles of Marketing 3
   - BA A447 International Marketing 3
   - CIS A305 Managerial Presentations 3
   - CIS A376 Management Information Systems 3
   - ECON A202 Principles of Microeconomics 3
   - *PARL A101 Introduction to Law 3
   - Advisor Approved Elective 3
   *Courses may be used to fulfill the Bachelor of Applied Science, General Education Requirements.

2. A minimum of 124 credits is required for the Aviation Management emphasis, of which a minimum of 48 credits must be upper division.

Air Traffic Control Emphasis

Emphasis Description and Outcomes
ATC professionals utilize knowledge of aircraft operating limitations and performance, weather and atmospheric processes, radar theory and radar systems, federal regulations, the US air traffic control system, as well as navigation methods within the National Airspace System. The BSAT prepares students not only for the technical requirements of air traffic control, but also for the organizational, human relations, and managerial demands. Federal Aviation Administration Recommendation for Employment and Special Considerations contained in the Associate of Applied Science, Air Traffic Control degree apply to this emphasis. At the completion of this program, students will be able to:
1. Demonstrate knowledge of the theory 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 each affect the air traffic control system.
3. Demonstrate knowledge of Federal Regulations and the U.S. air traffic control system interactions, including FAA publications.
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.
5. Demonstrate awareness of ATC industry trends, future developments, global implications, and current management practices and techniques.
6. Demonstrate broad knowledge of the aviation industry.

Required Emphasis Courses
1. Complete the following required emphasis courses:
   - ATA A132 History of Aviation 3
   - ATA A143 ATA Regulations 3
   - ATA A144 ATA Flight Procedures 3
   - ATA A147 Pilot/Controller Techniques 3
   - ATA A241 Control Tower Operations 3
   *Courses may be used to fulfill the Bachelor of Applied Science, General Education Requirements.
Students majoring in another discipline who wish to minor in Aviation Technology must complete the following requirements. A total of 18 credits is required for the minor, 6 credits must be upper division. Students are encouraged to select courses from the following list. Students may request prior approval of other Aviation Technology courses.

Complete 18 credits from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMT A171</td>
<td>Basic Aerodynamics</td>
<td>3</td>
</tr>
<tr>
<td>AMT A172</td>
<td>Aircraft Publications, Regulations, and Records</td>
<td>3</td>
</tr>
<tr>
<td>AMT A177</td>
<td>Reciprocating Engine Theory</td>
<td>2</td>
</tr>
<tr>
<td>AMT A178</td>
<td>Turbine Engine Theory</td>
<td>2</td>
</tr>
<tr>
<td>AMT A185</td>
<td>Aircraft Sheetmetal Structures</td>
<td>3</td>
</tr>
<tr>
<td>AMT A185L</td>
<td>Aircraft Sheetmetal Structures Lab</td>
<td>2</td>
</tr>
<tr>
<td>AMT A285</td>
<td>Aircraft Bonded Structures</td>
<td>4</td>
</tr>
<tr>
<td>AMT A285L</td>
<td>Aircraft Bonded Structures Lab</td>
<td>1</td>
</tr>
<tr>
<td>ATA A132</td>
<td>History of Aviation</td>
<td>3</td>
</tr>
<tr>
<td>ATA A133</td>
<td>Aviation Law and Regulations</td>
<td>3</td>
</tr>
<tr>
<td>ATA A233</td>
<td>Aviation Safety</td>
<td>3</td>
</tr>
<tr>
<td>ATA A331</td>
<td>Human Factors in Aviation</td>
<td>3</td>
</tr>
<tr>
<td>ATA A335</td>
<td>Airport Operations</td>
<td>3</td>
</tr>
<tr>
<td>ATA A336</td>
<td>Air Service Operations</td>
<td>3</td>
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<tr>
<td>ATA A337</td>
<td>Airline Operations</td>
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<tr>
<td>ATA A425</td>
<td>Civil Aviation Security</td>
<td>3</td>
</tr>
<tr>
<td>ATA A431</td>
<td>Aircraft Accident Investigation</td>
<td>3</td>
</tr>
<tr>
<td>ATA A492</td>
<td>Air Transportation System Seminar</td>
<td>3</td>
</tr>
<tr>
<td>ATC A147</td>
<td>Pilot/Controller Techniques</td>
<td>3</td>
</tr>
<tr>
<td>ATP A100</td>
<td>Private Pilot Ground School</td>
<td>3</td>
</tr>
<tr>
<td>ATP A235</td>
<td>Elements of Weather</td>
<td>3</td>
</tr>
</tbody>
</table>

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COMPUTER ELECTRONICS

Kenai Peninsula College (KPC)
156 College Drive, Soldotna, Alaska, 99669, (907) 262-0330, (877) 262-0330
www.kpc.alaska.edu

This two-year degree program trains students in maintenance and repair of digital/computer equipment including computer circuitry, hands-on maintenance, electronic fundamentals, and programming. Students are prepared for employment as computer technicians, field service representatives, and other jobs requiring electronic skills.

Associate of Applied Science, Computer Electronics

The Computer Electronics program is only offered at Kenai Peninsula College (KPC), Kenai River Campus.

Advising for this program is only available from the Computer Science faculty at Kenai Peninsula College. Please call (907) 262-0344 for more information.

The graduates of the UAA Computer Electronics program will have the ability to:
1. Use all tools common to electronic repair, including hand tools, meters, oscilloscopes and logic probes;
2. Analyze and troubleshoot circuits in both analog and digital electronics;
3. Program in assembly and high-level languages;
4. Enter and print data in a spreadsheet program and enter and edit text using a word processor; and
5. Interface microcontrollers used in embedded systems.

Admission Requirements
Complete Associate's Degree Admissions Requirements for associate degrees found in Chapter 7, Academic Standards and Regulations.

A. General University Requirements
Complete the General University and the General Course Requirements for Associate of Applied Science Degrees at the beginning of this chapter.

B. Communication and General Requirements

1. Oral Communication Requirements:
   COMM A111 Fundamentals of Oral Communication (3)
   or
   COMM A235 Small Group Communication (3)
   or
   COMM A241 Public Speaking (3)

2. Written Communication Requirements:
   ENGL A111 Methods of Written Communication (3)
   ENGL A212 Technical Writing (3)

3. General Requirements:
   Math Courses:
   MATH A105 Intermediate Algebra (3)
   MATH A107 College Algebra (4)

   Physical Science Courses:
   PHYS A115/L Physical Science (4)
   PHYS A123/L Basic Physics I (4)

   Natural Science Courses:
   PHYS A124/L Basic Physics II (4)
   CHEM A103/L Survey of Chemistry (4)
   CHEM A105/L General Chemistry I (4)

4. Electives

5. A total of 60 credits is required for the degree.

C. Major Requirements

1. Complete the following required courses:
   - CIS A110 Computer Concepts in Business 3
   - CNT A170 Cisco Academy Network Fundamentals 4
   - ET A101 Basic Electronics: DC Physics 4
   - ET A102 Basic Electronics: AC Physics 4
   - ET A126 Principles of Logic and Gates 4
   - ET A175 Technical Introduction to Microcomputers 3
   - ET A240 Application of Integrated Circuits 3
   - ET A241 Microcomputer Interfacing 3

2. Complete 3 credits from the following:
   - CS A109 Computer Programming: (Languages vary) (3)
   - CS A110 Java Programming (3)
   - CS A111 Visual Basic.NET Programming (3)
   - CS A201 Programming Concepts I (3)
   - CS A207 C Programming (3)

3. Applied Technology Electives
   - Computer Science, Computer Network Tech, or Electronics 3-5

4. Electives
   - 4-1

5. A total of 60 credits is required for the degree.

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COMPUTER INFORMATION AND OFFICE SYSTEMS

Anchorage - University Center (UC), Room 130, (907) 786-6426
www.uaa.alaska.edu/ctc/computers/cios

Kenai - Ward Building, Room 204, (907) 262-035, (877) 262-0330
www.kpc.alaska.edu

Kodiak - Campus Center, Room 123D, (907) 486-1212
www.koc.alaska.edu

Matanuska-Susitna - FSM 108, (907) 745-9763
www.matsu.alaska.edu/cios

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. A few of these titles include administrative assistant, executive assistant, technical assistant, receptionist or information clerk, payroll assistant, information/database specialist, help-desk technician, and desktop or website publishing specialist.

The Computer Information and Office Systems (CIOS) program provides career education leading to an Associate of Applied Science (AAS) degree or Occupational Endorsement Certificates (OECs) that prepare students for career entry or advancement while developing and refining lifelong learning skills, fostering flexible career path options and building confidence to adapt to new technological demands in the workplace.

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 Microsoft Office certification examinations and the Certified Administrative Professional (CAP) and Certified Professional Secretary (CPS) certification examinations.
The following programs are available:

**Occupational Endorsement Certificates**

OECs are designed to give students skills in a specific occupational field and indicate competence in a technical and professional area. Some OECs are embedded in the AAS in Computer Information and Office Systems. Students must receive a satisfactory grade (C or higher, or P) in all required CIOS courses to be awarded an OEC. The CIOS Department offers the following OECs:

- Office Foundations
- Bookkeeping Support
- Medical Office Support
- Corporate Specified Skills
- Office Digital Media
- Office Support
- Technical Support

**Admission Requirements**

See Occupational Endorsement Certificate Admission Requirements in Chapter 7, Academic Standards and Regulations.

**Advising**

Students should contact the CIOS faculty for assistance with course planning toward occupational endorsement certificates.

**Academic Progress**

Students must earn a satisfactory grade (C or higher, or P) in all CIOS courses required for each certificate.

**General University Requirements**

See General University Requirements for Occupational Endorsement Certificates at the beginning of this chapter.

**Occupational Endorsement Certificate, Office Foundations**

Provides foundational skills required for entry into the administrative office professional field.

**Outcomes**

Upon completion of this OEC, students will demonstrate:
- Keystroke skills of 28 net words per minute minimum.
- Entry-level skills in word processing and spreadsheets.
- Entry-level skills using the Internet to obtain information.
- Customer service skills.
- Knowledge of proper grammar and mechanics used in business documents.
- The ability to create and maintain an electronic file system.

**Requirements**

1. All students must take the following basic computer skills courses or possess equivalent knowledge. Students may take challenge examinations to prove proficiency in these areas. Beginning computer users are encouraged to take CIOS A113 Operating Systems: MS Windows as the first course.
   - CIOS A101A Keyboarding A: Basic Keyboarding
   - CIOS A113 Operating Systems: MS Windows
   - CIOS A130A Word Processing I: MS Word
   - CIOS A135A Spreadsheets I: MS Excel
   - CIOS A146 Internet Concepts and Applications
   - CIOS A161A Proofreading
   - CNT A165 Customer Service Fundamentals

2. A total of 9 credits is required for this OEC.

**Occupational Endorsement Certificate, Bookkeeping Support**

Provides essential skills to handle financial transactions and recordkeeping.

**Outcomes**

Upon completion of this OEC, students will demonstrate:
- Basic skills in financial transactions, payroll, and bookkeeping procedures.

**Requirements**

1. Must complete the 9-credit Office Foundations OEC before admission to this program.
2. Complete 1 credit from the following:
   - CIOS A101B Keyboarding B: Business Documents I (1)
   - CIOS A101C Keyboarding C: Business Documents II (1)
3. Complete 3 credits from the following:
   - ACCT A101 Principles of Financial Accounting I (3)
   - ACCT A120 Bookkeeping for Business I (3)
4. Complete the following 10 credits:
   - CIOS A115 10-Key for Business Calculations (2)
   - CIOS A118 Payroll Procedures (2)
   - CIOS A120A Bookkeeping Software Applications I: QuickBooks (1)
   - CIOS A165 Office Procedures (3)
   - CIOS A220A Bookkeeping Software Applications II: QuickBooks (2)
5. A total of 14 credits is required for this OEC.

**Occupational Endorsement Certificate, Corporate Specified Skills**

Enables employers to target skill sets needed for positions within a specific business or industry. Consulting with a faculty advisor, students will complete a study plan, which will formally establish the specific program requirements. The study plan becomes official once it is approved by the department chair and is filed with Enrollment Management. Upon completing the specific requirements established in the study plan, students will be entitled to the certificate. Businesses can contact the department to develop specific criteria to meet individual job specifications. Note: this is not an individually customized OEC. Skill sets must be developed based on specific job descriptions approved by the department and industry. This OEC may be repeated with a different study plan.

**Outcomes**

Upon completion of this OEC, students will demonstrate the ability to:
- Produce business communication using typical office software.
- Communicate effectively orally and in writing.
- Deal effectively with business constituents and/or customers.

**Requirements**

Complete 9 to 29 credits of coursework from the following skill sets:

1. Choose 3 to 9 credits from the following technical skills set: 3-9
   - CIOS A101 Keyboarding (3)
   - CIOS A101A Keyboarding A: Basic Keyboarding (1)
   - CIOS A101B Keyboarding B: Business Documents I (1)
   - CIOS A101C Keyboarding C: Business Documents II (1)
   - CIOS A102 Keyboarding Skill Building (1)
   - CIOS A108 Digital Design Fundamentals (1)
   - CIOS A113 Operating Systems: MS Windows (1)
   - CIOS A115 10-Key for Business Calculations (2)
   - CIOS A125A Electronic Communications I: MS Outlook (1)
   - CIOS A130A Word Processing I: MS Word (1)
Occupational Endorsement Certificate, Office Digital Media

Builds on the Office Foundations OEC with basic skills in website maintenance and desktop publishing sometimes required of administrative assistants in an office setting.

Outcomes
Upon completion of this OEC, students will demonstrate:
- The ability to design and create business-quality electronic and print documents using a variety of media (digital imaging, website design, and desktop publishing programs).

Requirements
1. Must complete the 9-credit Office Foundations OEC prior to admission to this program.
2. Complete 1 credit from the following:
   - CIOS A101B Keyboarding B: Business Documents I (1)
   - CIOS A101C Keyboarding C: Business Documents II (1)
3. Complete the following 11 credits:
   - CIOS A108 Digital Design Fundamentals (1)
   - CIOS A152A Digital Imaging Concepts and Applications: Photoshop (3)
   - CIOS A153B Website Design: Dreamweaver (3)
   - CIOS A251A Desktop Publishing Concepts and Applications: InDesign (3)
   - CIOS A259 Preparing Electronic Documents: Adobe Acrobat (1)
4. Complete 3 elective credits approved by the CIOS Department Suggested Courses:
   - CIOS A153A Website Design: HTML (1)
   - CIOS A156 Web Graphics: Fireworks (1)
   - Programming or other related courses (1-3)
5. A total of 15 credits is required for this OEC.

Occupational Endorsement Certificate, Medical Office Support

Provides a solid foundation for individuals seeking a support position in a medical office.

Outcomes
Upon completion of this OEC, students will demonstrate:
- Keystroke skills of 35 net words per minute minimum.
- Effective communication using appropriate medical terminology.
- The ability to create and maintain a file system.

Requirements
1. Must complete the 9-credit Office Foundations OEC before admission to this program.
2. Complete 1 credit from the following:
   - CIOS A101B Keyboarding B: Business Documents I (1)
   - CIOS A101C Keyboarding C: Business Documents II (1)
3. Complete the following 11 credits:
   - CIOS A140A Databases I: MS Access (1)
   - CIOS A164 Filing (1)
   - CIOS A264A Records Management (2)
   - MA A101 Medical Terminology (3)
   - MA A120 Medical Office Procedures (4)
4. Complete 3 elective credits approved by the CIOS Department:
   - Recommended Courses:
     - BIOL A100 Human Biology (3)
     - CIOS A208 Medical Transcription (3)
     - MA A104 Essentials of Human Disease (3)
     - MA A140 Medical Terminology I (2-3)
     - MA A220 Coding for the Medical Office (3)
5. A total of 15 credits is required for this OEC.
Occupational Endorsement Certificate, Technical Support

This OEC blends the skills of a network technician with those of the administrative support professional by providing basic skills for setting up and troubleshooting computer hardware and supporting systems.

Upon completion of this OEC, students will demonstrate:

- Entry-level skills in word processing, spreadsheets, and databases.
- Basic skills in computer hardware, networking, and operating systems.

Requirements

1. Complete the following 1 credit:
   - CIOS A140A Databases I: MS Access 1

2. Complete 12 credits from the following:
   - CNT A106 PC Operating Systems (3)
   - CNT A126 PC Building, Upgrading, and Architecture (3)
   - CNT A183 Local Area Networks (3)
   - CNT A210 PC Technician Fundamentals (3) (offered only at Mat-Su College)

   - CNT A290 Selected Topics in Information Technology (1-3)

4. A total of 13 credits is required for this OEC.

Associate of Applied Science, Computer Information and Office Systems

This Associate of Applied Science Degree program prepares students for career entry or career advancement in a variety of office settings and also offers skill building for personal use. It provides students with the technical, administrative, and human relations skills required of office professionals. Both the Office Foundations and the Office Support Occupational Endorsement Certificates articulate directly into this degree.

Outcomes

Upon completion of this program, students will demonstrate:

- Keyboarding skills of 40 net words per minute minimum.
- Intermediate skills that utilize advanced features of word processing, spreadsheet, and database software.
- Oral and written communications skills that meet business standards.
- Application of critical thinking skills to make effective decisions and solve problems.
- Professional behavior and interpersonal skills.

Admission Requirements

See Associate of Applied Science admissions in Chapter 7 of this catalog.

Advising

Students should contact the CIOS faculty for assistance with course planning toward the Associate of Applied Science Degree.

Academic Progress

Students must earn a satisfactory grade (C or higher, or P) in all CIOS courses required for the degree.

Degree Requirements

A. General University Requirements

1. Complete the General University Requirements for Associate Degrees located at the beginning of this chapter.

2. Complete the Associate of Applied Science General Degree Requirements located at the beginning of this chapter. CIOS A260A, ENGL A212, and PSY A153 recommended.

B. Major Requirements

1. Complete the 9-credit Office Foundations OEC.

2. Complete the 13-credit Office Support OEC.

3. Complete the following 15 credits:
   - CIOS A102 Keyboarding Skill Building 1
   - CIOS A230A Word Processing II: Ms Word 2
   - CIOS A235A Spreadsheets II: Ms Excel 2
   - CIOS A240A Databases II: Ms Access 2
   - CIOS A262A Professional Development 3
   - CIOS A264A Records Management 2
   - CIOS A265 Office Management 3

4. Complete 3 credits of the following:
   - ACCT A101 Principles of Financial Accounting I (3)
   - ACCT A120 Bookkeeping for Business I (3)
   - ACCT A201 Principles of Financial Accounting (3)

5. Complete 3 credits from the following:
   - CIOS A261A Interpersonal Skills in Organizations (3) or HUMS/PSY A153 Human Relations (3)

6. Complete 1-3 credits from the following:
   - CIOS A276A Independent Project (1-3) or CIOS A295 Office Internship (1-3)

7. Complete a minimum of 1 elective credit 1

8. A total of 60 credits is required for this degree.

FACULTY

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COMPUTER SYSTEMS TECHNOLOGY

The Computer Systems Technology program is offered through the Matanuska-Susitna College and Kodiak College.

An Associate of Applied Science in Computer Systems Technology provides skills and education for qualified workers in the field of network and systems administration. The degree is designed to teach students both the business and IT-related concepts needed to enter the workforce as a systems administrator and technician. Four, full-time semesters are required to complete the degree program. An AAS in CST can be earned by completing a series of specific technical, business, and general education courses. Graduates with an AAS in Computer Systems Technology can be employed as systems administrators and in a wide variety of other positions in the information technology field. Graduates of this program will have a firm understanding of a wide variety of technical concepts, from the latest version of the Windows Operating System to routing and switching technology using Cisco equipment. Graduates will also have a wide body of knowledge in vendor neutral and theoretical concepts and practices.

Both the Matanuska-Susitna and the Kodiak campuses offer the degree program.
The program objective is the development of a well-trained workforce for the state of Alaska. Since many jobs in the computer technology sector are predicted to grow at high rates in the coming decade, this degree program was designed to train essential employees for that sector.

The educational objectives of the Computer Systems Technology program are to produce graduates who:

1. Have sufficient technical competence to obtain employment as an entry-level technician and to be able to progress professionally within the discipline and are prepared for advanced study.
2. Are able to communicate their ideas.
3. Are able to work within a team environment.
4. Are able to apply their knowledge and skills to create and operate networked computer systems that provide solutions and add to the capabilities of business organizations.
5. Demonstrate their understanding of professional and ethical behavior in the workplace.

Students graduating from this program will demonstrate:

1. Proficiency in operating system, utility software and network installation and configuration.
2. Proficiency in computer hardware, software and network operation, troubleshooting and upgrades. Demonstrate familiarity with hardware, software and network security features.
3. Management of user accounts and group accounts in a MS Windows workgroup and/or domain.
4. Ability to identify, design, and implement a network services management strategy.
5. Setup, configuration, and management of a router to include: router interfacing, command line editing, startup, setup, and configuration.
6. Proficiency in the management of local area networks (LANs).
7. Application of customer service principles, including relationships, perceptions, telephone techniques, quality, ethics, record keeping, interpersonal relationships, and teamwork.
8. Application of business principles and the fundamentals of investment, finance, organization, operation and management within a business entity.
9. Application of project management principles and practices, and use of appropriate project management software in the workplace.

**Associate of Applied Science, Computer Systems Technology**

**Admission Requirements**
Satisfy the Admission to Certificate and Associate Degree Programs Requirements in Chapter 7, Academic Standards and Regulations. Additionally, all students are required to take CIS A105 or possess equivalent knowledge prior to entering this degree program.

**Academic Progress**
In order to receive an Associate of Applied Science degree in Computer Systems Technology, students must achieve a grade of C or higher in all courses undertaken and applied to the degree.

**General University Requirements**
Complete the General University and General Course Requirements for Associate of Applied Science Degrees listed at the beginning of this chapter.

**Major Requirements**

1. Complete the following required courses:
   - BA A151 Introduction to Business 3
   - BA A231 Fundamentals of Supervision 3
   - CNT A160 PC Operating Systems 3
   - CNT A165 Customer Service Fundamentals 1
   - CNT A170 Cisco Academy Network Fundamentals 4
   - CNT A210 PC Technician Fundamentals 3
   - CNT A212 Network Technician Fundamentals 3
   - CNT A240 Windows System Essentials 2
   - CNT A241 Administering and Supporting Windows Workstations and Server 3
   - CNT A242 Windows Network Infrastructure Administration 3
   - CNT A243 Windows Directory Services Administration 3
   - CNT A244 Designing Secure Windows Networks 3
   - CNT A245 Windows Directory Services Design 2
   - CNT A246 Windows Network Infrastructure Design 2
   - CNT A261 Cisco Academy Router Fundamentals 4
   - CNT A270 Cisco Academy Switching and Intermediate Routing 4
   - CNT A271 Cisco Academy WAN Management 3
   - CNT A276 Independent Project (3) 3 or
   - CNT A282 Work Study (3)
   - ENGL A212 Technical Writing 3
   - MATH A105 Intermediate Algebra (3) 3-4 or
   - MATH A107 College Algebra (4)
   - MATH A172 Applied Finite Mathematics (3)

2. Students are required to meet a 2-credit Project Management requirement. CIOS A270 is recommended. See advisor for more information.

3. A total of 66-67 credits is required for the degree.

**FACULTY**

Harry Banks, Instructor, hbanks@matsu.alaska.edu
Michael Buckland, Assistant Professor, AFMPB@uaa.alaska.edu

**CONSTRUCTION MANAGEMENT**

**University Center (UC), Room 130, (907) 786-6465**

The Construction Management (CM) program provides comprehensive preparation and continuing 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 the 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 project changes 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 small multifamily projects to skyscrapers and from rural roads to major highways and bridges. The construction manager’s duties are varied, challenging, and rewarding.

The Construction Management 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. The curriculum has been designed in accordance with the requirements of the American Council for Construction Education (ACCE). 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’s 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 (AAS-CM) degree requires four to five semesters to complete. The Bachelor of Science (BSCM) degree requires eight to nine semesters to complete.

Advising
Students are encouraged to consult the faculty in the Construction Management 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.

All 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. 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 Intermediate Algebra).

English  Composition (skill level as demonstrated by ACT, SAT, or UAA placement test to qualify for enrollment in ENGL A111 Fundamentals of Written Communication).

The university offers courses to help students without this preparation to meet the math and English skill levels required in the Construction Management program. Insufficient preparation will increase the number of semesters required to complete the degree.

Associate of Applied Science, Construction Management

Program Outcomes
Graduates will be able to:

- Analyze, interpret and understand the fundamental processes used to create project designs and construction documents.
- Define the roles, relationships and responsibilities of the participants in the design and construction process.
- Use clear and effective written and oral communication methods to facilitate interaction with all project team participants.
- Define the methods, materials, and techniques used in the design and construction of buildings and civil works.
- Interpret construction documents to accurately predict project costs and assign resources.
- Utilize construction operations planning methods to create accurate project schedules and monitor productivity.
- Interpret and apply building codes in construction processes.
- Proficiently operate industry-standard software for computer-aided design and drafting (CADD), project cost estimating, and project scheduling.

- Utilize a working knowledge of safety, health, and environmental issues related to construction activities.

Admission Requirements
1. Satisfy the requirements under Admission to Certificate and Associate Degree Programs in Chapter 7, Academic Standards and Regulations.
2. Certain courses require prerequisites or faculty permission. See an academic advisor for further information.

Graduation Requirements
In order to receive the Associate of Applied Science in Construction Management, students must achieve a grade of C or better in all courses required for the degree.

Course Requirements
1. Complete the General University Requirements for Associate of Applied Science Degrees located at the beginning of this chapter.
2. Complete the General Course Requirements for Associate of Applied Science degrees located at the beginning of this chapter (15 credits).

Required Support Courses
Complete the following required support courses:

- ACCT A201 Principles of Financial Accounting 3
- ACCT A202 Principles of Managerial Accounting 3
- *ENGL A212 Technical Writing 3
- *MATH A107 College Algebra (4) 6/7
  - and
- *MATH A108 Trigonometry (3) or
- *MATH A109 Precalculus (6)
- *PHYS A123 Basic Physics I 3
  - and
- *PHYS A123/L Basic Physics I Laboratory 1
*Note: Required support courses may also be used to satisfy General Course Requirements.

Major Requirements
1. Complete the following required courses:
   - CM A101 Fundamentals of CADD for Building Construction 4
   - CM A102 Methods of Building Construction 3
   - CM A123 Codes and Standards 3
   - CM A142 Mechanical and Electrical 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 Civil Technology 4
   - CM A231 Structural Technology 4
   - CM A263 Civil Construction Cost Estimating 3
   - CM A295 Construction Management Internship 3
2. A total of 65/66 credits is required for the degree.

Bachelor of Science, Construction Management

Program Outcomes
Graduates will be able to:

- Manage the principal resources of a construction industry organization including its workers, equipment, time, and budgets.
- Represent the role of the constructor in the multi-discipline team responsible for managing construction projects.
- Assess project risk and evaluate alternate project delivery systems for project procurement and construction.
• Communicate effectively with project design professionals during the planning phases of design-build projects and throughout the construction phase of all projects.
• Utilize knowledge of materials, methods, and equipment operations to plan, control, and analyze the results of construction processes.
• Manage construction operations in unique and changing conditions to produce measured results that meet stated quality criteria and overall project goals.

Admissions Requirements
1. Satisfy the requirements under Admission to Baccalaureate Programs in Chapter 7, Academic Standards and Regulations.
2. Certain courses require prerequisites or faculty permission. See an academic advisor for further information.

Graduation Requirements
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.

General University Requirements
1. Complete the General University Requirements for All Baccalaureate Degrees located at the beginning of this chapter.
2. Complete the General Education Requirements for Baccalaureate Degrees at the beginning of this chapter.

Required Support Courses
1. Complete the following support courses:
   ACCT A201  Principles of Financial Accounting  3
   ACCT A202  Principles of Managerial Accounting  3
   BA/JUST A241  Business Law I  3
   *ECON A201  Principles of Macroeconomics  3
   *ECON A202  Principles of Microeconomics  3
   *ENGL A212  Technical Writing  3
   ES A411  Northern Design  3
   GEO A155  Fundamentals of Surveying  3
   *MATH A107  College Algebra (4)  6/7
   and
   *MATH A108  Trigonometry (3)  or
   *MATH A109  Precalculus (6)
   *PHIL A301  Ethics  3
   *PHYS A123/L  Basic Physics I with lab  3
2. Complete one of the following science courses:
   *CHEM A105/L  General Chemistry I with lab (4)  4
   or
   *GEOL A111  Physical Geology (4)
3. Complete one additional science course at or above the *100-level in CHEM, ENVI, GEOL, or PHYS (3 credits)
4. Complete one of the following:  3-4
   *MATH A200  Calculus (4)
   *MATH A272  Applied Calculus (3)
   *STAT A253  Applied Statistics for the Sciences (4)
   *Note: Required Support Courses may also be used to satisfy General Education Requirements.

Major Requirements
1. Complete the following required courses:
   CM A101  Fundamentals of CADD for Building Construction  4
   CM A102  Methods of Building Construction  3
   CM A123  Codes and Standards  3
   CM A142  Mechanical and Electrical 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  Civil Technology  4
   CM A231  Structural 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 & Strengths 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

*Tier 3 General Education Requirement, integrative capstone.

2. A total of 123/125 credits is required for the degree of which 42 credits must be upper division.

Accreditation
All necessary steps will be taken for successful accreditation by the American Council for Construction Education (ACCE).

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CORRECTIONS
Kenai Peninsula College
Kenai River Campus, Ward Building, Room 204, (907) 262-0344, (877) 262-0330 (toll free)
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)

The Corrections program is offered through the Kenai Peninsula College.

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

### Occupational Endorsement Certificate, Corrections

**Kenai Peninsula College**

**Kenai River Campus**

Ward Building, Room 204, (907) 262-0344, (877) 262-0330  
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)

This 16-credit hour certificate provides vocational training for entry-level positions in the field of corrections. The certificate can be extended to an Undergraduate Certificate, Corrections with the completion of additional courses.

### Program 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.
2. Demonstrate proficiency in probation, parole and correctional institutional methods.
3. Use English language writing skills to communicate and record information appropriately in the corrections field.
4. Manipulate spreadsheets and compute formulas with basic proficiency.
5. Recognize human services and systems for the helping professions.
6. Recognize the addictive process and methods to assist those in addiction.
7. Possess competitive entry-level skills for employment and promotion in the field of corrections.

### Admission Requirements

Admissions will be based on approval through Kenai Peninsula College. Students must submit the Kenai Peninsula College admissions application and the application for the corrections program. See Admission to Occupational Endorsement Certificates in Chapter 7, Academic Standards and Regulations, and 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 e-mail, telephone or face-to-face contact. See contact information above. 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. Kenai Peninsula College 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 the KPC course catalog. Contact (907) 262-0344 or (877) 262-0330 for further information.

### Occupational Endorsement Certificate Requirements

1. Complete the General University Requirements for Occupational Endorsement Certificate located at the beginning of this chapter.

2. Complete the following required courses with a minimum grade of C:

   - CIOS A135A Spreadsheets I: MS Excel 1
   - ENGL A111 Methods of Written Communication 3
   - HUMS A101 Introduction to Human Services 3
   - HUMS A122 Substance Abuse as a Contemporary Problem 3
   - JUST A110 Introduction to Justice 3
   - JUST A210 Principles of Corrections 3

3. A total of 16 credits is required for the occupational endorsement certificate.

### Undergraduate Certificate, Corrections

**Kenai Peninsula College**

**Ward Building, Room 204**, (907) 262-0344, (877) 262-0330  
www.kpc.alaska.edu

This 31-credit hour 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.

### Program 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.
7. Describe adults 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.

### Admission Requirements

Admissions will be based on approval through Kenai Peninsula College. Students must submit the Kenai Peninsula College admissions application and the application for the corrections program. See Admission to Occupational Endorsement Certificates in Chapter 7, Academic Standards and Regulations.

### 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 e-mail, telephone or face-to-face contact. See contact information above. Students interested in the undergraduate 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 UAAonline. Kenai Peninsula College 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 the KPC course catalog. Call (907) 262-0344 or (877) 262-0330 for further information.

Undergraduate Certificate Requirements
1. Complete the General University Requirements for Undergraduate Certificate located at the beginning of this chapter.

2. Complete the following required courses with a minimum grade of C:
   - CIOS A135A Spreadsheets I: MS Excel 1
   - HUMS A101 Introduction to Human Services 3
   - HUMS A122 Substance Abuse as a Contemporary Problem 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 A251 Criminology 3

3. Complete two of the following courses in written communication with a minimum grade of C:
   - ENGL A111 Methods of Written Communication (3)
   - ENGL A212 Technical Writing (3)
   - ENGL A213 Writing in the Social and Natural Sciences (3)
   - ENGL A214 Persuasive Writing (3)

4. Complete one of the following two courses, with a minimum grade of C:
   - COMM A237 Interpersonal Communication (3)
   - HUMS A153 Human Relations (3)

5. A total of 31 credits is required for this certificate.

FACULTY
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CULINARY ARTS
Lucy Cuddy Hall (CUDY), Room 126, (907) 786-4728
www.uaa.alaska.edu/ctc/culinary

The Culinary Arts and Hospitality Division offers two degrees: an Associate of Applied Science (AAS) degree in Culinary Arts, and a Bachelor of Arts degree in Hospitality and Restaurant Management (BA).

Persons employed in the foodservice industry who wish to update skills and knowledge may take culinary courses for professional development. Students are strongly encouraged to contact a faculty advisor about prerequisites and other lab or course requirements.

The Culinary Arts and Hospitality and Restaurant Management 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 foodservice 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 degree generally takes two years of full-time study to complete. With additional culinary electives, students may focus their studies in culinary/bakery, management, or hospitality. In the third or fourth semester, the capstone experience for the AAS degree is a 225-hour internship designed to provide direct hands-on advanced culinary experience. Arranged by the department, culinary internships are unpaid work experiences at an approved foodservice site. Through a study abroad agreement, students have the option of studying abroad for one semester at the prestigious Italian Culinary Institute of Florence.

The bachelor's degree generally takes four to five years of study to complete. In addition to general education requirements, students will complete a culinairy core, a business core, and then have the option to complete an emphasis study core in hospitality, hotel, restaurant management, convention and catering management, or tourism at the University of Nevada Las Vegas (UNLV) or Northern Arizona University (NAU). Or, students may complete a nutrition emphasis study core at UAA. The study cores at either UNLV or NAU require two semesters to complete; students have the option of attending UNLV or NAU or may complete the coursework via distance-delivered courses. 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).

The capstone experience for the bachelor's degree is a 600-hour Alaska internship offered through UAA and designed to provide direct 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.

The bachelor's degree is a 600-hour Alaska internship offered through UAA and designed to provide direct 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.

To help students move efficiently through the program, the department requires specific admissions and advising procedures outlined below. An approved placement test is required for admission and, while not used for placement, is used to advise students of potential difficulties in selected courses.

With application to the program, students open a personal portfolio used to monitor and track student progress and house transcripts, resumes, letters of reference, certificates of completion, scholarship information, evidence of computer competency, internship and job placement, and any other related career planning or placement materials. Students may use their portfolios to apply for scholarships, jobs, or for other personal or professional development.

Associate of Applied Science, Culinary Arts
The Culinary Arts program produces graduates who are not just prepared for entry-level work positions in the rapidly expanding and varied foodservice, hospitality and tourism industry, but also graduates who can quickly advance in career opportunities because of their formal training and education.

Program Outcomes
At the completion of this program, students are able to:

1. Apply theories and concepts of baking and implement techniques to operate or function in a commercial bakery.
2. Apply theories and concepts of cooking and implement techniques to operate or function in a commercial kitchen.
3. Identify sanitation and safety codes and procedures necessary to maintain a safe foodservice facility.
4. Analyze food cost and implement necessary controls to maintain costs and ensure profitability.
5. Demonstrate the ability to use human resource management and facility operation management concepts to ensure safety, customer service and profitability.

Admission Requirements
1. Satisfy the Admission to Associate's Degree Programs Requirements in Chapter 7, Academic Standards and Regulations.
2. Request an admission and advising packet. Complete and return the application form to the department. This form opens an individual student portfolio, which is used to advise and counsel...
students throughout their program of study and to contain important career planning and placement materials.

Advising

1. Call the Culinary Arts department at (907) 786-4728 for an appointment with a faculty advisor to plan a personal program of study.
2. Contact Advising and Testing (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 postsecondary transcripts may also be submitted to the department. These records will be used for advising only.

Academic Progress Requirements

Core 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. The core consists of the following courses (note each course must be completed with a grade of C or higher):

- 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
- DN A101 Principles of Nutrition 3

General University Requirements
Complete the General University Requirements for Associate of Applied Science Degrees located at the beginning of this chapter.

General Course Requirements
Complete the Associate of Applied Science General Course Requirements (15 credits) located at the beginning of this chapter.

Major Requirements

1. Complete the following required courses: 25
   - CA A103 Culinary Skill Development 4
   - CA A111 Bakery Skill Development 4
   - CA A201 A la Carte Kitchen 4
   - CA A202 Advanced Bakery 4
   - CA A223 Advanced Foods: Buffet and Garde Manger 3
   - CA A224 Hospitality Service 3
   - CA A230 Foodservice Management 3
   - CA A225 Hospitality Concept Design (3)
   - CA A295C Foodservice Internship (3)
   - DN A260 Food Science (3)

   Note: Other nutrition, culinary arts, or business courses may be considered for credit in the elective area by petition. See your program academic advisor.

2. Complete a minimum of 8 credits from the following: 8
   - CA A114 Beverages Management (3)
   - CA A225 Hospitality Concept Design (3)
   - CA A295C Foodservice Internship (3)
   - DN A260 Food Science (3)

3. A total of 60 credits is required for the degree.

Bachelor of Arts, Hospitality and Restaurant Management

The Hospitality and Restaurant Management 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.

Program Outcomes
At the completion of this program, students are able to:

1. Apply theories and concepts of baking and cooking and implement necessary techniques to operate or function in a commercial kitchen and bakery.
2. Demonstrate ability to practice concepts of customer service and operate front desk operations for lodging venues.
3. Analyze the food, beverage and lodging cost-control cycle and accounting practices, and implement controls to maintain costs and ensure profitability.
4. Demonstrate the ability to implement sales, marketing and promotion, and utilize resources to develop and implement marketing plans for foodservice, lodging, and tourism venues.
5. 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.
6. Identify health, building, and fire codes and implement requirements to maintain a safe hospitality environment.

Admission Requirements

1. Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.
2. Request an admission and advising packet. Complete and return the application form to the department. This form opens an individual student portfolio which is used to advise students throughout their program of study and to contain important career planning and placement materials.

Advising
Call the Culinary Arts and Hospitality Department at (907) 786-4728, for an appointment with a faculty advisor to plan a personal program of study.

Contact Advising and Testing (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 postsecondary transcripts may also be submitted to the department. These records will be used for advising only.

Degree Requirements

1. Complete the General University Requirements for Baccalaureate Degrees listed at the beginning of this chapter.
2. Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.
3. 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. To avoid taking additional courses later, it is highly recommended students complete ECON A201 and ECON A202.
4. A minimum of 3 credits of General Education Requirements must be at the 300- or 400-level to meet the upper division credit requirements for this degree.
5. Complete the Culinary Core, Business Core and one of the emphasis study core options listed below.

Major Requirements

1. Culinary Core
   Complete all of the following courses (31 credits):
   - CA A101 Hospitality Industry: Careers, Trends, and Practices 2
   - CA A103 Culinary Skill Development 4
   - CA A104 Sanitation 2
   - CA A107 Cost Control 4
   - CA A110 Quantity Food Purchasing 2
   - CA A111 Bakery Skill Development 4
   - CA A201 A la Carte Kitchen 4
   - CA A202 Advanced Bakery 4
   - CA A224 Hospitality Service 3
   - CA A225 Hospitality Concept Design 3
3. **Business Core**
   Complete all of the following courses (30 credits):
   - ACCT A201 Principles of Financial Accounting 3
   - ACCT A202 Principles of Managerial Accounting 3
   - BA A300 Organizational Theory and Behavior 3
   - BA A343 Principles of Marketing 3
   - BA A361 Human Resource Management 3
   - BA A381 Consumer Behavior 3
   - BA A463 Promotion Management 3
   - BA A488 Environment of Business 3
   - CIS A110 Computer Concepts in Business 3
   - STAT A252 Elementary Statistics (3) 3

   **Note:** To meet prerequisites, these courses must be taken in a certain sequence. You are encouraged to plan your course schedule with the program advisor.

4. There are three emphasis study core options in this degree program. In addition to General Education Requirements, students will complete a culinary core, a business core and then have the option to complete an emphasis study core in hospitality, hotel, restaurant management, convention and catering management or tourism at the Northern Arizona University (NAU) or University of Nevada Las Vegas (UNLV). Or, students may complete a nutrition emphasis study core at UAA. The emphasis study cores at either NAU or UNLV require two semesters to complete; students have the option of attending NAU or UNLV or may complete the coursework via distance-delivered courses. 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).

   Two semesters prior to transferring to either NAU or UNLV students are highly encouraged to apply for NSE. UNLV requires transfer students to have an overall GPA of 2.50.

   **Special note:** It is possible to complete NAU or UNLV coursework via distance delivery. This requires special coordination with the program academic advisor.

   1. **Northern Arizona University (NAU) Hospitality Core (24 credits):**
      a. Complete the following:
         - HA 335 Hospitality Law 3
         - HA 345 Human Resource Management 3
         - HA 355 Food and Beverage Cost Control 3
         - HA 400 Hospitality Sales Management 3
         - HA 490C Senior Seminar 3
         (last semester at NAU)
      b. Additionally, complete three courses from the following:
         - HA 340 Beverage and Bar Operations (3) (Must be 21 or older)
         - HA 390 International Hospitality Operations (spring/summer) 3
         - HA 401 Resort Management (spring) 3
         - HA 435 Hospitality Litigation (fall) 3
         - HA 442 Advanced Food & Beverage Management (3)
         - HA 477 Casino Management (fall) 3

   2. **University of Nevada Las Vegas (UNLV) Hospitality Core (24 credits):**
      a. Complete the following:
         - HMD 114 Lodging Operations 3
         - HMD 202 Exec. Planning/Housekeeping Operations 3
         - HMD 395 Facilities Management 3
         - HMD 401 Hotel Law 3
         - HMD 410 Hospitality Security/Preservation of Assets 3
         - TCA 379 Catering Sales and Operations 3
         - TCA 385 Convention Service Management 3
         - HMD or TCA Elective (300 level or higher) 3

   3. **University of Alaska Anchorage Nutrition Core (24 credits):**
      a. Complete the following:
         - DN A145 Child Nutrition 3

   **Note:** The Nutrition Core can be completed entirely online through UAA.

5. A minimum of 125 credits is required for the degree of which 42 must be upper division. Of those 42 upper division credits a total of 24 must be completed in residence at UAA.

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- Kendra Sticka, Assistant Professor, AFKD@uaa.alaska.edu
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- Naomi Everett, Instructor, AFNSE@uaa.alaska.edu

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**DENTAL ASSISTING**

**Allied Health Sciences Building (AHS), Room 160, (907) 786-6929**

http://alliedhealth.uaa.alaska.edu/da

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 dentist 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 a 34-credit certificate and an Associate of Applied Science degree.

The Dental Assisting 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
Undergraduate Programs, Community & Technical College
eligible to take the Dental Assisting National Board examination and upon successful completion will become certified dental assistants.

Advising
Special admission requirements apply. Interested individuals must contact the advisor in the Department of Dental Assisting to review procedures and requirement for admission.

Application Procedure
1. Complete a dental assisting application form and mail to:
   UAA Dental Assisting Program
   Allied Health Sciences Building, Room 160
   3211 Providence Drive
   Anchorage AK 99508-8371
   (907) 786-6929

2. Complete UAA-approved English and mathematics placement tests. Contact Advising and Testing at (907) 786-4500 for testing times. If test scores are low, additional coursework will be recommended to help you achieve your goal of completing the Dental Assisting program.

3. 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.

4. The information listed above must be in an applicant’s file before they will be considered for admission in the program in the fall semester of the year applying.

Selection Criteria: Applicants with a complete file are selected for admission based upon their test scores, grades in high school and college, and the ability to complete the application process. If test results are low and classes are recommended to improve reading comprehension levels, applicants will be advised and 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 Basic Life Support (BLS) class, licensure fees, and student health insurance.

Immunizations and BLS certification are required prior to clinical participation. Adult, infant and child CPR certification and immunizations must be current throughout the program. Students must be free of tooth decay and active periodontal disease.

Undergraduate Certificate,
Dental Assisting
Admission Requirements
See Admission to the Program and Application Procedure above.

Certificate Requirements

Fall Semester
DA A101 Essentials of Dentistry 3
DA A102 Infection Control in Dentistry 3
DA A110 Dental Radiography 3
DA A110L Dental Radiography Lab 1
DA A127 Dental Practice Management and Professionalism 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 Dental Assisting 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

Associate of Applied Science,
Dental Assisting
Admission Requirements
See Admission Requirements for Associate’s Degree Programs in Chapter 7, Academic Standards and Regulations.

General University Requirements
1. Complete the General University Requirements for Associate of Applied Science Degrees located at the beginning of this chapter.

2. Complete the Associate of Applied Science General Course Requirements (15 credits) located at the beginning of this chapter. (Completion of Biology and Psychology fulfill the requirement of 6 credits of mathematics, humanities, social sciences or natural sciences.)

Major Requirements
1. Complete the required courses for the Dental Assisting Undergraduate Certificate as outlined above. 34

2. Complete one of the following Biology courses 4
   BIOL A102 Introductory Biology (3)
   and
   BIOL A103 Introductory Biology Laboratory (1)
   or
   BIOL A111 Human Anatomy and Physiology I (4)
   or
   BIOL A115 Fundamentals of Biology (4)

3. Complete one of the following Nutrition Courses 3
   DN A101 Principles of Nutrition (3)
   or
   DN A203 Nutrition for Health Sciences (3)

4. Complete one of the following courses 3
   PSY A111 General Psychology (3)
   or
   PSY A150 Lifespan Development (3)
   or
   PSY/ HUMS A153 Human Relations (3)

5. Electives 7
   Recommended courses include:
   CIS A105 Introduction to Personal Computers and Application Software (3)
   DA A295B Clinical Practicum III (2)
   MA A101 Medical Terminology I (3)
   or
   General Education Requirements (GER) for Baccalaureate Degrees

6. A total of 60 credits is required for the degree.

FACULTY
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DENTAL HYGIENE
Allied Health Sciences Building (AHS), Room 160, (907) 786-6929
www.uaa.alaska.edu/ctc/alliedhealth/dh

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 which aid individuals and groups to 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.

The Dental Hygiene 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. The Associate of Applied
Science degree is a three-year endeavor comprising one year of science and
general education courses and two years of coursework in dental hygiene.
The program prepares graduates clinically and academically to take the
National and Western Regional Examining Boards (WREB) for licensure.

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.

Transfer of credits may be possible to graduates of an American Dental
Association (ADA) accredited dental assisting program. Contact the
Dental Hygiene program advisor for details.

Some expenses beyond tuition generally include activity fees, instruments,
uniforms, lab fees, student organization membership, graduation pin,
immunizations, cost of cardiopulmonary resuscitation (CPR) class,
licensure fees, student health insurance, and malpractice insurance for the
Western Regional Examining Boards and professional liability insurance.

Once enrolled as a dental hygiene student, the student can anticipate a
four-semester, 40-hour-per-week endeavor. Some evening classes and
clinics are scheduled.

**Associate of Applied Science,**
**Dental Hygiene**

**Description and Outcomes**

This degree program prepares students to sit for the ADA National
Board Dental Hygiene Examination (written examination) and the WREB
Anesthesia Examination (written and clinical) so that they are able to
work in the dental hygiene field. At the completion of the program,
students are able to:

1. Provide 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. Evaluate scientific literature.
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. Provide community oral health services.

**Admission Requirements**

1. Satisfy Requirements for Admission to Associate's Degrees found in
Chapter 7 of this catalog.
2. Special admission requirements and application procedures are
required. Selection criteria change periodically. Applicants must
contact the department for the selection criteria for the year they
wish to apply. Completion of the admission requirements does not
guarantee selection into the Dental Hygiene program. Applicants
transferring credit from another institution should apply to
UAA no later than November 1 prior to spring application to
Dental Hygiene program to allow sufficient time for application
processing and transcript evaluation by application deadline.
Spring enrollment in another institution may postpone transcript
evaluation and therefore affect program application acceptance.

a. Applicants must meet with the UAA Dental Hygiene program
advisor regarding application and program admission
requirements prior to application deadline.
b. Graduation from high school or equivalent.
c. Documentation from official transcripts showing successful
completion of the following science courses with a minimum
grade of C:
   - BIOL A111/L Human Anatomy and Physiology I
   - BIOL A112/L Human Anatomy and Physiology II
   - BIOL A240 Introductory Microbiology for
     Health Sciences (4)
   - BIOL A241 Lectures in Introductory
     Microbiology for Health Sciences (3)
   - CHEM A103 Survey of Chemistry (3)
   - CHEM A105 General Chemistry I (3)
   - CHEM A104 Introduction to Organic Chemistry and
     Biochemistry (3)

   Courses must be completed by the application deadline.
d. Documentation from official transcripts showing successful
completion of the following general requirements courses with a
minimum grade of C:
   - COMM A111 Fundamentals of Oral
     Communication (3)
   - COMM A235 Small Group Communication (3)
   - COMM A237 Interpersonal Communication (3)
   - COMM A241 Public Speaking (3)
   - ENGL A111 Methods of Written Communication
   - PSY A111 General Psychology (3)
   - PSY A150 Lifespan Development (3)
   - PSY A153 Human Relations (3)
   - SOC A101 Introduction to Sociology (3)
   - SOC A201 Social Problems and Solutions (3)
   - SOC A222 Small and Rural Communities (3)
   - SOC A307 Demography (3)
   - SOC A309 Urban Sociology (3)

   Courses must be completed by the application deadline.

**Special Considerations**

Due to the nature of the work, 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 exposure 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 information concerning illegal activity, crimes, hospitalization history regarding emotional or mental illness, drug addiction, alcoholism, and contagious diseases. If these are issues for the applicant, it is highly recommended the applicant contact the Alaska Division of Occupational Licensing or a similar government agency in any state in which the applicant wants to practice. 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 by the first day of class:

1. A signed application form indicating the understanding and acceptance of the Dental Hygiene program requirements regarding health screening, vaccinations, 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 at orientation. Certification must be kept current until graduation.
3. Professional liability insurance 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.

In order to satisfy clinical requirements, students are responsible for providing both adult and child patients.

Application Procedure

To be considered for fall admission into the program, the application process must be completed by the deadline date posted on the program's website.

1. Complete the Dental Hygiene program application and submit to the address below.
2. Provide proof of admittance into the University of Alaska Anchorage as a premajor dental hygiene student.
3. Submit official transcripts (non-UA) and request transcript credit evaluation (for non-UAA transcripts) to UAA Enrollment Management. Proof of completion of the courses listed under Admission Requirements 3 and 4 through transcript submission and transcript credit evaluation must be completed by the application deadline date.
4. Three letters of recommendation sent to the Dental Hygiene program on the provided forms.
5. Submission of current Health Occupations Basic Entrance Test (HOBET) scores to the UAA Dental Hygiene program no later than the application date.

Information and applications can be obtained by contacting:
UAA Dental Hygiene Program
Allied Health Sciences Building, Room 160
3211 Providence Drive
Anchorage, AK 99508-8371
Please call (907) 786-6929
www.uaa.alaska.edu/ctc/alliedhealth/dh/

Advising

Students should contact the Dental Hygiene program advisor for details.

Academic Progress

Students must earn at least 75 percent or higher in each dental hygiene course.

Degree Requirements

1. Complete the General University Requirements for Associate of Applied Science Degrees located at the beginning of this chapter.
2. Complete the Associate of Applied Science General Course Requirements located at the beginning of this chapter (ENGL A212 is recommended).
3. Complete the Major Requirements listed below.

Major Requirements

1. Complete the following required courses with a minimum grade of C:

   Fall Semester 1st year
   DA A110/A110L Dental Radiography with lab 4
   DH A201 Oral Histology and Embryology 2
   DH A202 Basic Techniques for Dental Hygienists 7
   DH A204 Anatomy of the Orofacial Structures 2
   *DN A101 Principles of Nutrition (3) 3
   or
   *DN A203 Nutrition for Health Sciences (3)

   *Due to a heavy credit load, it is recommended that the nutrition course be taken prior to formal admission into the Dental Hygiene Program.

   Spring Semester 1st year
   DA A160 Materials in Dentistry 3
   DH A222 Adjunctive Techniques for Dental Hygienists 1.5
   DH A292D Clinical Seminar I 1
   DH A295D Clinical Practicum I 4
   DH A311 Periodontics 2
   DH A365 Pharmacology for Dental Hygienists 2

   Fall Semester 2nd year
   DH A310 Oral Pain Control 3
   DH A312 Advanced Techniques for Dental Hygienists 3
   DH A314 Pathology of Oral Tissues 2
   DH A321 Current Periodontal Therapies 2
   DH A392C Clinical Seminar II 1
   DH A395C Clinical Practicum II 5

   Spring Semester 2nd year
   DH A316 Professional Dental Hygiene Practice 1.5
   DH A324 Community Dental Health I 2
   DH A392D Clinical Seminar III 1
   DH A395D Clinical Practicum III 6

2. A total of 73 credits is required for the degree.

FACULTY
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The Culinary Arts, Hospitality, Dietetics and Nutrition department seeks to meet the growing needs of the dietetics and nutrition industry by training entry-level registered dietitians, community nutrition and nutrition science professionals. Three undergraduate academic areas of study are offered:

**Bachelor of Science in Nutrition**
- **Community Nutrition Emphasis** is for students who are interested in non-Registered Dietitian (RD) required jobs in public health, health promotion and wellness settings, including 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 RDs, to improve the health and well-being of individuals and communities.
- **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.

The Nutrition Minor allows those students pursuing degrees other than nutrition the opportunity to minor in Nutrition.

Dietetics and Nutrition also offers a Graduate Certificate: Dietetic Internship. Please see Chapter 12, Graduate Programs for more information.

**BACHELOR OF SCIENCE, NUTRITION**

The Bachelor of Science degree in Nutrition prepares individuals for professional positions within the nutrition industry. The mission statement of the Bachelor of Science degree in Nutrition is to guide the future of nutrition in Alaska by preparing students for work as entry-level community nutrition and nutrition science professionals. Related career opportunities are found within schools, public health programs, and health- and wellness-settings, depending on the selected emphasis area.

Within the degree there are two emphasis areas: Community Nutrition and Nutrition Science, each having a 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, a common set of core courses, and courses relative to each emphasis area.

Students can complete their GERs and prerequisite courses at the University of Alaska location of their choice. The Dietetics and Nutrition (DN) course requirements are online courses to enable access to the BS in Nutrition degree statewide. Some courses require students to complete practicums with registered dietitians in their communities. If practicums are located in healthcare settings, fingerprinting and criminal background checks will be required and paid for by the student.

**Admission Requirements**
1. Satisfy the Admission to Baccalaureate Degree Programs Requirements in Chapter 7, Academic Standards and Regulations.
2. Request an admission and advising packet. Complete and return the application form to the department. This form opens an individual student portfolio, which is used to advise and counsel students throughout their program of study, and to contain important career planning and placement materials.
3. Meet with the Dietetics and Nutrition program advisor regarding application and program admission requirements prior to application. For an advising appointment call 786-4728.
4. Satisfy and meet any requirements established by applicable health care facilities such as fingerprinting and criminal background checks.

**Academic Progress**
To graduate with a BS in Nutrition students must have met the following GPA requirements:
1. A minimum overall major GPA of 2.50.
2. No course in which a grade below C has been received will count towards the major.
3. A minimum cumulative GPA of 2.50 in all university coursework.

**Advising**
1. Call the Culinary Arts, Hospitality, Dietetics and Nutrition Department at (907) 786-4728, for an appointment with a Dietetics and Nutrition program advisor to plan a personal program of study.
2. Contact Advising and Testing (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 postsecondary transcripts may also be submitted to the department. These records will be used for advising only.
3. All students in the BS in Nutrition degree program (both emphasis areas) are required to participate in the nutrition group advising sessions a minimum of one time per semester.

**Community Nutrition Emphasis**

**Emphasis Description and Outcomes**
The purpose of an emphasis in community nutrition is to provide students with a thorough understanding of nutrition and the ability to communicate principles of nutrition to the public. This emphasis will have a strong focus on communication as this will be a significant job-related responsibility in this field.

Some expenses beyond tuition generally include activity fees, lab fees, fingerprinting and criminal background checks for practicums and food/supplies for some DN courses.

At the completion of this program students will be able to:
1. Assess the nutrition needs of individuals, populations and diverse cultures, including infants, children, adolescents, adults, pregnant/lactating females and the elderly.
2. Evaluate the therapeutic nutrition needs for various conditions, including, but not limited to overweight and obesity, diabetes, cancer, and cardiovascular, gastrointestinal and renal disease.
3. Develop communication skills appropriate for entry-level jobs in nutrition and dietetics.
4. Integrate principles of research methodology, interpretation of literature and integration of research principles into evidence-based practice.
5. Appraise the role of environment, food, nutrition and lifestyle choices in health promotion and disease prevention.
6. Specify the nutrition therapy recommended for a selected disease state.

**Degree Requirements**
1. Complete the General University Requirements for Baccalaureate Degrees listed at the beginning of this chapter.
2. Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.
3. Complete the Support Courses and the Major Requirements listed below.
Support Courses

Complete the following support courses, some of which may be used to satisfy the General Education Requirements (43 credits):

- **Biol A102** Introductory Biology 3
- **Biol A103** Introductory Biology Laboratory 1
- **Chem A103** Survey of Chemistry I 3
- **Chem A103L** Survey of Chemistry I Laboratory 1
- **Chem A104** Introduction to Organic Chemistry and Biochemistry 3
- **Chem A104L** Introduction to Organic Chemistry and Biochemistry Laboratory 1
- **Comm course** Speech Communication GER course 3
- **Econ A201** Principles of Macroeconomics 3
- **Engl A111** Methods of Written Communication 3
- **Engl A212** Technical Writing 3
- **Fine arts course** 3
- **Humansities** (language recommended) 6
- **Math A107** College Algebra 4
- **Psy A111** General Psychology (3) 3
- **Soc A101** Introduction to Sociology (3) 3
- **Stat A252** Elementary Statistics 3

Major Requirements

1. Complete the following required courses (48 credits):
   - **Biol A100** Human Biology 3
   - **Biol A240/L** Introductory Microbiology for Health Sciences with Laboratory 4
   - **Comm - two additional oral communications courses** 6
   - **Dn A100** Introduction to Nutrition and Dietetics 1
   - **Dn A145** Child Nutrition 3
   - **Dn A147** Geriatric Nutrition 3
   - **Dn A155** Survey of Alaska Native Nutrition 3
   - **Dn A203** Nutrition for Health Sciences 3
   - **Dn A255** Concepts of Healthy Food 3
   - **Dn A301** Nutrition Assessment 2
   - **Dn A303** Preventive and Therapeutic Nutrition 3
   - **Dn A310** Nutrition Communications 2
   - **Dn A315** World Food Patterns 3
   - **Dn A355** Weight Management and Eating Disorders 3
   - **Dn A375** Research Methods in Nutrition and Dietetics 3
   - **Dn A415** Community Nutrition 3

   *Integrative Capstone Course

2. Electives (29 credits): 23 credits of electives or other self-select courses must be upper division courses (300 or 400 level).

3. A minimum of 120 credits is required for the Community Nutrition emphasis, of which a minimum of 42 credits must be upper division.

The following courses are recommended as higher-level GERs if the student is interested in pursuing the Registered Dietitian (RD) career pathway at a later time:

- **Biol A111/L** Human Anatomy and Physiology I with Laboratory 4
- **Biol A112/L** Human Anatomy and Physiology II with Laboratory 4
- **Biol A115/L** Fundamentals of Biology I with Laboratory 4
- **Chem A105** General Chemistry I 3
- **Chem A105L** General Chemistry I Laboratory 1
- **Chem A106** General Chemistry II 3
- **Chem A106L** General Chemistry II Laboratory 1
- **Chem A321** Organic Chemistry I 3
- **Chem A441** Principles of Biochemistry 3

The following electives are recommended if the student is interested in pursuing the RD career pathway at a later time:

- **Dn A260** Food Science 3
- **Dn A350** Foodservice Systems and Quantity Foods 3
- **Dn A450** Dietetic Management 3
- **Dn A475** Advanced Nutrition 3

Nutrition Science Emphasis

**Emphasis Description and Outcomes**

The purpose of this emphasis is to provide the training necessary to pursue advanced study in nutrition leading toward a career in nutrition research. This option also can be used for those students seeking admission to medical schools. Those students seeking medical school admission will also likely need one year of physics courses (8 credits). Students interested in applying to medical school should also maintain regular contact with a pre-med advisor.

Some expenses beyond tuition generally include activity fees, lab fees, fingerprinting and criminal background checks for practicums and food/supplies for some DN courses.

At the completion of this program students will be able to:

1. Assess the nutrition needs of individuals, populations and diverse cultures, including infants, children, adolescents, adults, pregnant/lactating females and the elderly.
2. Evaluate the therapeutic nutrition needs for various conditions, including, but not limited to overweight and obesity, diabetes, cancer, and cardiovascular, gastrointestinal and renal disease.
3. Develop communication skills appropriate for entry-level jobs in nutrition and dietetics.
4. Integrate principles of research methodology, interpretation of literature and integration of research principles into evidence-based practice.
5. Appraise the role of environment, food, nutrition and lifestyle choices in health promotion and disease prevention.
6. Evaluate the current literature related to selected topics in advanced nutrition.

Degree Requirements

1. Complete the General University Requirements for Baccalaureate Degrees listed at the beginning of this chapter.
2. Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.
3. Complete the Support Courses and the Major Requirements listed below.

Support Courses

1. Complete the following support courses, some of which may be used to satisfy the General Education Requirements (61-62 credits):
   - **Biol A111/L** Human Anatomy and Physiology I with Laboratory 4
   - **Biol A112/L** Human Anatomy and Physiology II with Laboratory 4
   - **Biol A115/L** Fundamentals of Biology I with Laboratory 4
   - **Chem A105** General Chemistry I 3
   - **Chem A105L** General Chemistry I Laboratory 1
   - **Chem A106** General Chemistry II 3
   - **Chem A106L** General Chemistry II Laboratory 1
   - **Comm course** Speech Communication GER course 3
   - **Econ A201** Principles of Macroeconomics 3
   - **Engl A111** Methods of Written Communication 3
   - **Engl A212** Technical Writing 3
   - **Fine arts course** 3
   - **Humansities** (language recommended) 6
   - **Math A107** College Algebra (4) 6-7
   - **Math A108** Trigonometry (3) OR
   - **Math A109** Precalculus (6)
   - **Math A200** Calculus I 4
   - **Psy A111** General Psychology (3) OR
Major Requirements

1. Complete the following required courses (51 credits):
   - BIOL A240/L Introductory Microbiology for Health Sciences with Laboratory 4
   - BIOL A242/L Fundamentals of Cell Biology with Laboratory 4
   - CHEM A321 Organic Chemistry I 3
   - CHEM A322 Organic Chemistry II 3
   - CHEM A323L Organic Chemistry Laboratory 2
   - *CHEM A441 Principles of Biochemistry I 3
   - CHEM A442 Principles of Biochemistry II 3
   - CHEM A443 Biochemistry Laboratory 2
   - DN A100 Introduction to Nutrition and Dietetics 1
   - DN A145 Child Nutrition 3
   - DN A147 Geriatric Nutrition 3
   - DN A203 Nutrition for Health Sciences 3
   - DN A301 Nutrition Assessment 2
   - DN A303 Preventive and Therapeutic Nutrition 3
   - DN A315 World Food Patterns 3
   - DN A355 Weight Management and Eating Disorders 3
   - DN A375 Research Methods in Nutrition and Dietetics 3
   - DN A475 Advanced Nutrition 3

   *Integrative Capstone Course

2. Electives (7-8 credits): 7-8 credits of electives or other self-select courses must be upper division courses (300 or 400 level).

3. A minimum of 120 credits is required for the Community Nutrition emphasis, of which a minimum of 42 credits must be upper division.

Depending on the student's career plans, the following courses are recommended (per an advising session):
   - DN A255 Concepts of Healthy Food (3)
   - DN A260 Food Science (3)
   - Physics (see Pre-Med Advisor) (8)

Minor, Nutrition

Students majoring in another discipline who wish to minor in Nutrition must complete the following requirements. Nutrition is essential to the maintenance of a healthy life. A minor in Nutrition will act as a supplement to other fields of study and the application of knowledge to target populations and systems. A minor requires 18 credits; 6 credits must be upper division.

Required Core (6 credits)
   - DN A101 Principles of Nutrition (3) 3
   - or
   - DN A203 Nutrition for Health Sciences (3)
   - DN A145 Child Nutrition (3) 3
   - or
   - DN A147 Geriatric Nutrition (3)

Required Upper Division Courses (6 credits)
   - Select 6 credits from the following:
     - DN A303 Preventive and Therapeutic Nutrition (3)
     - DN A315 World Food Patterns (3)
     - DN A355 Weight Management and Eating Disorders (3)

Electives *
   - Select 6 credits from the following:
     - DN A145 Child Nutrition (3)
     - DN A147 Geriatric Nutrition (3)
     - DN A155 Survey of Alaska Native Nutrition (3)
     - DN A215 Sports Nutrition (3)

*Note: Other courses may be counted toward the minor with written approval of an advisor in the Culinary Arts, Hospitality, Dietetics and Nutrition Department (i.e. CA A490 Current Topics in Food and Hospitality and DN A490 Current Topics in Dietetics and Nutrition).

FACULTY

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FIRE AND EMERGENCY SERVICES TECHNOLOGY

Allied Health Science Building (AHS), Room 165, (907) 786-6476
www.uaa.alaska.edu/crc/alliedhealth/fire

The Fire and Emergency Services Technology program provides entry-level knowledge and skills for students planning a career in emergency services as well as knowledge and skill for the career firefighter.

Program Outcomes

Graduates of the Fire and Emergency Services Technology program are prepared to:

- Discuss the history, support organizations, resources, incident management, training, and emergency operations and relate how each plays a role within emergency services.
- Define and use basic terms and concepts associated with the chemistry and dynamics of fire.
- Relate how fire prevention and fire inspections are connected.
- Demonstrate the importance of public education in relation to fire prevention.
- Identify the equipment and systems used in control and extinguishment of fire.
- Identify the five types of building construction and their uniqueness under fire conditions.
- Calculate water flow, friction loss, and gallon per minute flow for a given scenario.

The Associate of Applied Science degree has a technical core which follows the National Fire Academy's Fire and Emergency Service Higher Education's model core curriculum for two-year degree programs. The technical core consists of courses in principles of emergency services, building construction, fire prevention, fire hydrants, protection systems, and fire behavior and combustion. Each student must complete the technical core as well as MATH A105 or higher, a natural science with lab, and remaining UAA AAS general education requirements. The student also has four options from which to choose: Fire Suppression, Fire Administration, Emergency Medical Services, or Wildland Firefighting. It may take more than two years to complete the degree.

For baccalaureate degree options, contact a Fire and Emergency Services Technology 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 academic difficulties arise.
Associate of Applied Science, Fire and Emergency Services Technology

Admission Requirements
Satisfy the Admission to Certificate and Associate's Degree Program Requirements in Chapter 7, Academic Standards and Regulations. 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.

Academic Progress
In order to progress within the Associate of Applied Science Fire and Emergency Services Technology program, students must earn a satisfactory grade (C or higher or S) in all Fire and Emergency Service Technology (FIRE) courses required for the degree.

Degree Requirements
1. Complete the General University Requirements for Associate of Applied Science Degrees located at the beginning of this chapter.
2. Complete the Associate of Applied Science General Degree Requirements located at the beginning of this chapter.
3. Complete the Major Requirements listed below.

Major Requirements
1. Complete the following required courses (28 credits):
   - FIRE A101 Principles of Emergency Services 3
   - FIRE A105 Fire Prevention 3
   - FIRE A121 Fire Behavior and Combustion 3
   - FIRE A202 Fire Protection Hydraulics and Water Supply 3
   - FIRE A206 Building Construction for Fire Protection 3
   - FIRE A214 Fire Protection Systems 3
   - MATH 105 Intermediate Algebra or Higher 3
   - Natural science with lab (recommend CHEM 103/L) 4
   - Social science (PS, PSY, or SOC) 3
   - Math, natural science, and social science may also meet AAS General Course Requirements.

2. Complete 12 credits in one of the following options:
   - **Fire Suppression- Option 1**
     - FIRE A107 Strategy and Tactics 3
     - FIRE A117 Rescue Practices (3) 3
     - FIRE A151 Wildland Fire Control I (3)
     - FIRE A123 Fire Investigation I 3
     - FIRE A203 Hazardous Materials Chemistry I 3
   - **Fire Administration- Option 2**
     - FIRE A111 Fire Administration 3
     - FIRE A170 Occupational Safety and Health for Fire Service 3
     - FIRE A201 Principles of Emergency Management (3) 3
     - FIRE A230 Fire Department Organizational Theory and Behavior (3)
     - FIRE A220 Legal Aspects of Emergency Services 3
   - **Emergency Medical Services- Option 3**
     - EMT A130 Emergency Medical Technician I 6
     - EMT A230 Emergency Medical Technician II 3
     - EMT A231 Emergency Medical Technician III (3) 3
     - FIRE A117 Rescue Practices (3)
   - **Wildland Firefighting- Option 4**
     - FIRE A151 Wildland Fire Control I 3
     - FIRE A155 Wildland Fire Behavior 3
     - FIRE A157 Wildland Air Operations and Safety 3
     - FIRE A159 Wildland Fire Operations Functions 3

3. Complete an additional 11 credits from any FIRE, FSA, or EMT course or from the general education list that will lead towards a baccalaureate degree. (Advisor approval required for general education courses)

4. A total of 60 credits is required for the degree.

FACULTY
Gail Warner, Assistant Professor/Program Coordinator, AFTGO@uaa.alaska.edu

HEALTH, PHYSICAL EDUCATION & RECREATION

Eugene Short Hall (ESH), Room 125, (907) 786-4083 www.uaa.alaska.edu/ctc/programs/hea

The Department of Health, Physical Education & Recreation 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 adventure education 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 & 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 one or all of the following: acknowledgement of risk forms, release of liability statements 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 classes. Students under 16 cannot enroll in HPER classes. Approved students must also meet the university's Secondary School Student Enrollment Requirements (see Chapter 7).

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, the legal or intellectual ability, or the 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) whom a faculty member believes poses a safety risk to themselves or others.

Any financial reimbursements related to such withdrawals are subject to standard university refund policies.

Outdoor/Adventure Courses: The Department of Health, Physical Education & Recreation 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.

I. 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 required good fitness will involve a moderate degree of physical activity, may involve travel over challenging terrain, may involve carrying a pack weighing 50 pounds or more, or may involve 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.

II. 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/descent of 500 to 1500 feet per mile. Off-trail travel can include bushwhacking; uneven, wet or marshy ground; scrambling up, over or around small terrain features; and river crossing 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; thigh- to waist-deep river crossings. Specialized gear may be required for travel.

d. Extremely difficult 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.

III. 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.

Occupational Endorsement Certificate, Fitness Leadership
The Fitness Leadership Occupational Endorsement Certificate is designed to provide quality education and training to individuals interested in working in the fitness industry. Of the required 10 credits, 7 include lecture courses and 3 are laboratory sessions. The labs are enhanced by practicum experiences that reinforce skills, knowledge, and leadership qualities. Students receive training in basic applied kinesiology and exercise physiology, nutrition and healthy weight loss, injury prevention, fitness assessment, legal considerations, special populations, health screening, leadership, and motivation.

Admission Requirements
Satisfy the UAA Admissions Requirements for Occupational Endorsement Certificates found in Chapter 7, Academic Standards and Regulations.

Academic Progress
A minimum grade of B or better in each required course.

Occupational Endorsement Requirements
1. Complete the following required courses (7 credits):
   - PEP A112 First Aid and CPR for Professionals 1
   - PEP A115 Fitness Leadership/Group Fitness and Personal Training 3
   - DN A101 Principles of Nutrition (3) 3
     or
   - DN A203 Nutrition for Health Sciences (3)

2. Complete the required courses within one of the following two emphasis areas (3 credits):
   - Group Fitness Leader
     - PEP A116 Techniques in Group Fitness Instruction 2
     - Choose PER activity course related to specialty 1
   - Personal Trainer
     - PEP A117 Techniques in Personal Training 2
     - PER A11B Beginning Weight Training 1

3. A total of 10 credits is required for this certificate.

Bachelor of Science, 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 Adventure Leadership.

The Health and Fitness Leadership emphasis and the Adventure Leadership emphasis 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 readsies 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. The Adventure Leadership emphasis readies graduates for employment with youth or recreational programs, adventure tourism, guide services, camps, schools, or a host of experiential education opportunities.

Program 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: 1) evaluate and direct/re-direct skillful movement, 2) lead a variety of activities, 3) use appropriate motivational strategies, 4) employ appropriate safety and prevention techniques, 5) exercise sound judgment and good decision-making skills, and 6) effective communication skills.

Admission Requirements
1. Complete the Baccalaureate Degree Programs Admission Requirements in Chapter 7, Academic Standards and Regulations.
2. Meet with a Health, Physical Education & Recreation advisor regarding application, program admission, and development of a program of study.
3. Submit a departmental application for admission to the Department of Health, Physical Education & Recreation.
4. The degree requires computer competency which may be demonstrated by:
   a. successful completion of an approved university computer course,
   b. work-related experience requiring computer competency as approved by faculty or major advisor,
   c. 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.

Academic Progress
Maintain a 2.50 GPA or higher for the courses within the emphasis and a B or better in the Internship.

Degree Requirements
1. Complete the General University Requirements for Baccalaureate Degrees listed at the beginning of this chapter.
2. Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.
3. Complete the Support Courses and the Major Requirements listed below.

Required Support Courses
Complete the following support courses, some of which may be used to satisfy the General Education Requirements:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL A111</td>
<td>Human Anatomy and Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL A112</td>
<td>Human Anatomy and Physiology II</td>
<td>4</td>
</tr>
<tr>
<td>DN A203</td>
<td>Nutrition for Health Sciences (3)</td>
<td>3</td>
</tr>
<tr>
<td>or DN A215</td>
<td>Sports Nutrition (3)</td>
<td></td>
</tr>
<tr>
<td>HS A220</td>
<td>Core Concepts in the Health Sciences (3)</td>
<td>3</td>
</tr>
<tr>
<td>PSY A111</td>
<td>General Psychology (3)</td>
<td>3</td>
</tr>
<tr>
<td>or PSY A150</td>
<td>Lifespan Development (3)</td>
<td></td>
</tr>
</tbody>
</table>

Major Requirements
1. Complete the following core courses (39 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEP A181</td>
<td>Introduction to Health, Physical Education and Recreation</td>
<td>3</td>
</tr>
<tr>
<td>PEP A281</td>
<td>Leadership in Activities for Diverse Populations</td>
<td>2</td>
</tr>
<tr>
<td>PEP A282</td>
<td>Leadership in Experiential Initiatives and Activities</td>
<td>2</td>
</tr>
<tr>
<td>PEP A283</td>
<td>Leadership in Aquatic Activities</td>
<td>2</td>
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<tr>
<td>PEP A284</td>
<td>Leadership in Fitness Activities</td>
<td>2</td>
</tr>
<tr>
<td>PEP A285</td>
<td>Leadership in Team Activities</td>
<td>2</td>
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<tr>
<td>PEP A286</td>
<td>Leadership in Individual and Dual Activities</td>
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<tr>
<td>PEP A287</td>
<td>Leadership in Outdoor Recreation Activities</td>
<td></td>
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<tr>
<td>PEP A288</td>
<td>Leadership in Rhythmic Activities</td>
<td></td>
</tr>
<tr>
<td>PEP A382</td>
<td>Kinesiology and Biomechanics</td>
<td></td>
</tr>
<tr>
<td>PEP A383</td>
<td>Movement Theory and Motor Development</td>
<td></td>
</tr>
<tr>
<td>PEP A384</td>
<td>Cultural and Psychological Aspects of Health and Physical Activity</td>
<td>3</td>
</tr>
<tr>
<td>PEP A385</td>
<td>Physiology of Exercise</td>
<td>4</td>
</tr>
<tr>
<td>PEP A486</td>
<td>Standards and Assessment in Health, Physical Education, and Recreation</td>
<td>3</td>
</tr>
<tr>
<td>PEP A487</td>
<td>Administration and Supervision in Health, Physical Education and Recreation</td>
<td>3</td>
</tr>
</tbody>
</table>

2. Complete one of the following emphasis areas:

   **Health & Fitness Leadership (43 credits)**
   ACCT A201 Principles of Financial Accounting 3
   BA A151 Introduction to Business 3
   BIOL/  
   GEOL A104 Natural History of Alaska 3
   PEP A161 Wilderness First Responder 4
   PEP A262 Foundations of Adventure and Experiential Leadership 3
   PEP A363 Natural History Interpretation and Environmental Education 3
   PEP A364 Survival and Search and Rescue for Adventure Leaders 3
   PEP A365 Adventure Leadership Theory and Practice 3
   PEP A466 Organizational Safety and Risk Management 3
   PEP A496 Internship in Adventure Leadership 6
   Choose one of the following: 3
   PER A169 Four-Season Backpacking (3)
   PER A182 Alaska Winter Survival (3)
   Choose two of the following: 2
   PER A151 Beginning Canoeing (1)
   PER A152 Beginning River Rafting (1)
   PER A153 Beginning Sea Kayaking (1)
   Choose two of the following: 2
   PER A146 Beginning Rock Climbing (1)
   PER A147 Beginning Ice Climbing (1)
   PER A148 Beginning Indoor Sport Climbing (1)
   PER A181 Crevasse Rescue Techniques (1)
   PER A246 Intermediate Rock Climbing (1)
   Choose three of the following: 6
   PEP A467A Challenge Course Adventure Leadership (2)
   PEP A467B Climbing-based Adventure Leadership (2)

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3. A total of 120-124 credits is required for the degree of which 42 credits must be upper division.

**Recommended Course Sequence**
See a Health, Physical Education & Recreation advisor for information on a recommended course sequence.

**Minor, Adventure Leadership * **
Students who wish to minor in Adventure Leadership must complete the following requirements. A total of 22 credits, including 8 upper division credits, is required for the minor. Prerequisites for these courses must also be satisfied. Requires a grade of C or better in PEP A467A or PEP A467C.

1. Complete the following core courses (13 credits):
   - PEP A161 Wilderness First Responder 4
   - PEP A262 Foundations of Adventure and Experiential Leadership 3
   - PEP A364 Survival and Search and Rescue for Adventure Leaders 3
   - PEP A365 Adventure Leadership Theory and Practice 3

2. Choose one of the following:
   - PER A169 Four-Season Backpacking (3)
   - PER A182 Alaska Winter Survival (3)

3. Choose two of the following:
   - PER A151 Beginning Canoeing (1)
   - PER A152 Beginning River Rafting (1)
   - PER A153 Beginning Sea Kayaking (1)

4. Choose two of the following:
   - PER A146 Beginning Rock Climbing (1)
   - PER A147 Beginning Ice Climbing (1)
   - PER A148 Beginning Indoor Sport Climbing (1)
   - PER A181 Crevasse Rescue Techniques (1)
   - PER A246 Intermediate Rock Climbing (1)

5. Choose one of the following:
   - PEP A467A Challenge Course Adventure Leadership (2)
   - PEP A467C Land-based Adventure Leadership (2)

* Not available to Physical Education majors with Adventure Leadership emphasis.

**Minor, Athletic Training**
Students who wish to minor in Athletic Training must complete the following requirements. A total of 20 credits, including 14 upper division credits, is required for the minor. Prerequisites for these courses must also be satisfied. Requires a grade of C or better in PEP A346 and PEP A347.

1. Complete the following requirements (20 credits):
   - DN A203 Nutrition for Health Sciences (3) 3
   - DN A215 Sports Nutrition (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

**Minor, Coaching**
Students who wish to minor in Coaching must complete the following requirements. A total of 22 credits, including 10 upper division credits, is required for the minor. Prerequisites for these courses must also be satisfied. Requires a grade of C or better in PEP A130 and sport specific coaching course.

1. Complete the following core courses (20 credits):
   - PEP A130 Introduction to Coaching 3
   - PEP A230 Sport Ethics 1
   - PEP A231 Drugs and Sport 1

2. Choose one of the following:
   - PEP A251 Prevention and Care of Activity Related Injuries 3
   - PEP A281 Leadership in Activities for Diverse Populations 2
   - 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

**Minor, Health & Fitness Leadership * **
Students who wish to minor in Health & Fitness Leadership must complete the following requirements. A minimum of 27 credits, including 6 upper division credits, is required for the minor. Prerequisites for these courses must also be satisfied. A minimum grade of C or better is required in the courses within the option.

1. Complete the following core courses (24 credits):
   - BIOL A111/L Human Anatomy and Physiology I with Laboratory 4
   - BIOL A112/L Human Anatomy and Physiology II with Laboratory 4
   - DN A203 Nutrition for Health Sciences (3) 3
   - DN A215 Sports Nutrition (3)
   - PEP A115 Fitness Leadership/Group Fitness and Personal Training 3
   - PEP A385 Physiology of Exercise 4
   - PEP A442 Exercise and Aging 3
   - PEP A452 Challenges in Health and Fitness Leadership 1
   - PEP A453 Health Promotion 2

2. Choose one of the following options:
   - Fitness Instruction Option (3 credits)
     - PEP A116 Techniques in Group Fitness Instruction 2
     - PER activity course related to specialty 1
   - Personal Training Option (3 credits)
     - PEP A117 Techniques in Personal Training 2
     - PEP A118 Basic Weight Training 1
   - Wellness Option (4 credits)
     - PEP A116 Techniques in Group Fitness Instruction 2
     - PEP A117 Techniques in Personal Training 2

3. A minimum of 27 credits is required for this minor.

* Not available to Physical Education majors with Health & Fitness Leadership emphasis.

**Minor, Physical Education * **
Students who wish to minor in Physical Education must complete the following requirements. A total of 21 credits, including 10 upper division credits, is required for the minor. Prerequisites for these courses must also be satisfied. Requires a grade of C or better in the leadership courses.

1. Complete the following core courses (15 credits):
   - PEP A181 Introduction to Health, Physical Education and Recreation 3
   - PEP A281 Leadership in Activities for Diverse Populations 2
   - PEP A382 Kinesiology and Biomechanics 4
2. Choose three of the following:  
PEP A282 Leadership in Experiential Initiatives and Activities (2)  
PEP A283 Leadership in Aquatic Activities (2)  
PEP A284 Leadership in Fitness Activities (2)  
PEP A285 Leadership in Team Activities (2)  
PEP A286 Leadership in Individual and Dual Activities (2)  
PEP A287 Leadership in Outdoor Recreation Activities (2)  
PEP A288 Leadership in Rhythmic Activities (2)  

*Not available to Physical Education majors.

FACULTY  
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Michael Chriss, Assistant Professor, AFMCI@uaa.alaska.edu  
Dorothy Orr, Faculty, AFDAO@uaa.alaska.edu  
Wil Rickards, Assistant Professor, AFWHR@uaa.alaska.edu

INDUSTRIAL PROCESS INSTRUMENTATION  
Kenai Peninsula College (KPC)  
156 College Drive, Soldotna, AK, 99669, (907) 262-0330, (877) 262-0330  
www.kpc.alaska.edu

Advising for this program is only available from the Instrumentation faculty at Kenai Peninsula College. 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.

Associate of Applied Science, Industrial Process Instrumentation  
The Industrial Instrumentation program is offered only at Kenai Peninsula College, Kenai River Campus.

The graduates of the UAA Industrial Process Instrumentation program will have the ability to:  
1. Read P & ID drawings and piping isometric drawings;  
2. Enter and print data in a spreadsheet program and enter and edit text using a word processor;  
3. Predict the output from a pneumatic or electronic transmitter for a given process input condition;  
4. Predict the effect of changes in gain or integral time on the dynamic behavior of closed-loop control;  
5. Describe the techniques for troubleshooting an orifice meter and flow control loop using either electronic or pneumatic equipment;  
6. Correctly interpret RTD or thermocouple output values as process temperatures;  
7. Correctly predict the voltage drops in a series connected current loop or a parallel connected voltage loop;  
8. Correctly implement a set-reset function using Boolean logic, TTL circuits, or relay logic;  
9. Correctly distinguish between data transmitted by analog signals and data transmitted by digital signals;  
10. Identify typical pumps, compressors, transmitters, and similar components;  
11. Communicate technical issues to peers both in writing and orally; and  
12. Demonstrate punctuality and responsibility suitable to work place employment.

Admission Requirements  
1. Complete university Admissions Requirements for Associate’s degrees found in Chapter 7, Academic Standards and Regulations.  
2. All students are required to take CIS A105 (or CIS A110) or possess equivalent knowledge prior to entering this degree program.

General University Requirements  
Complete the General University and the General Course Requirements for Associate of Applied Science Degrees located at the beginning of this chapter.

Communication and General Requirements  
1. Oral Communication Requirements:  
   COMM A111 Fundamentals of Oral Communication 3  
   or  
   COMM A235 Small Group Communication (3)  
   or  
   COMM A241 Public Speaking (3)  
2. Written Communication Requirements:  
   ENGL A111 Methods of Written Communication 3  
   or  
   ENGL A212 Technical Writing 3  
3. General Requirements:  
   MATH A105 Intermediate Algebra (or higher level) 3  
4. Natural Science Requirements:  
   PHYS A115/L Physical Science I for Technicians 4  
   or  
   PHYS A123/L Basic Physics I (4)  
   CHEM A103/L Survey of Chemistry (4)  
   or  
   CHEM A105/L General Chemistry I (4)

Major Requirements  
ET A101 Basic Electronics: DC Physics 4  
ET A102 Basic Electronics: AC Physics 4  
ET A126 Principals of Logic and Gating 4  
ET A175 Technical Introduction to Microcomputers 3  
ET A240 Application of Integrated Circuits 3  
ET A241 Microcomputer Interfacing 3  
ET A246 Electronic Industrial Instrumentation 3  
PETR A155 Blueprint Reading (3) 3-4  
or  
EDD A288 Computer Aided Drafting (4)  
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  
Technical Electives – Complete one of the following:  
CNT A170 Cisco Network Fundamentals (4)  
CS A109 Selected Computer Languages (3)  
ET A243 Programmable Logic Controllers (3)  
PRT A230 Process Technology II: Systems (4)  
PRT A250 Process Troubleshooting (3)

A total of 66-68 credits is required for the degree.
The one-year certificate in Mechanical Technology provides the student with experience in the repair and maintenance of most major types of rotating equipment and the operation of common machine tools. This program prepares students for employment as entry-level mechanics, repair personnel or millwrights in all types of industrial plants. This certificate may take more than two semesters to complete due to staggered course offerings.

Undergraduate Certificate, Mechanical Technology

The Mechanical Technology program is offered at Kenai Peninsula College, Kenai River Campus.

Advising for this program is only available from the Technology faculty at Kenai Peninsula College. Please call (907) 262-0344 for more information.

The graduates of the UAA Mechanical Technology program will have the ability to:
1. Operate basic machine tools at an entry level: lathe, mill, grinder, saws, drill press, sanders, arbor press, radial drill, ovens, precision measuring tools;
2. Measure, identify, and apply with real world parts and pieces, pipe, pipe schedules, fittings and related steel structural materials, and produce appropriate blue prints;
3. Show proficiency in the use, calibration, repair, maintenance, and care of all precision measuring tools;
4. Complete advanced machine shop projects in a variety of materials using standard machine tools and student-created blue prints;
5. Plan and complete machining jobs on the CNC (Computer Numerical Control) equipment in a variety of materials including steel, aluminum, brass, cast iron, stainless, nylon, plastics, and hardwood (optional focus);
6. Pass entry-level welding certification test (optional focus).

Admission Requirements

Complete university Admissions Requirements for Undergraduate Certificates found in Chapter 7, Academic Standards and Regulations.

General University Requirements

Complete the General University and the General Course Requirements for Certificates located at the beginning of this chapter.

Major Requirements

1. Certificate Requirements (18 Credits):
   - MATH A105 Intermediate Algebra 3
   - MECH A101 Introduction to Machine Shop 4
   - PETR A155 Blueprint Reading 3
   - PRT A130 Process Technology I: Equipment 4
   - WELD A101 Gas and Arc Welding 4

2. Choose a minimum of 14 credits from the following electives:
   - EDD A288 Computer Aided Drafting 4
   - ET A101 Basic Electronics: DC Physics 4
   - MECH A102 Intermediate Machine Shop 4
   - MECH A115 Gasoline Engine Rebuilding 3
   - MECH A201 Advanced Machine Shop 4
   - MECH A220 Computer Numerical Control Mill 4
   - WELD A108 Wire Welding 4
   - WELD A109 TIG Welding 4

3. A total of 32 credits is required for this certificate.
terminology courses are valuable for all health science students and may be taken by anyone entering a health occupation. Formal admission to the Medical Assisting program is not required for all courses.

**Occupational Endorsement Certificate, Medical Office Coding**

**Certificate Description and Outcomes**
Medical office coders work in medical office and outpatient settings coding medical records for statistical and reimbursement purposes.

**Description of Outcomes**
This program prepares students to work as medical coders in outpatient settings. The program is based upon the American Health Information Management Association (AHIMA) recommendations. Upon successful completion of the program, students are prepared to sit for the AHIMA’s Certified Coding Specialist – Physician (CCS-P) coding examination. After successful completion of this program the students will be able to demonstrate the following:

2. **Proficiency in the performance of Healthcare Common Procedure Coding System (HCPCS) coding.**
3. **Proficiency in the performance of International Classification of Diseases, Clinical Modification diagnostic coding.**

**Admission Requirements**
See Occupational Endorsement Certificate Admission Requirements in Chapter 7, Academic Standards and Regulations.

**Certificate Requirements**

1. Complete the following core courses with a grade of C or higher: (11 credits)
   - **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

2. Complete a minimum of 6 credits of the following support courses, as approved by the department advisor, with a minimum grade of C:
   - **BIOL A100** Human Biology (3)
   - **BIOL A111** Human Anatomy and Physiology I (4)
   - **BIOL A112** Human Anatomy and Physiology II (4)
   - **MA A230** Billing and Insurance for the Medical Office (3)

3. A total of 17 credits is required for this occupational endorsement certificate.

**Preparation for the Certified Medical Assistant (CMA) examination**

1. 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 ENGL A111 or above, or completion, with a minimum grade of C, of PRPE A107 and PRPE A108, or ENGL A109.
   - Recommended keyboarding skill of 45 wpm or completion of keyboarding course(s).

2. Complete the following required courses with a minimum grade of C in each course:
   - **BIOL A100** Human Biology 3
   - **CIS A105** Introduction to Personal Computers and Application Software (3)
   - **CIOS A130A** Word Processing I: MS Word (1) and

**Additional Information Regarding Externship**
1. A recent physical examination is required prior to the beginning of 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.
2. Current Healthcare Provider (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.
3. 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.
4. Transportation to off-campus externship sites is the responsibility of the student.

**Associate of Applied Science, Medical Assisting**

**Degree Description and Outcomes**
At the completion of this program, students are able to demonstrate:
1. Basic knowledge in the principles and skills related to administrative, clinical, and general areas of medical assisting.
2. Entry-level medical assistant employment skills.
3. Professionalism as certified medical assistant (CMA).

**Admission Requirements**
1. See Certificate and Associate of Applied Science Degree Program Admission Requirements at the beginning of this chapter.
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) 786-6928 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 off 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.
General University Requirements
Complete the General University Requirements for Associate of Applied Science Degrees located at the beginning of this chapter.

General Course Requirements
Complete the Associate of Applied Science General Course Requirements (15 credits) located at the beginning of this chapter. (Completion of BIOL A100 and PSY A150 fulfill the requirement of 6 credits of mathematics, humanities, social sciences or natural sciences.)

Major Requirements
1. Complete the required courses for the Preparation for the Certified Medical Assisting (CMA) Examination as outlined above with a minimum grade of C in each course.  40
2. Complete 8 to 9 credits in the following courses:  8-9
   ACCT A101 Principles of Accounting I (3)
   or
   ACCT A120 Bookkeeping for Business I (3)
   DN A101 Principles of Nutrition (3)
   or
   DN A203 Nutrition for Health Sciences (3)
   MA A240 Medical Transcription II (3)
   MA A320 Advanced Case Studies in Medical Coding (2)
   MEDT A101 Phlebotomy Procedures (3)
   MEDT A110 Specimen Processing (3)
   or
   MEDT A195A Phlebotomy Practicum (3)
   RADT A101 Radiation Protection and Biology for Limited Radiography Professionals (3)
3. Elective credits.  0-3
4. A minimum of 60 credits is required for this degree.

FACULTY
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MEDICAL LABORATORY TECHNOLOGY
Allied Health Sciences Building (AHS) Room 169, (907) 786-4930, www.uaa.alaska.edu/ctc/alliedhealth/medlab

The mission of the Medical Laboratory Technology 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 Technology 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 AAS graduates who wish to obtain a bachelor's degree in Medical Technology may “career ladder” without loss of credit.

General admission requirements for all students entering programs offered by the Medical Laboratory Technology Department include:
1. Complete the Medical Laboratory Technology program application.
2. Review the Essential Requirements for Admission and return the signed form to the department.

3. High School diploma or GED equivalency.
4. Prior to enrollment in either MEDT A101 or MEDT A132, students must provide documentation of the following:
   • Immunity to rubella, rubella and chicken pox confirmed by titer.
   • Immunity to hepatitis A and hepatitis B. Students must have started the immunization series prior to enrolling in the courses.
   • Tetanus/diphtheria/pertussis (Tdap) vaccination within the past 10 years.
   • Freedom from active tuberculosis, documented annually by negative PPD skin test or by health examination by a nurse practitioner, physician or physician's assistant.
5. Prior to enrolling in a practicum (MEDT A195A, MEDT A195B, MEDT A295 or MEDT A495) students must
   • Demonstrate computer competency in the prerequisite MEDT courses.
   • Provide documentation of a background check within six months prior to start of practicum.
   • Provide proof of personal medical insurance coverage.

Additional admission requirements are listed under program descriptions.

The Medical Laboratory Technology 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 Technology Department. Students enrolled in practicum (MEDT A195A, MEDT A195B, MEDT A295 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 Center. Liability insurance is purchased by the Medical Laboratory Technology Department to cover the student's practicum. The occupational endorsement certificate, AAS, and BS degrees are not contingent upon the students passing any type of external certification or licensure examination.

The AAS in Medical Laboratory Technology and the BS in Medical Technology programs 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 United States 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.

Honors in Medical Technology
Students majoring in medical technology are eligible to graduate with departmental honors by satisfying the following requirements:
1. Meet the requirements for Graduation with Honors as listed in the UAA catalog.
2. Meet the requirements for a BS in Medical Technology.
3. Earn a grade point average of 3.5 or higher in courses with an MEDT prefix.
4. Obtain approval to enroll in the Honors Elective from the Program Director.
5. Pass the Honors Elective course, MEDT A402 Medical Technology Honors: Quality Assessment Project.
Occupational Endorsement Certificate, 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.

Program Outcomes

The specific educational outcomes for the program are to produce graduates who:

- Select the appropriate site and demonstrate the proper technique for collecting, handling, and processing blood and non-blood specimens.
- Demonstrate professional conduct, stress management, interpersonal, and communication skills with patients, peers, other health care personnel, and the public, recognizing possible legal implications.
- Recognize and adhere to infection control and safety policies and procedures.
- Demonstrate an understanding of test requisitioning.
- Identify factors that affect specimen collection procedures and test results, and take appropriate actions within predetermined limits when applicable.
- Recognize and act upon individual needs for continuing education as a function of growth and maintenance of professional competence.
- Perform point-of-care testing according to standard operating procedures.

Certificate Requirements

1. Complete the Occupational Endorsement Admission Requirements in Chapter 7, Academic Standards and Regulations.
2. Complete the General Admissions Requirements for all programs in the Medical Laboratory Technology Department that are listed at the beginning of this section.
3. The Phlebotomist Occupational Endorsement Certificate is offered on campus and by distance delivery. Distance students must contact the Medical Laboratory Technology Department to arrange for a mentor and clinical training facility prior to enrolling in any of the courses.
4. Students must earn a minimum grade of C or higher in the following courses:
   - MEDT A101 Phlebotomy Procedures 3
   - MEDT A105 Microbiology for Clinical Assistants 3
   - MEDT A106 Waived Testing 4
   - MEDT A110 Specimen Processing 3
   - MEDT A195A Phlebotomy Practicum 3
   - MEDT A195B Clinical Assistant Practicum 4
5. A total of 9 credits is required for the OEC.

Occupational Endorsement Certificate, Clinical Assistant

Clinical assistants perform basic laboratory testing in medical laboratories, working under the supervision of a medical laboratory scientist, medical laboratory technician, or pathologist. A clinical assistant collects and processes blood specimens and performs waived testing procedures in chemistry, hematology, microbiology, and urinalysis.

Program Outcomes

The specific educational outcomes for the program are to produce graduates who have met the educational outcomes for the occupational endorsement phlebotomist and 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 healthcare professional.
- Find gainful employment as laboratory professionals.
- Demonstrate continuing competency through participation in continuing education and providing continuing education.
- Demonstrate professional advancement by involvement in administrative and/or supervisory roles in the employment setting or through completion of specialty or certification examinations.
- Demonstrate a commitment to the laboratory profession through sustained membership and active involvement in professional organizations.

Certificate Requirements

1. Complete the Occupational Endorsement Certificate Admission Requirements at the beginning of Chapter 7, Academic Standards and Regulations.
2. Complete the General Admissions Requirements for all programs in the Medical Laboratory Technology Department that are listed at the beginning of this section.
3. The Clinical Assistant Occupational Endorsement Certificate is offered on campus and by distance delivery. Distance students must contact the Medical Laboratory Technology Department to arrange for a mentor and clinical training facility prior to enrolling in any of the courses.
4. Students must earn a minimum grade of C or higher in the following courses:
   - MEDT A101 Phlebotomy Procedures 3
   - MEDT A105 Microbiology for Clinical Assistants 3
   - MEDT A106 Waived Testing 4
   - MEDT A110 Specimen Processing 3
   - MEDT A195A Phlebotomy Practicum 3
   - MEDT A195B Clinical Assistant Practicum 4
5. A total of 20 credits is required for the OEC.

Associate of Applied Science, Medical Laboratory Technology

NAACLS 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 after completing the program.

Program 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 healthcare professional.
- Find gainful employment as laboratory professionals.
- Demonstrate continuing competency through participation in continuing education and providing continuing education.
- Demonstrate professional advancement by involvement in administrative and/or supervisory roles in the employment setting or through completion of specialty or certification examinations.
- Demonstrate a commitment to the laboratory profession through sustained membership and active involvement in professional organizations.
Admission Requirements
1. Complete the Associate's Degree Programs Admission Requirements at the beginning of Chapter 7, Academic Standards and Regulations.
2. Complete the General Admissions Requirements for all programs in the Medical Laboratory Technology Department that are listed at the beginning of this section.
3. Meet with the Medical Laboratory Technology program advisor regarding application, program admission, and development of a program of study.

Academic Progress
In order to progress within the Associate of Applied Science in Medical Laboratory Technology program, students must earn a minimum grade of C or higher or P in all Medical Laboratory Technology (MEDT) courses required for the degree and demonstrate professional behavior as defined by the "Medical Laboratory Technology 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 an average score of 3 or higher in the Entry Level Criteria for each of the attributes in order to graduate from the program. Students who are unable to earn an acceptable grade in the 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 they can complete their practicum should space become available, or they are given preference when space becomes available. They may be placed on an alternate list and informed they can complete their practicum if space becomes available. They are given preference when space becomes available.

Degree Requirements
1. Complete the General University Requirements for Associate of Applied Science Degrees found at the beginning of this chapter.
2. Complete the General Course Requirements for Associate of Applied Science degrees found at the beginning of this chapter. In the Medical Laboratory Technology program, the required support courses meet the AAS General Course Requirements.
3. Complete the Required Support Courses and the Major Requirements listed below.

Required Support Courses
Complete all 15 credits of support courses for the Medical Laboratory Technology major with a minimum grade of C or higher.
- BIOL A111 Human Anatomy and Physiology I 4
- BIOL A112 Human Anatomy and Physiology II 4
- CHEM A103/L Survey of Chemistry 3
- CHEM A104 Introduction to Organic Chemistry and Biochemistry 3

Major Requirements
1. Complete the following major courses with a minimum grade of C or higher.
   - MEDT A132 Introduction to Laboratory Medicine (3) 3/4 or MEDT A101 Phlebotomy Procedures (3) 4
     and MEDT A133 Basic Techniques in Laboratory Medicine (1)
   - MEDT A202 Clinical Chemistry 6
   - MEDT A203 Clinical Microbiology 6
   - MEDT A204 Hematology and Coagulation 6
   - MEDT A206 Immunology and Blood Banking 6
   - MEDT A208 Urine and Body Fluid Analysis 3
   - MEDT A250 Cultural Diversity in Health Care 3
   - MEDT A295 Clinical Practicum 12

Bachelor of Science, Medical Technology

Medical Laboratory Scientist
NAACLS provides the following description: 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. The 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 and;
- 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.

Program 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.
- Find gainful employment as laboratory professionals.
- Demonstrate continuing competency through participation in continuing education and providing continuing education.
- Demonstrate professional advancement by involvement in administrative and/or supervisory roles in the employment setting or through completion of specialty or certification examinations.
- Demonstrate a commitment to the laboratory profession through sustained membership and active involvement in professional organizations.

Admission Requirements
1. Complete the Baccalaureate Degree Programs Admission Requirements in Chapter 7, Academic Standards and Regulations.
2. Complete the General Admission Requirements for all programs in the Medical Laboratory Technology Department that are listed at the beginning of this section.
3. Meet with the Medical Technology Program advisor regarding application, program admission, and development of a program of study.

Academic Progress
In order to progress within the Bachelor of Science Medical Technology program, students must earn a minimum grade of C or higher or P in all
Medical Technology courses required for the degree and demonstrate professional behavior as defined by the “Medical Laboratory Technology 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 Technology 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 an average score of 3 or higher in the Entry Level Criteria for each of the attributes in order to graduate from the program. Students who are unable to earn an acceptable grade in the MEDT courses during their initial enrollment may attempt to earn a satisfactory grade on 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 to graduate from the program. Students who are unable to earn an acceptable grade in the MEDT courses during their initial enrollment may attempt to earn a satisfactory grade on one additional time on a space available basis.

Degree Requirements

1. Complete the General University Requirements for Baccalaureate Degrees listed at the beginning of this chapter.
2. Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter. In the Medical Technology program, the required support courses meet the Quantitative Skills and Natural Science Requirements.
3. Complete the Required Support Courses and Major Requirements listed below.

Required Support Courses

Complete all 31-36 credits of support courses for the Medical Technology major with a minimum grade of C or higher.

<table>
<thead>
<tr>
<th>Course</th>
<th>31-36 Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL A111</td>
<td>Human Anatomy and Physiology I 4</td>
</tr>
<tr>
<td>BIOL A112</td>
<td>Human Anatomy and Physiology II 4</td>
</tr>
<tr>
<td>CHEM A103</td>
<td>Survey of Chemistry (3) and 4</td>
</tr>
<tr>
<td>CHEM A103L</td>
<td>Survey of Chemistry Laboratory (1) or 4</td>
</tr>
<tr>
<td>CHEM A105</td>
<td>General Chemistry I (3) and 4</td>
</tr>
<tr>
<td>CHEM A105L</td>
<td>General Chemistry I Laboratory (1) 4/7</td>
</tr>
<tr>
<td>CHEM A104</td>
<td>Introduction to Organic Chemistry and Biochemistry (3) and</td>
</tr>
<tr>
<td>CHEM A104L</td>
<td>Introduction to Organic Chemistry and Biochemistry Laboratory (1) or</td>
</tr>
<tr>
<td>CHEM A106</td>
<td>General Chemistry II (3) and 4</td>
</tr>
<tr>
<td>CHEM A106L</td>
<td>General Chemistry II Laboratory (1) and 4</td>
</tr>
<tr>
<td>CHEM A321</td>
<td>Organic Chemistry I (3) 4</td>
</tr>
<tr>
<td>CIS A305</td>
<td>Managerial Presentations 3</td>
</tr>
<tr>
<td>ENGL A212</td>
<td>Technical Writing 3</td>
</tr>
<tr>
<td>MATH A107</td>
<td>College Algebra (or higher (may not use MATH A205)) 4/3</td>
</tr>
<tr>
<td>PHIL A302</td>
<td>Biomedical Ethics 3</td>
</tr>
<tr>
<td>STAT A252</td>
<td>Elementary Statistics (or higher) 3/4</td>
</tr>
</tbody>
</table>

Major Requirements

1. Complete the following major courses with a satisfactory grade (C or higher or P).

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEDT A132</td>
<td>Introduction to Laboratory Medicine (3) 3/4</td>
</tr>
<tr>
<td>MEDT A101</td>
<td>Phlebotomy Procedures (3) 4</td>
</tr>
<tr>
<td>MEDT A133</td>
<td>Basic Techniques Laboratory Medicine (1) 4</td>
</tr>
<tr>
<td>MEDT A202</td>
<td>Clinical Chemistry 6</td>
</tr>
<tr>
<td>MEDT A203</td>
<td>Clinical Microbiology 6</td>
</tr>
<tr>
<td>MEDT A204</td>
<td>Hematology and Coagulation 6</td>
</tr>
<tr>
<td>MEDT A206</td>
<td>Immunology and Blood Banking 6</td>
</tr>
<tr>
<td>MEDT A208</td>
<td>Urine and Body Fluid Analysis 3</td>
</tr>
<tr>
<td>MEDT A250</td>
<td>Cultural Diversity in Health Care 1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEDT A301</td>
<td>Clinical Molecular Biology 4</td>
</tr>
<tr>
<td>MEDT A302</td>
<td>Clinical Laboratory Education and Management 4</td>
</tr>
<tr>
<td>MEDT A303</td>
<td>Advanced Clinical Microbiology 6</td>
</tr>
<tr>
<td>MEDT A401</td>
<td>Introduction to Research 2</td>
</tr>
<tr>
<td>MEDT A495</td>
<td>Medical Technology Practicum (12) 24</td>
</tr>
<tr>
<td>MEDT A295</td>
<td>Clinical Practicum* (12) and 24</td>
</tr>
<tr>
<td>MEDT A495</td>
<td>Medical Technology Practicum (12) 24</td>
</tr>
</tbody>
</table>

*Students fulfilling this requirement with MEDT A295 and MEDT A495 must complete a total of 42 upper division credits for the bachelor’s degree.

2. A total of 123-129 credits is required for the degree, of which 42 credits must be upper division.

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OCCUPATIONAL SAFETY
AND HEALTH

Kenai Peninsula College (KPC), Anchorage Extension Site (AES)
University Center (UC), Room 118, 3901 Old Seward Highway, Anchorage, AK 99503, (907) 786-6421
www.kpc.alaska.edu

Advising for this program is available only from the Anchorage Extension Site of Kenai Peninsula College. Please call the OSH faculty at (907) 786-6421 for more information.

The Occupational Safety and Health program prepares students for employment as safety professionals in a variety of industries including construction, petroleum, mining and tourism. Employment opportunities are growing for safety professionals. This program provides a thorough background in occupational safety and health, preparing graduates for entry-level safety positions in industry and government agencies throughout Alaska.

The Occupational Safety and Health program is a 62-63 credit Associate of Applied Science degree. Coursework includes hazardous materials, safety training methods, ergonomics, industrial hygiene, injury prevention, epidemiology, OSHA standards, and safety program management and record keeping.

Associate of Applied Science, Occupational Safety and Health

The Occupational Safety and Health program is offered only at the Kenai Peninsula College-Anchorage Extension Site. (KPC/AES) University Center Room 118, 3901 Old Seward Highway, Anchorage, AK 99503, (907) 786-6421

Program Outcomes

The specific education outcomes of this program are to produce graduates who are able to:

1. Define the roles and responsibilities of safety professionals, safety regulations and their applications.
2. Develop safety management system programs, evaluate their effectiveness, and describe methods of implementation.
3. Identify and analyze workplace injuries, incidents and hazards and provide methods of correction.
4. Identify and analyze needs and methods for safety training and develop safety presentations.

Admission Requirements
1. Complete the university Admissions Requirements for Associate’s Degrees found in Chapter 7, Academic Standards and Regulations.
2. Submit the KPC undergraduate application.
3. Demonstrate computer competency evidenced by any of the following:
   a. A 3-credit course in word processing, spreadsheets, databases, data processing or micro-computers.
   b. Work-related experience verifying computer competency as approved by the faculty advisor.
   c. Self-initiated computer competency as approved by the faculty advisor.

Advising
1. Meet with a faculty advisor to complete advising interview checklist. Students must meet with the OSH advisor prior to registering for Occupational Safety and Health courses.
2. Students in Anchorage should contact the OSH faculty at (907) 786-6421 for an appointment with a faculty advisor.
3. Students on the Kenai Peninsula should call 262-0344 for an appointment with a faculty advisor.

Graduation Requirements
1. Complete the General University and the General Course Requirements for Associate of Applied Science Degrees located at the beginning of this chapter.
2. Complete the following required courses:
   - BIOL A100 Human Biology 3
   - CHEM A103 Survey of Chemistry 3
   - CHEM A103L Survey of Chemistry Laboratory 1
   - ENGL A111 Methods of Written Communication 3
   - ENGL A212 Technical Writing 3
   - OSH A101 Introduction to Occupational Safety and Health 3
   - OSH A108 Injury Prevention and Risk Management 4
   - OSH A110 Program Assessment, Development, and Implementation 4
   - OSH A112 Introduction to Injury Epidemiology 3
   - OSH A120 Safety Program Management and Recordkeeping 3
   - OSH A180 Introduction to Industrial Hygiene 4
   - OSH A201 Workplace Injury and Incident Evaluation 4
   - OSH A210 Training Needs and Methods 3
   - OSH A230 Principles of Ergonomics 3
   - OSH A240 Workplace Monitoring: Instrumentation and Calibration 3
   - OSH A250 Hazardous Materials Operation 3
   - TECH A295* Technical Internship (I-6) 3
   * An advisor approved elective may be substituted for TECH A295 Technical Internship.
3. Complete one of the following mathematics courses: 3-4
   - MATH A105 Intermediate Algebra (3)
   - MATH A107 College Algebra (4)
4. Complete one of the following physical science courses: 3
   - PHYS A123 Basic Physics (3)
   - TECH A101 Introduction to technological principles (3)
5. Complete one of the following verbal communication courses: 3
   - COMM A111 Fundamentals of Oral Communication (3)
   - COMM A235 Small Group Communication (3)
   - COMM A237 Interpersonal Communication (3)
   - COMM A241 Public Speaking (3)

FACULTY
Don G. Weber, Assistant Professor, IfDGW@uaa.alaska.edu

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
www.kpc.alaska.edu/academics/Paramedical.html

Matanuska-Susitna College (MSC)
Mile 2 Trunk Road, Palmer, AK 99645
Contact Kathy Griffin (907) 746-9329
www.matsu.alaska.edu/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 field internship. Clinical rotations provide instruction and supervised practice of emergency medical skills in various units of hospitals within the Anchorage and Mat-Su borough areas. The field internship provides experience in advanced life support vehicles such as ambulances, helicopters, and fixed-wing aircraft. Student interns are the third member of the medical/rescue team and work under the direct supervision of a paramedic preceptor. Internship sites are arranged in various 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.

Associate of Applied Science, Paramedical Technology

Graduates of the Paramedical Technology program will have the ability to:
1. Understand their roles and responsibilities as a program within an EMS system by applying the basic concepts of development, pathophysiology and pharmacology to assess and manage patients with emergency medical needs;
2. Maintain a patient’s airway, oxygenate, and ventilate a patient and be able to take a proper history and perform a comprehensive physical examination;
3. Properly administer medications and communicate effectively with other health care providers including physicians, nurses, and other allied health personnel; and
4. Integrate pathophysiological principles and assessment findings to formulate a field impression and implement a treatment plan for trauma and medical patients of all ages.

Admission Requirements
Kenai Peninsula College/Matanuska-Susitna (Mat-Su) College - Admission Requirements

Advising for Kenai Peninsula College (KPC) students for this program is only available from the Paramedical Technology faculty at KPC. Please call (907) 262-0344 for more information.

Advising for Mat-Su College (MSC) students for this program is only available from the Paramedical Technology faculty at MSC. Please call (907) 746-9329 for more information.

Admission to the KPC/MSC Paramedical Technology programs 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 May 15 application deadline.

**Admission Requirements for Paramedical Degree - Pre-Major - Kenai Peninsula College and Mat-Su College only**

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, you may be eligible for financial aid since you 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 degree 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 Anatomy & Physiology I and II (BIOL A111, BIOL A112; 8 credits); with a minimum C grade.
   f. Take and submit to the program coordinator the scores from the Nurse Entrance Test (NET). It is scheduled through the KPC, MSC, or UAA testing center where you intend to take the examination.
   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 their results.

**Admission Requirements Before Beginning Coursework**

Once admitted to the Paramedical Technology program, students are required to provide the following before actually 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 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/MSC).
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.

**Academic Progress**

1. 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.
2. Students MUST complete all General Degree courses (English, communications and math) before they register for or begin their ride-along internship (PMED A295).

**General University Requirements**

Complete the General University and the General Course Requirements for Associate of Applied Science Degrees located at the beginning of this chapter.

**Communication Requirements (9 credits)**

Oral communication – COMM A111 is recommended (3)
Written communication - ENGL A111 is required and ENGL A212 is recommended (6)

**Natural Science Requirements (8 credits)**

BIOL A111 and BIOL A112 are required prerequisites for admission into the Paramedic program and also fulfill the general requirements for the AAS degree.

**Math Requirements (3 credits)**

MATH A105 Intermediate Algebra (or higher) 3

**Major Requirements (48 credits)**

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 Paramedical Internship 12

A total of 68 credits is required for the degree.

**FACULTY**

Kathy Griffin, Coordinator/Assistant Professor (MSC), kgriffin@matsu.alaska.edu
Paul Ferry, Coordinator/Instructor (KPC), IFPEP@uaf.alaska.edu
PETROLEUM TECHNOLOGY

Kenai Peninsula College (KPC), Kenai River Campus
156 College Drive, Soldotna, Alaska, 99669, (907) 262-0300, (877) 262-0330
www.kpc.alaska.edu

Kenai Peninsula College offers a one-year certificate program in Petroleum Technology. The certificate provides specific training in petro/chemical plant operations.

Undergraduate Certificate, Petroleum Technology

The Petroleum Technology program is offered at Kenai Peninsula College, Kenai River Campus.

Advising for this program is only available from the Petroleum Technology faculty at Kenai Peninsula College. Please call (907) 262-0344 or (877) 262-0330 for more information.

The graduates of the UAA Petroleum Technology program will have the ability to:

1. Maintain a safe work area: To enforce safety regulations, follow safe operating procedures, maintain effective communications with personnel, and identify workplace hazards;
2. Monitor area operations: To monitor equipment for efficiency and integrity, identify process problems, and perform trend analyses;
3. Maintain process parameters: To perform process adjustments, start up process equipment, and shut down process equipment;
4. Maintain emergency response preparedness: To respond to emergencies, effectively participate in emergency response drills, and conduct periodic review of emergency response procedures;
5. Maintain regulatory compliance: To report recordable incidents, record discharge reports, record regulatory data, maintain current licensing, participate in internal/external audits, and comply with HAZCOM requirements;
6. Coordinate maintenance activities: To generate work requests, develop safe out procedures, schedule maintenance activities, prepare equipment for maintenance activity, and issue work permits;
7. Perform administrative activities: To produce required reports, record logbook entries, and perform personal evaluations;
8. Understand the need for continued professional development, participate in job related training, and utilize self-study resources;
9. Demonstrate English skills: To communicate effectively in entry-level technical occupations.

Admission Requirements

Complete University Admissions Requirements for Undergraduate Certificates in Chapter 7, Academic Standards and Regulations.

Complete the following requirements:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRE A108</td>
<td>Introduction to College Writing (3)</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>ENGL A111</td>
<td>Methods of Written Communication (3)</td>
</tr>
<tr>
<td>MATH A105</td>
<td>Intermediate Algebra</td>
<td>3</td>
</tr>
<tr>
<td>PRT A101</td>
<td>Introduction to Process Technology</td>
<td>3</td>
</tr>
<tr>
<td>PRT A130</td>
<td>Process Technology I: Equipment</td>
<td>4</td>
</tr>
<tr>
<td>PRT A140</td>
<td>Industrial Process Instrumentation I</td>
<td>3</td>
</tr>
<tr>
<td>PRT A144</td>
<td>Industrial Process Instrumentation II</td>
<td>3</td>
</tr>
<tr>
<td>PRT A160</td>
<td>Oil &amp; Gas Exploration &amp; Production I</td>
<td>3</td>
</tr>
<tr>
<td>PRT A230</td>
<td>Process Technology II: Systems</td>
<td>4</td>
</tr>
<tr>
<td>PRT A231</td>
<td>Process Tech. III: Operations (4)</td>
<td>4</td>
</tr>
<tr>
<td>or</td>
<td>ET A101</td>
<td>Basic Electronics: DC Physics (4)</td>
</tr>
<tr>
<td>or</td>
<td>ET A126</td>
<td>Principles of Logic and Gating (4)</td>
</tr>
<tr>
<td>PRT A250</td>
<td>Process Troubleshooting</td>
<td>3</td>
</tr>
</tbody>
</table>

A total of 33 credits is required for the certificate.

FACULTY

Allen Houtz, Professor, HHADH@uaa.alaska.edu
Rich Kochis Assistant Professor, HFRLK@uaa.alaska.edu
Henry Haney, Assistant Professor, HFHW@uaa.alaska.edu

PHARMACY TECHNOLOGY

Allied Health Sciences Building (AHS), Room 161, (907) 786-6928
www.uaa.alaska.edu/cr/allied/health/pharmacy

Pharmacy technicians work in pharmacies under the direct supervision of a pharmacist. Under supervision 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.

Occupational Endorsement Certificate, Pharmacy Technology

The 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.

Admission Requirements

Complete the Occupational Endorsement Certificate Admission Requirements in Chapter 7, Academic Standards and Regulations.

Program Description and Outcomes

This program of study 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 Occupational Endorsement Certificate, Pharmacy Technology, 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). They will also have a solid background to continue further study in the field of pharmacy, pursuing a pre-pharmacy degree and ultimately a Doctor of Pharmacy degree.

After completion of this program students will be able to:

1. Receive, screen and prepare prescription/medication orders checking for completeness, authenticity and accuracy.
2. Initiate, verify, assist in the adjudication of, and collect payment and/or initiate billing for pharmacy services and goods.
3. Purchase and maintain inventory of medications, equipment and devices according to an established plan.
4. Maintain pharmacy equipment and facilities.
5. Participate in the process for preventing medication misadventures, notifying the pharmacist when a problem or situation requires his/her attention.
6. Communicate clearly when speaking or writing while maintaining confidentiality, compassion, and an image of professionalism.

Occupational Endorsement Certificate Requirements

1. Students must earn a satisfactory grade (C or higher) in all courses:
   - 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
The graduates of the UAA Process Technology program will have the
College KRC (Kenai River Campus) and AES (Anchorage Extension site).
The Process Technology program is offered only at Kenai Peninsula
Associate of Applied Science, chemical, mechanical, individuals to obtain employment in the industries that use and control
through UAA and UAF.
The Associate of Applied Science degree in Process Technology is
Kenai Peninsula College and is delivered collaboratively
information. For the KPC Anchorage Extension Site, call 786-6413.
The graduates of the UAA Process Technology program will have the
ability to:
1. Maintain a safe work area – to enforce safety regulations, follow
safe operating procedures, maintain effective communications with
personnel and identify workplace hazards;
2. Monitor area operations – to monitor equipment for efficiency and
integrity, identify process problems and perform trend analyses;
3. Maintain process parameters – to perform process adjustments,
start up process equipment and shut down process equipment;
4. Maintain emergency response preparedness – to respond to
emergencies, effectively participate in emergency response drills
and conduct periodic review of emergency response procedures;
5. Maintain regulatory compliance – to report recordable incidents,
record discharge reports, record regulatory data, maintain current
licensing, participate in internal/external audits and comply with
HAZCOM requirements;
6. Coordinate maintenance activities – to generate work requests,
develop safe out procedures, schedule maintenance activities,
prepare equipment for maintenance activity and issue work permits;
7. Perform administrative activities – to produce required reports,
record logbook entries and perform personal evaluations;
8. Prepare for and understand the need for continued professional
development, participate in job related training and utilize self-
study resources.

**Admission Requirements**
1. Complete university Admissions Requirements for Associate’s
   Degrees found in Chapter 7, Academic Standards and Regulations.
2. Placement at the A105 level or above, equivalent course, or
   appropriate ACT/SAT scores.
3. Placement for reading at the ENGL A111 level or above.

**Advising**
Students must see a faculty advisor in the Process Technology program
prior to registering for Process Technology courses.

**General University Requirements**
Complete the General University and the General Course Requirements
for Associate of Applied Science Degrees located at the beginning of this chapter.

**Communication and General Requirements**
1. **Oral Communications Skills** (One of the following) 3
   - COMM A111 Fundamentals of Oral Communication (3)
   - COMM A235 Small Group Communication (3)
   - COMM A237 Interpersonal Communication (3)
   - COMM A241 Public Speaking (3)
2. **Written Communication Skills** 6
   - ENGL A111 Methods of Written Communication (3)
   and one of the following:
   - ENGL A211 Academic Writing About Literature (3)
   - ENGL A212 Technical Writing (3)
   - ENGL A213 Writing in the Social and Natural Sciences (3)
   - ENGL A214 Persuasive Writing (3)
3. **Support Courses Math** 3-4
   - MATH A105 Intermediate Algebra (3)
or
   - MATH A107 College Algebra (4)
4. **Computer Literacy:**
   - CIS A105 Introduction to Personal Computers and Application Software (3)
or
   - CIS A110 Computer Concepts in Business (3)
5. **Natural Sciences** 8
   - CHEM A103/L Survey of Chemistry (or higher level) (4)
   - PHYS A115 Physical Science I for Technicians (4)
or
   - CHEM A103/L Survey of Chemistry (or higher level) (4)
   - PHYS A123/L Basic Physics I (4)
6. **Social Science**
   - Elective (3)

**Major Requirements**
1. Complete the following courses (28 credits):
   - PRT A101 Introduction to Process Technology 3
   - PRT A110 Introduction to Occupational 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
2. Approved Applied Technology Electives 9
   All 9 credits must be chosen with advisor approval. For example, they may be chosen from:
   • Electronics
   • Environmental Technology (Wastewater) Mining Technology
   • Industrial Process
   • Instrumentation
   • Occupational Safety & Health
   • Petroleum Technology
   • Process Technology
   • Power Generation
   • Technical Internship
   • Technology
   3. A total of 63 credits is required for the degree.

FACULTY
Rick Adams, Assistant Professor, IFRHA@uaa.alaska.edu
Allen Houts, Professor, IFADH@uaa.alaska.edu
Henry Haney, Assistant Professor, IFHWH@uaa.alaska.edu
Jeff Laube, Assistant Professor, IFJDL@uaa.alaska.edu

RADIOLOGIC TECHNOLOGY
Allied Health Science Building (AHS), Room 151B, (907)786-6940
www.uaa.alaska.edu/ctc/alliedhealth/radtech

Occupational Endorsement Certificate, Limited Radiography

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 degree in Radiologic Technology.

Admissions Requirements
See Occupational Endorsement Certificate Admission Requirements in Chapter 7, Academic Standards and Regulations.

Student must be at least 18 years or older.

Student 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:
1. Entry-level knowledge and skills for employment as a limited radiographer.
2. Proficiency in the performance of limited radiographic procedures.
3. Meet statewide staffing needs.

Occupational Endorsement Certificate Requirements
1. Students must be at least 18 years or older.
2. Students must earn a satisfactory grade (C or higher) in all required courses:
   RADT A101 Radiation Protection and Biology for Limited Radiography Professionals 3
   RADT A102 Principles of Radiography for Limited Practice I 3
   RADT A103 Radiographic Procedures for Limited Practice II 3
   RADT A104 Radiographic Procedures for Limited Practice III 2
3. A total of 11 credits is required for this certificate

Associate of Applied Science, 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, and other organization fees.

The AAS degree is not contingent upon the students passing any type of external certification or licensure examination.

Student 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:
1. Entry-level knowledge and skills for employment as a radiologic technologist.
2. Proficiency in the performance of radiographic procedures.
3. Professional attitude and proper ethical behavior in clinical settings.

Admissions Requirements
See Associate’s Degree Admissions Requirements in Chapter 7, Academic Standards and Regulations. Students will be admitted to the Radiologic Technology program as a premajor. 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 First Aid/CPR for Professionals or BLS-C 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 the Radiologic Technology faculty for assistance with course planning toward the degree.

General University Requirements
Complete the General University Requirements for Associate's Degrees located at the beginning of this chapter.

General Course Requirements
Complete the Associate of Applied Science General Degree Requirements located at the beginning of this chapter (ENGL A212 recommended).

Major Requirements
1. Complete the following required courses:
   - MATH A105 Intermediate Algebra (3) or MATH A107 College Algebra (4)
   - Select one of the following:
     - PSY A111 General Psychology (3)
     - PSY A150 Lifespan Development (3)
     - PSY A153 Human Relations (3)
     - SOC A101 Introduction to Sociology (3)

2. 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 Medical Imaging 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 (3)
   - RADT A195C Radiography Practicum III (3)
   - RADT A211 Radiologic Pharmacology and Drug Administration (1)
   - RADT A251 Radiobiology and Protection (2)
   - RADT A272 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)

3. A total of 62 credits is required for the degree.

FACULTY
Robert McClung, Assistant Professor, AFREM1@ualaska.edu
Kathryn Single, Assistant Professor, AFKSM@ualaska.edu
Erica Koch Wight, Assistant Professor, AFKEW@ualaska.edu

REFRIGERATION AND HEATING TECHNOLOGY
Matanuska-Susitna College
P.O. Box 2889, Palmer, AK 99645, (907) 745-9715

The Refrigeration and Heating Technology program is offered only through Matanuska-Susitna College.

Four occupational endorsement certificates, one undergraduate certificate, and an Associate of Applied Science degree in Refrigeration and Heating are available. Satisfactory completion of the four specialty certificates qualifies a student for the Undergraduate Certificate in Refrigeration and Heating Technology. The AAS degree may be earned by obtaining the Undergraduate Certificate in Refrigeration and Heating Technology and successfully completing the General University and General Course Requirements 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, 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 R&H program must take a standardized placement test in reading, writing, and mathematics. The faculty place heavy emphasis on student preparation for job entry-level skills.

Professional tests related to the industry 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.

Program Objectives and Expected Outcomes
The curriculum of the Matanuska-Susitna College Refrigeration and Heating Technology program is designed to produce graduates able to:

1. Apply the fundamental laws of physics related to the heating, ventilation, air conditioning, and refrigeration (HVAC/R) industry.
2. Use mathematical skills required to succeed in HVAC/R trades.
3. Understand and describe the function of individual components that make up HVAC/R systems.
4. Work safely with tools, torches, electricity, refrigerants, heating fuels, and other equipment and material associated with HVAC/R work.
5. Follow work practices that are environmentally responsible.
6. Obtain employment as an entry-level HVAC/R technician and be able to advance professionally.
7. Work effectively with customers, employers, and co-workers.
8. Systematically troubleshoot HVAC/R systems.
9. Apply municipal, state, and national mechanical codes to decisions involving the design, installation, operation and maintenance of HVAC/R systems.

Occupational Endorsement Certificates
Admissions
Satisfy the Admissions Requirements for Occupational Endorsement Certificates in Chapter 7, Academic Standards and Regulations.

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 enrollment in RH classes.

Academic Progress
Prerequisites: Certain courses require prerequisites or faculty permission.

Students must pass all courses listed in core requirements before attempting any of the specialty courses.

Certificate Requirements
Students seeking an R&H occupational endorsement certificate must complete the following core requirements.

Occupational Endorsement Certificate
Core Requirements – 12 Credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>RH A103</td>
<td>Technical Mathematics for Industrial Trades</td>
<td>3</td>
</tr>
<tr>
<td>RH A105</td>
<td>Electrical Circuits for Refrigeration and Heating I</td>
<td>3</td>
</tr>
<tr>
<td>RH A109</td>
<td>Principles of Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>RH A209</td>
<td>Codes for HVAC/R</td>
<td>2</td>
</tr>
<tr>
<td>RH A211</td>
<td>Customer Relations and Job Etiquette</td>
<td>1</td>
</tr>
</tbody>
</table>
Occupational Endorsement Certificate, Residential and Light Commercial Heating and Ventilation

1. Complete the Core Requirements. 12
2. Complete the following certificate requirements:
   RH A203 HVAC/R Basic Controls 3
   RH A225 Heating Fundamentals and Forced Air Heat 4
   RH A228 Advanced Hydronic Heat Systems 4
3. A total of 23 credits is required for the certificate.

Occupational Endorsement Certificate, Commercial HVAC Systems

1. Complete the Core Requirements. 12
2. Complete the following certificate requirements:
   RH A226 Commercial HVAC/R Systems 4
   RH A229 HVAC/R Control Systems 3
   RH A232 HVAC/R Sheet Metal 3
3. A total of 22 credits is required for the certificate.

Occupational Endorsement Certificate, Residential and Light Commercial Air-Conditioning & Refrigeration

1. Complete the core requirements. 12
2. Complete the following certificate requirements:
   RH A101 Refrigeration and Air Conditioning Fundamentals 4
   RH A126 Electrical Circuits for Refrigeration and Heating II 3
   RH A132 Troubleshooting for HVAC/R Systems 3
3. A total of 22 credits is required for the certificate.

Occupational Endorsement Certificate, Commercial Refrigeration Systems

1. Complete the core requirements. 12
2. Complete the following certificate requirements:
   RH A101 Refrigeration and Air Conditioning Fundamentals 4
   RH A122 Refrigeration and Air Conditioning Fundamentals 4
   RH A201 Commercial and Ammonia Refrigeration 4
3. A total of 24 credits is required for the certificate.

Undergraduate Certificate, Refrigeration and Heating Technology

Admission
Satisfy the Requirements for Admission to Undergraduate Certificate and Associate’s Degree Programs in Chapter 7, Academic Standards and Regulations.

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.

Academic Progress
Prerequisites: Certain courses require prerequisites or faculty permission.

Students must pass all courses listed in core requirements before attempting any of the specialty courses.

Certificate Requirements
1. Satisfy the General University Requirements for Undergraduate Certificates found at the beginning of this chapter.
2. Complete the Core Requirements:
   RH A103 Technical Math 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
3. Complete the following requirements:
   RH A101 Refrigeration and Air Conditioning Fundamentals 4
   RH A122 Refrigeration and Air Conditioning Fundamentals 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

4. A total of 51 credits is required for the certificate.

Associate of Applied Science, Refrigeration and Heating Technology

Admission Requirements
Satisfy the Requirements for Admission to Undergraduate Certificate and Associate’s Degree Programs in Chapter 7, Academic Standards and Regulations.

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.

Academic Progress
Earn a cumulative GPA of 2.00 (C) or higher in required R&H courses to receive the AAS.

AAS Degree Requirements
1. Complete the General University Requirements for Associate of Applied Science Degrees located at the beginning of this chapter.
2. Complete the General Course Requirements for Associate of Applied Science Degrees located at the beginning of this chapter.
3. Complete the Major Requirements for the degree listed below.

Major Requirements
Complete the following required courses:
   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
RENEWABLE ENERGY

Matanuska-Susitna College, Palmer, AK (907) 745-9774
www.matsu.alaska.edu

The Renewable Energy program is offered through Matanuska-Susitna College.

Occupational Endorsement Certificate, Renewable Energy

In the Renewable Energy Occupational Endorsement Certificate program, students learn the fundamental concepts and skills necessary to pursue employment or gain further training as renewable energy technicians. Students are introduced to the physical principles of various renewable energies including solar, wind, hydro, and geothermal power sources. Terminology, energy conservation, and safety are emphasized throughout the program. Coursework incorporates the appropriate skills and knowledge necessary for students to become effective employees in the energy, utility, and maintenance industries. Career pathways may include operating large- and small-scale renewable power production facilities; designing, installing, and maintaining renewable energy systems; or assisting homeowners and businesses with energy efficiency. A required practicum provides applied experience in a workplace setting.

Student Outcomes
Upon completion of the occupational endorsement certificate, students will demonstrate:

- Knowledge of renewable energy resources and technologies
- Basic technical skills for diesel engine repair
- Introductory understanding of basic physics and power management as applied to renewable energy
- Familiarity with OSHA General Industry standards and safety
- Entry-level skills for renewable energy project development and management.

Admission Requirements
See Occupational Endorsement Certificate Admission Requirements in Chapter 7, Academic Standards and Regulations.

Academic Progress
In order to receive the Renewable Energy Occupational Endorsement Certificate, students must achieve a grade of C or better in all courses required for the occupational endorsement certificate.

Graduation Requirements
Complete the following required courses (23 credits):

RE A100 Introduction to Renewable Energy 3
RE A101 Industrial Safety for Renewable Energy 2
RE A102 Applied Physics for Renewable Energy 3
RE A106 Introduction to Diesel Engines 3
RE A200 Power Generation Systems 3
RE A201 Power System Management 3

A total of 66 credits is required for the degree.

TECHNOLOGY

University Center, (UC) 130, (907) 756-6423
www.uaa.alaska.edu/ctc/career/technology.cfm

The Bachelor of Science, Technology (BST) is a degree completion program for students who have earned an AAS (or a minimum of 45 related technical credits) from a regionally accredited institution and wish to pursue a baccalaureate degree. The BST offers a career pathway for technicians and professionals preparing for leadership positions. Students complete a common core of advanced technical and management courses, and they work with a faculty advisor to choose technical, quantitative, and natural science courses that prepare them to advance in their fields. Students may opt to focus their program of study through the Business emphasis in order to further develop their business acumen.

Technology, Career Specialty Undergraduate Certificates

Kodiak College Technology Center Building 123, (907) 486-1209

The Technology Career Specialty Certificates are offered through Kodiak College. Advising for this program is only available at Kodiak College. Please call (907) 486-1209 for more information.

The Technology Career Specialty Undergraduate Certificate programs provide entry-level skills in several specialized fields including welding, construction, and occupational safety and health.

Admission Requirements
See Requirements for Admission to Undergraduate Certificate and Associate’s Degree Programs in Chapter 7, Academic Standards and Regulations.

General University Requirements
Complete the General University Requirements for Undergraduate Certificates at the beginning of this chapter.

Undergraduate Certificate, Welding

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 outcomes for Welding Technology emphasis of the AAS degree.)

1. Complete the Certificate Requirements: 30-31 Credits
   AET A101 Fundamentals of CADD for Building Construction (4) 3-4
   or
   CIS A105 Introduction to Personal Computers and Application Software (3)
   or
   HUMS A153 Human Relations (3)
   or
   HUMS A155 Human Relations in the Workplace (3)
   or
   MATH A101 Technical Math (3) 3
   or
   MATH A105 Intermediate Algebra (3)
   or
   OSH A101 Introduction to Occupational Safety and Health 3
   or
   PRPE A108 Introduction to College Writing 3
   or
   TECH A295 Technical Internship 1

FACULTY
Dan Mielke, Assistant Professor, dmielke@matsu.alaska.edu

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

RE A203 Renewable Energy Project Development 3
RE A295 Renewable Energy Practicum 3

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www.uaa.alaska.edu
WELD A112 Shielded Metal Arc Welding 4
WELD A114 Welding of High Strength Steels 4
WELD A157 Technical Drawing for Welders 3
WELD A190 Selected Topics in Welding Technology 3

Undergraduate Certificate, Construction Technology

Students develop technical skills in AutoCAD, building methods, codes and standards, structural systems, and construction project management. Upon completion of the certificate in construction, students are prepared for entry-level positions as construction professionals. (See outcomes for Construction emphasis of the AAS degree.)

1. Complete the Certificate Requirements: 33 Credits
   - CIS A105 Introduction to Personal Computers and Application Software 3
   - CM A101 Fundamentals of CADD for Building Construction 4
   - CM A102 Methods of Building Construction 3
   - CM A123 Codes and Standards 3
   - CM A201 Construction Project Management I 3
   - CM A205 Construction Safety 3
   - CM A231 Structural Technology 4
   - HUMS A153 Human Relations (3) or HUMS A155 Human Relations in the Workplace (3)
   - MATH A101 Technical Math (3)
   - PRPE A108 Introduction to College Writing 3
   - TECH A295 Technical Internship 1

Undergraduate Certificate, Industrial Safety Program Support

Students develop technical skills in program development, assessment, and management, as well as training needs, training methods, injury prevention, risk management, workplace injury and incident evaluations. Upon completion of the certificate in construction, students are prepared for entry-level positions in industrial safety program support. (See outcomes for Occupational Safety and Health emphasis of the AAS degree.)

1. Complete the Certificate Requirements: 33 Credits
   - CIS A105 Introduction to Personal Computers and Application Software 3
   - ENGL A111 Fundamentals of Written Communication 3
   - MATH A105 Intermediate Algebra 3
   - OSH A101 Introduction to Occupational Safety and Health 3
   - OSH A108 Injury Prevention and Risk Management 4
   - OSH A110 Program Assessment, Development, and Implementation 4
   - OSH A120 Safety Program Management and Recordkeeping 3
   - OSH A180 Introduction to Industrial Hygiene 4
   - OSH A201 Workplace Injury and Incident Evaluation 4
   - TECH A295 Technical Internship 1

Associate of Applied Science, Technology

The Associate of Applied Science, Technology is offered only through Kodiak College. Advising for this program is only available from Kodiak College. Please call (907) 486-1209 for more information.

The Associate of Applied Science in Technology Degree 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.

Students successfully completing the core of the Associate of Applied Science, Technology should expect to:

1. Understand, describe and analyze the physical components and processes found in technical systems.
2. Demonstrate skills in communication, computation and human relations applicable to personal and professional situations.
3. Demonstrate and apply knowledge of physics, math and computers to technical fields
4. Understand and apply safety practices.

Admission Requirements

See Requirements for Admission to Undergraduate Certificate and Associate’s Degree in chapter 7, Academic Standards and Regulations.

General University Requirements

Complete the General University Requirements for Associate’s Degrees at the beginning of this chapter. Students are encouraged to meet with their academic advisor to coordinate program completion.

Major Requirements

1. Complete the following required courses:

General Requirements (16 Credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM A111</td>
<td>Fundamentals of Oral Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM A235</td>
<td>Small Group Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM A237</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A111</td>
<td>Methods of Written Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A212</td>
<td>Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>MATH A105</td>
<td>Intermediate Algebra</td>
<td>3</td>
</tr>
</tbody>
</table>

Science, select from:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM A103/L</td>
<td>Survey of Chemistry with Laboratory (for Construction or OSH emphases only)</td>
<td>4</td>
</tr>
<tr>
<td>CHEM A105/L</td>
<td>General Chemistry with Laboratory (for Construction or OSH emphases only)</td>
<td>4</td>
</tr>
<tr>
<td>GEOL A111</td>
<td>Physical Geology (for Construction emphasis only)</td>
<td>4</td>
</tr>
</tbody>
</table>

Technology Core Requirements (23 Credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AET A101</td>
<td>Fundamentals of CADD for Building Construction</td>
<td>4</td>
</tr>
<tr>
<td>CIS A105</td>
<td>Introduction to Personal Computers and Software Applications</td>
<td>3</td>
</tr>
<tr>
<td>ET A151</td>
<td>Basic Electricity for the Trades</td>
<td>4</td>
</tr>
<tr>
<td>HUMS A153</td>
<td>Human Relations</td>
<td>3</td>
</tr>
<tr>
<td>HUMS A155</td>
<td>Human Relations in the Workplace</td>
<td>3</td>
</tr>
<tr>
<td>OSH A101</td>
<td>Introduction to Occupational Safety and Health</td>
<td>3</td>
</tr>
<tr>
<td>OSH A250</td>
<td>Hazardous Material Operations</td>
<td>3</td>
</tr>
<tr>
<td>TECH A101</td>
<td>Introduction to Technological Principles</td>
<td>3</td>
</tr>
</tbody>
</table>
2. Complete one of the following Technology Career Emphasis areas:

**Construction (27 Credits)**

**Outcomes**
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:

a. **Documentation**: Create, interpret and use construction drawings and other documents, and calculate quantities of material, labor, and equipment needed for a project.

b. **Human Resources**: Define the roles, relationships, and responsibilities of the participants in the construction process, and understand employee relations and contract law.

c. **Building Methods**: Define theoretical structures 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.

d. **Codes and Standards**: Interpret standard building codes for application in modern construction processes.

e. **Construction Project Management**: Familiarity with effective contract administration methods to control, organize, and monitor construction projects.

f. **Management Tools**: Utilize industry standard software for computer-aided drafting (CADD) and gain familiarity with estimating, scheduling and resource management.

g. **Safety**: Apply knowledge of safety, health, and environmental issues related to construction activities.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CM A120</td>
<td>Methods of Building Construction</td>
<td>3</td>
</tr>
<tr>
<td>CM A123</td>
<td>Codes and Standards</td>
<td>3</td>
</tr>
<tr>
<td>CM A142</td>
<td>Mechanical and Electrical Technology</td>
<td>4</td>
</tr>
<tr>
<td>CM A201</td>
<td>Construction Project Management</td>
<td>3</td>
</tr>
<tr>
<td>CM A205</td>
<td>Construction Safety</td>
<td>3</td>
</tr>
<tr>
<td>CM A213</td>
<td>Civil Technology</td>
<td>4</td>
</tr>
<tr>
<td>CM A231</td>
<td>Structural Technology</td>
<td>4</td>
</tr>
<tr>
<td>TECH A295</td>
<td>Technical Internship</td>
<td>3</td>
</tr>
</tbody>
</table>

**Occupational Safety and Health (24 Credits)**

**Outcomes**
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:

a. Identify risks to life, health and property, and plan and implement strategies that prevent injuries.

b. Develop, implement and manage safety programs that comply with government regulations, industry standards and best safety practices.

c. Design and maintain company and personnel records related to safety activities, training and incidents.

d. Perform hazard recognition and mitigation related to chemical and physical conditions in the workplace.

e. 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.

f. Prepare and present employee training modules and programs based on training needs assessments and properly prepare objectives and materials, and practice effective presentations.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSH A108</td>
<td>Injury Prevention and Risk</td>
<td>4</td>
</tr>
<tr>
<td>OSH A110</td>
<td>Program Assessment, Development &amp; Implementation</td>
<td>4</td>
</tr>
<tr>
<td>OSH A120</td>
<td>Safety Program Management and Recordkeeping</td>
<td>3</td>
</tr>
<tr>
<td>OSH A180</td>
<td>Introduction to Industrial Hygiene</td>
<td>4</td>
</tr>
<tr>
<td>OSH A201</td>
<td>Workplace Injury and Incident Evaluation</td>
<td>4</td>
</tr>
</tbody>
</table>

OSH A210 Training Needs and Methods 3  
TECH A295 Technical Internship 2

Sixty-two to 66 credits are required for the Associate in Applied Science, Technology degree.

**Welding (25 Credits)**

**Outcomes**
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:

a. Technical and administrative skills required in today’s metal fabrication and welding environments.

b. Application of specifications and welding procedures to specific job tasks.

c. Skills in welding and thermal cutting processes and familiarity with basic metallurgy theory.

d. Competence in all-position welder qualification tests for two welding process and familiarity with other welding processes.

e. Safe work habits by assessing hazards and using best practices to avoid exposure to risk of injury, and to avoid damaging equipment.

f. Effective communication with other employees, customers, and management.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TECH A295</td>
<td>Technical Internship</td>
<td>3</td>
</tr>
<tr>
<td>WELD A112</td>
<td>Shielded Metal Arc Welding</td>
<td>4</td>
</tr>
<tr>
<td>WELD A114</td>
<td>Welding of High Strength Steel</td>
<td>4</td>
</tr>
<tr>
<td>WELD A157</td>
<td>Technical Drawing for Welders</td>
<td>3</td>
</tr>
<tr>
<td>WELD A161</td>
<td>Gas Metal Arc Welding</td>
<td>4</td>
</tr>
<tr>
<td>WELD A190</td>
<td>Selected Topics in Welding</td>
<td>7</td>
</tr>
</tbody>
</table>

**Bachelor of Science, Technology**
The Bachelor of Science, Technology is designed to allow students to design a program of study which complements their technical proficiencies. The general program, as well as the business emphasis, are described below.

**Admission Requirements**

Satisfy the Requirements for Admission to Baccalaureate Degree Programs found in Chapter 7, Academic Standards and Regulations.

Students who apply to the Bachelor of Science, Technology (BST) major are admitted in a pre-major status. The process for advancement to major status is:

1. Completion of an advising session with BST faculty advisor. (See contact information above.)

2. Completion of an Associate of Applied Science degree from a regionally accredited institution or equivalent credits in a technical specialty area as approved by BST faculty advisor (45 credits minimum).

3. Completion of Change of Major Form from pre-major to major status signed by BST faculty advisor.

**Degree Requirements**

1. Complete the General University Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

2. Complete the General Education Requirements (GER) for Baccalaureate Degrees listed at the beginning of this chapter.

3. Complete Required Support Courses and Major Degree Requirements.

**Program Description and Outcomes**

This program builds on technical skills and knowledge to achieve professional and management competencies needed over a lifetime in continuously changing technological fields. Upon completion of this program, graduates will be able to:

- Develop, demonstrate, and evaluate policies and processes to ensure a safe workplace.
• Integrate knowledge gained in the program into professional goals and objectives.
• Design, schedule, manage, and assess technical projects.
• Achieve professional and management competencies for work in technical fields.

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.

Required Support Courses (12-14 credits)
Ethics (*PHIL A301 recommended) 3
*ENGL A312 Advanced Technical Writing 3
*MATH A107 College Algebra (4) 3-4
*MATH A172 Applied Finite Mathematics (3)
BA A273 Introduction to Statistics for Business and Economics (3) 3-4
*STAT A252 Elementary Statistics (3)
*STAT A253 Applied Statistics for the Sciences (4)

Note: Courses marked with an (*) fulfill UAA GERs.

Major Requirements
1. Complete an Associate of Applied Science degree from a regionally accredited institution or have earned equivalent credits (45 minimum) in a technical specialty. (Must be approved by BST faculty advisor.) 45-60+
2. Additional natural sciences or quantitative skills** 12
Choose from:
Any GER natural sciences or quantitative skills courses and/or
Any upper division STAT, MATH, and/or natural science courses with prefix BIOL, CHEM, ENVI, GEOG, GEOL, and/or PHYS.
**Choose 12 credits of natural sciences or quantitative skills courses (in addition to the 10 credit minimum natural sciences [7] and quantitative skills [3] GERs and in addition to the quantitative skills courses listed under "Required Support Courses"), with faculty approval, for which prerequisites have been met.
3. Complete the following required BST core courses (15 credits):
TECH A302 Operational Safety 3
TECH A305 Technology Management 3
TECH A433 Project Design, Implementation, and Control (3) 3
TECH A443 Quality Leadership (3) 3
TECH A453 Capstone Project 3
4. Complete a minimum of 6 credits of faculty advisor-approved upper division electives related to program outcomes or professional goals. 6
5. A minimum of 120 credits is required for the Bachelor of Science, Technology degree, of which a minimum of 42 credits must be upper division.

Bachelor of Science, Technology Business Emphasis
Program Description and Outcomes
The BST Business Emphasis offers students a focused program of study drawing required courses from Economics and Accounting and incorporating selective courses from Business Administration, Computer Information Systems, or Logistics. While the emphasis requires a minimum of 9 additional credits, the Business emphasis allows students to pursue more depth in their business skills. Upon completion of this program, graduates will be able to:
• Develop, demonstrate, and evaluate policies and processes to ensure a safe workplace.

• Integrate knowledge gained in the program into professional goals and objectives.
• Design, schedule, manage, and assess technical projects.
• Achieve professional and management competencies for work in technical fields.
• Synthesize and apply economic, accounting, and business knowledge within technical contexts.

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.

Required Support Courses (18-20 credits)
Ethics (*PHIL A301 recommended) 3
*ECON A201 Principles of Macroeconomics 3
*ECON A202 Principles of Microeconomics 3
*ENGL A312 Advanced Technical Writing 3
*MATH A107 College Algebra (4) 3-4
*MATH A172 Applied Finite Mathematics (3)
BA A273 Introduction to Statistics for Business and Economics (3) 3-4
*STAT A252 Elementary Statistics (3)
*STAT A253 Applied Statistics for the Sciences (4)

Note: Courses marked with an (*) fulfill UAA GERs. No more than 3 credits of ECON A201 and ECON A202 may be used in fulfilling UAA GERs for a baccalaureate degree.

Major Requirements
1. Complete an Associate of Applied Science degree from a regionally accredited institution or have earned equivalent credits (45 minimum) in a technical specialty. (Must be approved by BST faculty advisor.) 45-60+
2. Complete the following 6 credits:
ACCT A201 Principles of Financial Accounting (3)
ACCT A202 Principles of Managerial Accounting (3)
3. Additional natural sciences or quantitative skills** 9
Choose from:
Any GER Natural Sciences or quantitative skills GER courses and/or
Any upper division STAT, MATH, and/or natural science courses with prefix BIOL, CHEM, ENVI, GEOG, GEOL, and/or PHYS.
**Choose 12 credits of natural sciences or quantitative skills courses (in addition to the 10 credit minimum natural sciences [7] and quantitative skills [3] GERs and in addition to the quantitative skills courses listed under "Required Support Courses"), with faculty approval, for which prerequisites have been met.
4. Complete the following required BST core courses: (15 credits)
TECH A302 Operational Safety 3
TECH A305 Technology Management 3
TECH A433 Project Design, Implementation, and Control (3) 3
TECH A443 Quality Leadership (3) 3
TECH A453 Capstone Project 3
5. Complete a minimum of 6 credits upper division selectives chosen from BA, CIS, ACCT, ECON or LOG. 6
6. A minimum of 129 credits is required for the Bachelor of Science, Technology degree with the Business emphasis, of which a minimum of 42 credits must be upper division.

FACULTY
Maria Angela Dirks, Assistant Professor, angela.dirks@uaa.alaska.edu
Mel Kalkowski, Assistant Professor, ANMLK@uaa.alaska.edu
Peter Risse, Assistant Professor, ANPGR@uaa.alaska.edu
Stephen Strom, Assistant Professor, AFSLS1@uaa.alaska.edu
The Telecommunications, Electronics and Computer Technology Department (TECT) provides entry-level skills and career education to meet the demand for well-trained technicians in the computer electronics, telecommunications and electronics industries. The TECT Department offers an Occupational Endorsement Certificate in Cisco Certified Network Associate (CCNA) and two Undergraduate Certificates in the specialized areas of Telecommunications and Electronics Systems (TES) and Computer and Networking Technology (CNT). Both certificates require three full-time semesters to complete. An Associate of Applied Science degree in Telecommunications, Electronics and Computer Technology can be earned by completing additional required technical and general education courses.

Graduates from the TECT program can be employed as skilled technical support workers in fields including communications, microchip manufacturing, and computer support and repair in private industry as well as municipal, state, and federal agencies.

Both the Anchorage campus and the Matanuska-Susitna campus offer the program and are collaborative sites for the Fairbanks-based, statewide Information Technology Specialist (ITS), which offers a certificate and an associate's degree. Students should consult the TECT faculty for assistance with curriculum planning toward certifications such as A+, Net+, CCNA, ICSA Customer Service, Microsoft Certified Professional, and other industry-recognized standards.

**Occupational Endorsement Certificate, Cisco-Certified Network Associate (CCNA) Description and Outcomes**

At the completion of this occupational endorsement certificate program students are able to demonstrate:

1. Proficiency in Cisco router installation and configuration in multi-protocol internetworks using LAN and WAN switches.
2. Proficiency in Cisco switch and VLAN installation and configuration.
3. Entry-level tasks of planning, design, installation, operation and troubleshooting Ethernet and TCP/IP networks.

**Admission Requirements**

See Admission Requirements for Occupational Endorsement Certificates in Chapter 7, Academic Standards and Regulations.

**Advising**

Students should consult the TECT faculty for assistance with curriculum planning toward certifications.

**General University Requirements**

See General University Requirements for Occupational Endorsement Certificates at the beginning of this chapter.

**Major Requirements**

1. Complete the following courses:
   - CNT A170 Cisco Academy Network Fundamentals 4
   - CNT A261 Cisco Academy Router Fundamentals 4
   - CNT A270 Intermediate Switching and 4
   - CNT A271 Cisco Academy WAN Management 3
2. A total of 15 credits is required for the occupational endorsement certificate.

**Undergraduate Certificate, Computer and Networking Technology**

**Certificate Description and Outcomes**

This undergraduate certificate program prepares students to install, configure, operate and repair networks used to connect computing and digital communications systems of various types. At the completion of the program students are able to demonstrate:

1. Proficiency in PC troubleshooting and repair.
2. Competence in entry-level tasks of planning, design, installation, and troubleshooting Ethernet and TCP/IP networks.
3. Computer literacy in PC applications and operating systems.
4. Entry-level employability skills for computer and network technicians.
5. Job upgrade skills for technicians and professionals.
6. Proper customer service skills.
8. Proficiency in Cisco switch and VLAN installation and configuration.

**Admission Requirements**

See Undergraduate Certificate Admissions Requirements in Chapter 7, Academic Standards and Regulations.

**Advising**

Students should consult the TECT faculty for assistance with curriculum planning toward certifications.

**General University Requirements**

See General University Requirements for Undergraduate Certificates at the beginning of this chapter.

**Major Requirements**

1. Complete the following requirements (29 credits):
   - CNT A160 PC Operating Systems 3
   - CNT A162 PC Building, Upgrading, and Architecture 3
   - CNT A165 Customer Service Fundamentals 1
   - CNT A170 Cisco Academy Network Fundamentals 4
   - CNT A180 PC Interfacing, Peripherals, Storage and A+ 4
   - CNT A183 Local Area Networks 3
   - CNT A261 Cisco Academy Router Fundamentals 4
   - CNT A270 Cisco Academy Switching and Intermediate Routing 4
   - CNT A271 Cisco Academy WAN Management 3
2. Complete 6 credits from the following courses:
   - CNT A262 Computer Technical Support (2)
   - CNT A264 Introduction to Information Security (3)
   - CNT A272 Cisco Wireless Networking (3)
   - CNT A290 Selected Topics in Information Technology (1-3)
3. Complete 5 credits from the following courses:
   - CNT A240 Windows System Essentials (2)
   - CNT A241 Administering and Supporting Windows Workstations and Server (3)
   - CNT A280 Server Operating Systems (3)
4. Complete 3 credits from the following courses:
   - CIOS A113 Operating Systems: MS Windows (1)
   - CIOS A120A Application I: Quickbooks (1)
   - CIOS A130A Word Processing I: MS Word (1)
   - CIOS A135A Spreadsheets I: MS Excel (1)
Undergraduate Certificate, Telecommunications and Electronics Systems

Admission to the certificate program is currently suspended. Contact the department for further information.

Associate of Applied Science, Telecommunications, Electronics and Computer Technology

Degree Description and Outcomes
At the completion of the Computer and Networking Technology track of this associate's degree program, students are able to demonstrate:

1. Computer literacy in PC applications and operating systems.
2. Entry-level employment skills for computer and network technicians.
4. Proficiency in Cisco switch and VLAN installation and configuration.
5. Entry-level tasks of planning, design, installation, operation and troubleshooting Ethernet and TCP/IP networks.
6. Proficiency in PC troubleshooting and repair.
7. The installation configuration and troubleshooting Microsoft operating systems.
8. The configuration and maintenance of network and computer system security.
9. Proper customer service skills.

At the completion of the Telecommunications and Electronics Systems track of this associate degree program, students are able to demonstrate:

1. Proficiency in electronic theory, equipment maintenance and troubleshooting.
2. Proficiency in electronic communications and telecommunications.
3. Computer literacy in PC applications and operating systems.
4. Good customer service skills.

Admission Requirements
See Admission Requirements to Undergraduate Certificate and Associate's Degree Programs in Chapter 7, Academic Standards and Regulations.

General University Requirements

1. Complete the General University Requirements for Associate's Degrees listed at the beginning of this chapter.
2. Complete the Associate of Applied Science Requirements (15 credits) listed at the beginning of this chapter.

General Course Requirements
Complete the General Course Requirements for AAS degrees listed at the beginning of this chapter.

Major Requirements
Complete one of the following tracks:

Computer and networking track (52 credits)

1. Complete the following requirements (29 credits):
   - CNT A160 PC Operating Systems
   - CNT A162 PC Building, Upgrading and Architecture
   - CNT A180 PC Interfacing, Peripherals, Storage and A+ System Configuration
   - CNT A170 Cisco Academy Network Fundamentals
   - CNT A183 Local Area Networks
   - CNT A216 Cisco Academy Router Fundamentals
   - CNT A270 Cisco Academy Switching and Interconnection
   - CNT A271 Cisco Academy WAN Management

2. Complete 9 credits from the following courses:
   - CNT A262 Computer Technical Support (2)
   - CNT A264 Introduction to Information Security (3)
   - CNT A272 Cisco Wireless Networking (3)
   - CNT A276 Independent Project (3)
   - CNT A282 Work Study (3)
   - CNT A290 Selected Topics in Information Technology (1-3)

3. Complete 8 credits from the following courses:
   - CNT A240 Windows System Essentials (2)
   - CNT A241 Administering and Supporting Windows Workstations and Server (3)
   - CNT A242 Windows Network Infrastructure Administration (3)
   - CNT A280 Server Operating Systems (3)

4. Complete 3 credits from the following courses:
   - CNT A185 Introduction to Programming Business Applications (3)
   - CS A101 Introduction to Computer Science (3)
   - CS A109 Computer Programming (Languages Vary) (3)
   - CS A110 Java Programming (3)
   - CS A111 Visual Basic.NET Programming (3)

5. Complete 3 credits from the following courses:
   - CNT A113 Operating Systems: MS Windows (1)
   - CNT A120A Bookkeeping Software Application I: Quickbooks (1)
   - CNT A130A Word Processing I: MS Word (1)
   - CNT A130B Word Processing I: WordPerfect (1)
   - CNT A135A Spreadsheets I: MS Excel (1)
   - CNT A146 Internet Concepts and Applications (2)
   - CNT A150A Presentations: MS PowerPoint (2)
   - CIS A105 Introduction to Personal Computers and Applications Software (3)
   - CIS A110 Computer Concepts in Business (3)
   - CNT A290 Selected Topics in Information Technology (1-3)

Telecommunications and Electronics Systems Track (45 credits)

Admission to this track is currently suspended. Contact the department for further information.

FACULTY
Mark Bothum, Instructor, AFMSB1@uaa.alaska.edu
David Morrison, Assistant Professor, PFDSM@uaa.alaska.edu
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George Rex Playkett, Assistant Professor, AFGRP@uaa.alaska.edu
**VETERINARY ASSISTING**

Matanuska-Susitna College
Palmer, AK (907) 745-9774
www.matsu.alaska.edu

The Veterinary Assisting program is offered through Matanuska-Susitna College.

**Occupational Endorsement Certificate, Veterinary Assisting**

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.

**Certificate 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.

**Admission Requirements**

See Admission Requirements to Occupational Endorsement Certificates in Chapter 7, Academic Standards and Regulations.

**Certificate Requirements**

In order to receive the Veterinary Assisting Occupational Endorsement Certificate, students must achieve a grade of C or better in all courses required for the occupational endorsement certificate.

1. Complete the following required courses:
   - 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

2. A total of 21 credits are required for this Occupational Endorsement Certificate.

**FACULTY**

Karen Carpenter, Assistant Professor, kcarpenter@matsu.alaska.edu

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**WELDING & NONDESTRUCTIVE TESTING TECHNOLOGY**

Gordon Hartlieb Hall (GHH), Room 111, (907) 786-6475
www.aaa.alaska.edu/ctc/construction/weld

**Kenai**

www.kpc.alaska.edu/academics/cert_welding.html

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 Welding and Nondestructive Testing (NDT) program offers an Associate of Applied Science (AAS) degree in Welding and Nondestructive Testing Technology, and two separate Undergraduate Certificates in either Industrial Welding Technology or Nondestructive Testing Technology. Welding and NDT are combined in the AAS degree. Kenai Peninsula College also offers an Undergraduate Certificate in Welding Technology as described in this catalog section.

Industrial welding technician students develop manual 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 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.

**Undergraduate Certificates**

**Admission Requirements**

See Admission Requirements to Undergraduate Certificates and Associate's Degree Programs Chapter 7, Academic Standards and Regulations.

**General University Requirements**

Complete the General University Requirements for Undergraduate Certificates at the beginning of this chapter.

**Advising**

Students should consult the Anchorage or Kenai WELD faculty for assistance with course planning towards certifications.

**Academic Progress Requirements**

Students must complete certificate course requirements with a minimum cumulative GPA of 2.00.

**Undergraduate Certificate, Industrial Welding Technology**

Admission to the certificate program is currently suspended. Contact the department for further information.
## Undergraduate Certificate, Nondestructive Testing Technology

Admission to the certificate program is currently suspended. Contact the department for further information.

## Undergraduate Certificate, Welding Technology

Kenai Peninsula College
Kenai River Campus, Ward Building, Room 204, (907) 262-0344, (877) 262-0330

This certificate is offered only at Kenai Peninsula College.

Advising for this program is only available from the Welding faculty at Kenai Peninsula College. Please call (907) 262-0344 or (877) 262-0330 for more information.

### Certificate Description and Outcomes

The one-year certificate in welding technology provides a student 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.

NOTE: Experienced welders have the option of bypassing the first semester courses by successfully completing written and practical examinations on first semester work.

### General University Requirements

Complete the General University and the General Course Requirements for AAS degrees listed at the beginning of this chapter.

### Certificate Requirements

1. Complete the following requirements:
   - **MATH A105** Intermediate Algebra 3
   - **PRPE A108** Introduction to College Writing (3) 3
   - or
   - **ENGL A111** Methods of Written Communication (3) or
   - **COMM A111** Fundamentals of Oral Communication (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
   - **PETR A155** Blueprint Reading 3

2. Complete one of the following (4 credits):
   - **WELD A108** Wire Welding (4)
   - **WELD A109** TIG Welding (4)

3. All students must pass structural and pipe certification tests before receiving a certificate in Welding Technology.

4. A total of 31 credits is required for the undergraduate certificate.

### Faculty

- Fritz Miller, Associate Professor, IFFWM@uaa.alaska.edu
- Drew O’Brien, Assistant Professor, IFDO@uaa.alaska.edu

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## Associate of Applied Science, Welding and Nondestructive Testing Technology

### Degree Description and Outcomes

This associate's degree prepares students with the technical and administrative skills required in today's metal fabrication and inspection environments. Graduates of this program will be able to apply specifications and codes to complete specific job tasks.

At the completion of the program, students are able to demonstrate:

1. Entry-level technical skills in welding and nondestructive examination.
2. Technical knowledge of the interrelationship between welding and inspection processes.
3. Hazard assessment and best safety practices to avoid exposing themselves or others to risk of injury and avoiding damage to equipment.
4. Effective communication with other employees, customers, and management.

### Admission Requirements

See the Associate's Degree Admissions Requirements in Chapter 7, Academic Standards and Regulations.

### General University Requirements

Complete the General University Requirements for Associate of Applied Science Degrees at the beginning of this chapter.

### General Course Requirements

Complete the General Course Requirements for AAS degrees listed at the beginning of this chapter.

### Advising

Students should consult the Anchorage or Kenai WELD faculty for assistance with course planning towards the AAS degree.

### Major Requirements

1. Complete the following required courses:
   - **ENGL A111** Methods of Written Communication 3
   - **ENGL A212** Technical Writing 3
   - **MATH A105** Intermediate Algebra 3
   - **PHYS A101** Physics for Poets (3) 3-4
   - or
   - **PHYS A115** Physical Science with Laboratory (4)
   - **PHYS A123** Basic Physics I (3)
   - **WELD A112** Shielded Metal Arc Welding (SMAW) 4
   - **WELD A123** Radiographic Testing Safety 2
   - **WELD A124** Radiographic Testing 3
   - **WELD A261** Ultrasonic Testing 4
   - **WELD A262** General Nondestructive Testing 3
   - **WELD A263** Radiographic Testing Safety 2
   - **WELD A264** Radiographic Testing 3
   - **WELD A281** Welding Inspection and Code Review 4
   - **WELD A287** Welding Metallurgy Applications 5

2. Complete at least one of the following courses:
   - **TECH A295** Technical Internship (advisor approved) (3)
   - **WELD A117** Basic Pipefitting (4)
   - **WELD A118** Welding Fabrication and Manufacturing (4)
   - **WELD A190** Selected Topics in Welding Technology (3)

3. Pass three separate all-position welder qualification tests.
4. Pass two separate NDT method qualification tests.
5. A total of 61-62 credits is required for the degree.

**FACULTY**
Robert McCauley, Anchorage, Associate Professor, AFRDM@uaa.alaska.edu
Fritz Miller, Kenai, Assistant Professor, IFFWM@uaa.alaska.edu
Eli van Ringelenstein, Anchorage, Instructor, AFEV@uaa.alaska.edu

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**SCHOOL OF ENGINEERING**

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.

The School of Engineering offers areas of study at the undergraduate level:
- A four-year program leading to a Bachelor of Science in Civil Engineering;
- A four-year program leading to a Bachelor of Science in Engineering with three specialty tracks:
  - Mechanical Engineering
  - Electrical Engineering
  - Computer Systems 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; and

**Accreditation**
All Bachelor of Science programs are accredited by ABET (Accreditation Board for Engineering and Technology) and include the following:
1. Civil Engineering
2. Computer Systems Engineering
3. Electrical Engineering
4. Geomatics
5. Mechanical Engineering

**Civil Engineering**
The UAA School of Engineering offers a Bachelor of Science in Civil Engineering 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.

**Engineering**
The UAA School of Engineering offers a Bachelor of Science in Engineering (BSE) with specializations in Computer Systems Engineering, Electrical Engineering or Mechanical Engineering. Graduates with a BSE have a broad range of engineering skills that are necessary when serving the infrastructure needs of remote rural areas typical of many Alaskan communities. The program emphasizes fundamental engineering principles as a basis for interdisciplinary design, teamwork, and for lifelong learning. Graduates are in a position to take advantage of a wide variety of professional opportunities and are well prepared for an engineering career in a technologically changing world.

**Geomatics**
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.

Minors in the School of Engineering
To meet a variety of student needs, the School of Engineering offers several minors. A choice of two types of Engineering minors are offered. The first is a minor in General Engineering which is designed for students who are majoring in a non-engineering baccalaureate degree. The second is an Engineering Specialty minor program which is designed for students majoring in an engineering baccalaureate degree who, therefore, have completed much of the coursework in the Bachelor of Science in Engineering (BSE) or Civil Engineering (CE) programs. Engineering Specialty minors are in Civil Engineering, Computer Systems Engineering, Electrical Engineering, or Mechanical Engineering. Additionally, a minor in Geographic Information Systems (GIS) is offered for students who are majoring in baccalaureate degrees in a variety of disciplines and seeking strong GIS knowledge and skills to enhance their specialty and support a sustainable professional career.

CIVIL ENGINEERING
Engineering Building (ENGR), Room 201, (907) 786-1900
www.engr.uaa.alaska.edu

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.

Bachelor of Science, Civil Engineering
The Department of Civil Engineering offers an undergraduate curriculum leading to a Bachelor of Science in Civil Engineering. The first two years of the program have application to most other branches of engineering.

Accreditation
The Bachelor of Science program in Civil Engineering at UAA is accredited by the ABET which is the only accreditor of engineering programs and related fields of study in the US.

Program Objectives and Expected Outcomes
The curriculum of the UAA civil engineering program is designed to produce graduates who:
1. Have a basic knowledge of the principles and skills relating to the civil engineering sub-disciplines of water resources, geotechnical, structural, transportation, and environmental engineering;
2. Have an understanding of the principles related to project delivery;
3. Have sufficient technical competence to obtain employment as an entry-level engineer and to be able to progress professionally within the discipline, and are prepared for advanced study;
4. Have a fundamental understanding of the issues related to civil engineering practice in cold regions;
5. Are able to communicate their ideas;
6. Are able to work within a team environment; and
7. 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 Civil Engineering program will have:
1. An ability to apply knowledge of mathematics through differential equations, probability and statistics, calculus-based physics, and general chemistry;
2. An ability to apply knowledge in a minimum of four recognized major civil engineering areas;
3. 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;
4. An ability to design a civil engineering system, component, or process to meet desired needs;
5. An ability to function on multidisciplinary teams;
6. An ability to identify, formulate, and solve engineering problems;
7. An understanding of professional and ethical responsibility;
8. An ability to communicate effectively;
9. The broad education necessary to understand the impact of engineering solutions in a global and societal context;
10. A recognition of the need for, and an ability to engage in, lifelong learning;
11. A knowledge of contemporary issues in professional practice; and
12. An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

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 degree 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 Bachelor of Science in Civil Engineering degree.
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.

Admission Requirements
Admission to the Civil Engineering program is to one of two levels: Pre-Engineering or Civil Engineering. Students admitted to either of the two levels are considered to be degree-seeking engineering students. Pre-Engineering students are classified within the university system as pre-majors. Civil Engineering students are classified within the university system as full majors.
Pre-Engineering
Applicants for admission who have completed only the general Baccalaureate Degree Program Admission Requirements in Chapter 7 of this catalog are admitted as pre-majors to the Civil Engineering program at the Pre-Engineering level.

Civil Engineering
Applicants for admission who, in addition to the general Baccalaureate Degree Program Admission Requirements, have completed the following list of high school courses (or their university equivalents) with grades of C or better will be admitted as full majors to the Civil Engineering program at the Engineering Fundamentals level:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algebra</td>
<td>2 years</td>
</tr>
<tr>
<td>Chemistry</td>
<td>1 year</td>
</tr>
<tr>
<td>English</td>
<td>3 years</td>
</tr>
<tr>
<td>Physics</td>
<td>1 year</td>
</tr>
<tr>
<td>Trigonometry</td>
<td>1/2 year</td>
</tr>
</tbody>
</table>

Advancement

Pre-Engineering to Civil Engineering
Pre-Engineering students must work with their assigned advisor to develop a course plan to make up the high school course requirements for advancement to the Civil Engineering full major. Once the Pre-Engineering coursework outlined in the student's course plan is completed, students must meet with their advisor to apply for advancement to Engineering full-major status.

Advising
All undergraduate students are strongly encouraged to meet with their faculty advisor each semester for the purpose of reviewing their academic progress and planning future courses. All civil engineering students are required to meet with their faculty advisors to be advanced within the program and to apply for graduation. It is particularly important for students to meet with their faculty advisor whenever academic difficulties arise.

Academic Progress
Any given CE or ES course may only be taken when all 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 School 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 school. 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
In order to receive the Bachelor of Science degree in Civil Engineering, students must complete the following graduation requirements:

A. General University Requirements
Complete the General University Requirements for All Baccalaureate Degrees listed at the beginning of this chapter.

B. General Education Requirements
Complete the General Education Requirements for Baccalaureate Degrees (GER) listed at the beginning of this chapter with the additional requirement that one of the following criteria are met within the courses taken to meet the social sciences, humanities, and fine arts GER requirements:

1. Six credits are from courses that are at the 200 level or above.

2. Three credits are from courses that are at the 200 level or above and 6 credits are from a sequence of courses at the 100 level. For example, HIST A101 and HIST A102 is considered to be a 6-credit course sequence.

C. Civil Engineering Requirements
1. Satisfactorily complete these courses with a GPA of 2.00. Courses with an asterisk (*) must be completed with a grade of C or better (108 credits):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE A334*</td>
<td>Properties of Materials</td>
<td>3</td>
</tr>
<tr>
<td>CE A344</td>
<td>Water Resources Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CE A402</td>
<td>Transportation Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CE A403</td>
<td>Arctic Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CE A422</td>
<td>Foundation Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CE A431*</td>
<td>Structural Analysis</td>
<td>4</td>
</tr>
<tr>
<td>CE A432</td>
<td>Steel Design (3)</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>CE A433</td>
<td></td>
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<tr>
<td>or</td>
<td>CE A435*</td>
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<td>or</td>
<td>CE A438</td>
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<td>or</td>
<td>CE A441</td>
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<td>or</td>
<td>CHEM A105*</td>
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<td>or</td>
<td>CHEM A105L*</td>
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<tr>
<td>or</td>
<td>CHEM A106*</td>
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<tr>
<td>or</td>
<td>CHEM A106L*</td>
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<td>or</td>
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<td>GEO A155*</td>
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<td>or</td>
<td>MATH A200*</td>
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<td>or</td>
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<tr>
<td>or</td>
<td>PHYS A211L*</td>
<td></td>
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<tr>
<td>or</td>
<td>PHYS A212*</td>
<td></td>
</tr>
<tr>
<td>or</td>
<td>PHYS A212L*</td>
<td></td>
</tr>
</tbody>
</table>

2. A natural science elective (minimum 3 credits) must be taken in addition to the 7-credit natural science General Education Requirement and may be selected from the following list:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL A115/L</td>
<td>Fundamentals of Biology I with Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>BIOL A271/L</td>
<td>Principles of Ecology with Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>CHEM A450</td>
<td>Environmental Chemistry (3)</td>
<td>3</td>
</tr>
<tr>
<td>GEOL A111</td>
<td>Physical Geology (4)</td>
<td>4</td>
</tr>
<tr>
<td>GEOL</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>BIOL A178</td>
<td>Fundamentals of Oceanography (3)</td>
<td>3</td>
</tr>
<tr>
<td>PHYS A303</td>
<td>Modern Physics (3)</td>
<td>3</td>
</tr>
<tr>
<td>PHYS A314</td>
<td>Electromagnetics (3)</td>
<td>3</td>
</tr>
</tbody>
</table>
PHYS A320  Simulation of Physical Systems (3)
PHYS/BIOL/ CHEM A456  Nonlinear Dynamics and Chaos (3)

Note: GEOL A111 is the recommended course.

3. Six credits of technical elective courses are required that may be chosen from the following list of courses. These electives are intended to improve students' knowledge and skills relating to site characterization, problem identification, criteria development, and project design in the civil engineering sub-disciplines of water resources, geotechnical, structural, transportation, and environmental engineering. Graduate courses may not be applied to both a baccalaureate and master's degree.

Water Resources Engineering
CE A662  Surface Water Dynamics (3)
CE A663  Ground Water Dynamics (3)
CE A674  Waves, Tides, and Ocean Process for Engineers (3)
CE A677  Coastal Measurements and Analysis (3)
CE A682  Ice Engineering (3)
CE A683  Arctic Hydrology and Hydraulic Engineering (3)
CE A684  Arctic Utility Distribution (3)

Geotechnical Engineering
CE A676  Coastal Engineering (3)
CE A681  Frozen Ground Engineering (3)

Structural Engineering
CE A432  Steel Design (3)
or
CE A433  Reinforced Concrete Design (3)

Either CE A432 or CE A433 may be chosen as a technical elective, if not applied to satisfy the Civil Engineering Professional requirements described above.

CE A434  Timber Design (3)
CE A610  Engineering Seismology (3)
CE A611  Geotechnical Earthquake Engineering (3)
CE A612  Advanced Foundation Design (3)
CE A631  Structural Finite Elements (3)
CE A633  Structural Dynamics (3)
CE A634  Structural Earthquake Engineering (3)
CE A636  Multi-Story Building Structural Design (3)
CE A637  Earthquake Resistant Structural Design (3)
CE A639  Loads on Structures (3)

Transportation Engineering
CE A423  Traffic Engineering (3)
CE A424  Pavement Design (3)
CE A425  Highway Engineering (3)
CE A675  Design of Ports and Harbors (3)
GEO A456  Geomatics and Civil Design (3)

Environmental Engineering
AEST A601  Aquatic Process Chemistry (3)
AEST A602  Water Quality Management (3)
AEST A603  Solid Waste Management (3)
AEST A604  Environmental Law, Regulations and Permitting (3)
AEST A605  National Environmental Policy Act (3)
AEST A606  Clean Water Act (3)
AEST A608  Fundamentals of Air Pollution (3)
AEST A613  Remediation (3)
CE A442  Environmental Systems Design (3)
CE A600  Fundamentals of Environmental Science and Engineering (3)

CE A605  Chemical and Physical Water and Wastewater Treatment Processes (3)
CE A606  Biological Treatment Processes (3)

4. A total of 132 credits is required for the degree, of which 42 credits must be upper division (300-, 400-, or 600-level).

5. All Civil Engineering students are strongly encouraged to take the Fundamentals of Engineering Examination in their senior year as an initial step toward professional registration. Civil Engineering students are also encouraged to consider minors in Mathematics or Physics and graduation with departmental honors.

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www.uaa.alaska.edu

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ENGINEERING: COMPUTER SYSTEMS, ELECTRICAL, AND MECHANICAL ENGINEERING

Engineering Building (ENGR), Room 201, (907) 786-1900
www.engr.uaa.alaska.edu/programs/bse

Bachelor of Science, Engineering

The Bachelor of Science in Engineering (BSE) program is a design-oriented curriculum that incorporates topics that span the foundations of engineering disciplines. BSE students select courses for a specialization track that best suits their needs. Thus, the BSE curriculum can custom fit a student's education with the needs of the community and industry. The three tracks of specialization are: 1) Computer Systems Engineering, 2) Electrical Engineering, and 3) Mechanical Engineering.

The Computer Systems Engineering (CSE) specialty track focuses on applied computer theory and networking. Students take courses such as signals, systems, computer hardware design, assembly programming, and electronic device design.

The Electrical Engineering (EE) specialty track focuses on applied circuit design and theory. Students take courses in electrical signals and systems, circuit design, and communication systems.

The Mechanical Engineering (ME) specialty track focuses on heat transfer and machine design. Students take courses in heat transfer, HVAC (heating, ventilation, and air conditioning), and machine design.

Accreditation
All BSE programs are separately accredited by the ABET, which is the only accreditor of engineering programs and related fields of study in the US. The accredited BSE programs include: 1) Computer Systems Engineering, 2) Electrical Engineering, and 3) Mechanical Engineering.
Program Objectives and Expected Outcomes

The curriculum of the BSE program has also been carefully designed to prepare students for the profession of engineering through study, experience and practice, with these objectives:

1. Produce graduates who are able to successfully practice engineering to serve the state of Alaska, and national and international industries and government agencies.
2. Produce graduates with the necessary background and technical skills to work professionally as individuals or in teams in engineering practice or in graduate schools.
3. Prepare graduates for personal and professional success with and understanding and appreciation of ethical behavior, social responsibility, and diversity, both as individuals and in team environments.
4. Prepare graduates to be interested, motivated, and capable of pursuing continued lifelong learning through further graduate education, short courses, or other training programs in engineering and related fields.

Knowing that all engineering programs must demonstrate that their students attain a level of proficiency in a number of important areas, the BSE program has chosen the following set of program outcomes. Students will have:

(a) an ability to apply knowledge of mathematics, science, and engineering
(b) an ability to design and conduct experiments, as well as analyze and interpret data
(c) 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
(d) an ability to function on multidisciplinary teams
(e) an ability to identify, formulate, and solve engineering problems
(f) an understanding of professional and ethical responsibility
(g) an ability to communicate effectively
(h) the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
(i) a recognition of the need for, and the ability to engage in, lifelong learning
(j) a knowledge of contemporary issues
(k) and an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

Honors in Engineering

Undergraduate BSE students may be recognized for exceptional performance by earning Departmental Honors in each of the three specialty tracks: Mechanical Engineering, Electrical Engineering, or Computer Systems Engineering. The award will be noted on their permanent university transcript. In order to receive Honors in the BSE program, a student must meet each of the following requirements.

1. Complete all requirements for a BSE. A minimum of 30 credits applicable to the BSE 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 engineering profession.
3. Have a GPA of 3.30 or higher in courses applicable to the BSE.
4. Gain approval for and complete a design/research project prior to applying for graduation. An oral presentation of the project results to an appropriate audience will be required. The project proposal and final written report must be approved by the student’s academic advisor and the chair of BSE Engineering program.
5. Take and Pass the Fundamentals of Engineering Examination in the senior year.

6. Document a minimum of eight weeks work experience in an engineering or engineering-related position.

Admission Requirements

Complete the Baccalaureate Degree Programs Admission Requirements described in Chapter 7 of this catalog. In addition, in order to be prepared for first-year courses in the BSE program, students should have completed 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 qualify to be accepted into the BSE program with major status.

If an applicant to the School of Engineering BSE program does not satisfy one or more of the above requirements, the student may be accepted into the BSE with major or pre-major status depending upon the courses that were successfully completed. Students with either pre-major or major status are considered enrolled in the BSE program. Acceptance into the pre-major or major status is determined by the department chair.

Advancement from Pre-Major to Major Status

Pre-major BSE students must work with their assigned faculty advisor to develop a course plan to make up the high school course requirements for advancement to major status in the BSE program. Once the coursework outlined in the student’s course plan for advancement is completed, the student meets with their faculty advisor to request advancement to major status, or may also be advanced to major status by the department chair upon review of the students academic progress. Advancement to major status is subject to approval by the department chair.

Curriculum

The total required credits for the BSE is 132 credits. There are five main categories of required credits.

<table>
<thead>
<tr>
<th>Category</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>*General Education Requirements (GER)</td>
<td>15</td>
</tr>
<tr>
<td>Core Curriculum</td>
<td>59</td>
</tr>
<tr>
<td>Engineering Emphasis Track Courses</td>
<td>43</td>
</tr>
<tr>
<td>**Advanced Math Elective</td>
<td>3</td>
</tr>
<tr>
<td>Advanced Engineering/Science Electives</td>
<td>12</td>
</tr>
<tr>
<td>**Total Credits</td>
<td>132</td>
</tr>
</tbody>
</table>

*Note: For rules and information about selecting courses to meet General Education Requirements, see the link on the main School of Engineering website at: www.engr.uaa.alaska.edu/.

**Note: MATH A231 Discrete Mathematics is required for Computer Systems Engineering students.

During the first two years (freshman and sophomore) of the BSE program, the student completes a set of core courses of 74 credits (59 Core Curriculum credits and 15 General Education Requirements). These courses cover basic sciences, mathematics, oral and written communications, and other General Education Requirement courses. This provides the student with a broad and solid background in the topics necessary to build a specialization in a field of engineering.

The engineering emphasis track courses are taken mostly in the third and fourth (junior and senior) years. Each track has a series of required courses totaling 43 credits. In addition, the student selects an additional 12 credits of advanced engineering or science electives, and a 3 credit advanced mathematics elective.

Engineering design is introduced early in the curriculum and is emphasized throughout the program. In addition to the seminar series, a three-course introductory Engineering Practices series is a required part of the curriculum. It is an outstanding customized coordination of
courses that specifically teaches engineering students what they most need to know early in the curriculum. These courses help students become more successful in all of their subsequent courses and to be more effective as practicing engineers. Topics include applied mathematics, computer applications, experimental data gathering and analysis, collaborative teamwork, and report preparation and presentation. Also, a senior capstone design course is required.

Since the BSE program allows for the selection of more electives than the traditional BS engineering programs, students can custom design their curriculum to specialize in the areas of engineering most applicable for their plans. So, students can prepare themselves to specifically meet the needs of specific companies, and state and federal agencies.

Professional registration is emphasized throughout the program. Students attend three professional seminar courses that expose them to multiple experts from education and industry speaking about their field of expertise. All students are encouraged to take the Fundamentals of Engineering examination before graduation.

**Advising**

All undergraduate students are encouraged to meet with their faculty 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.

**Mathematics Minor**

Upon completion of the BSE with the mechanical or electrical engineering specialization, the requirements for obtaining a minor in Mathematics are also satisfied. Students are encouraged to apply for the mathematics minor with the BSE when applying for graduation.

**Academic Progress**

All prerequisites for engineering courses must be completed with a grade of C or higher. A student who has a cumulative semester GPA in engineering courses below 2.00 will be placed on academic warning by the School of Engineering. If a student on academic warning status receives a grade of C or higher. A student who has a cumulative semester GPA in engineering specialization, the requirements for obtaining a minor in Mathematics Minor students all undergraduate students are encouraged to meet with their faculty advisors and review the rules for selecting these 15 GER credits. A website with the rules is linked on the main School of Engineering website.

**C. Major Requirements**

1. Complete the following core courses (59 Credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM A105</td>
<td>General Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM A105L</td>
<td>General Chemistry Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>COMM A111</td>
<td>Fundamentals of Oral Communications (3)</td>
<td>3</td>
</tr>
<tr>
<td>COMM A235</td>
<td>Small Group Communication (3) or</td>
<td></td>
</tr>
<tr>
<td>COMM A237</td>
<td>Interpersonal Communication (3) or</td>
<td></td>
</tr>
<tr>
<td>ENGL A111</td>
<td>Methods of Written Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A212</td>
<td>Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENGR A105A</td>
<td>Engineering Computer-Aided Design I</td>
<td>1</td>
</tr>
<tr>
<td>ENGR A105B</td>
<td>Engineering Computer-Aided Design II</td>
<td>1</td>
</tr>
<tr>
<td>ENGR A151</td>
<td>Engineering Practices I</td>
<td>3</td>
</tr>
<tr>
<td>ENGR A161</td>
<td>Engineering Practices II</td>
<td>3</td>
</tr>
<tr>
<td>ENGR A192</td>
<td>Engineering Seminar I</td>
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</tr>
<tr>
<td>ENGR A251</td>
<td>Engineering Practices III</td>
<td>3</td>
</tr>
<tr>
<td>ENGR A292</td>
<td>Engineering Seminar II</td>
<td>1</td>
</tr>
<tr>
<td>ES A208</td>
<td>Engineering Mechanics</td>
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</tr>
<tr>
<td>ES A302</td>
<td>Engineering Data Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ESM A450</td>
<td>Economic Analysis and Operations</td>
<td>3</td>
</tr>
<tr>
<td>MATH A200</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH A201</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH A202</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH A302</td>
<td>Ordinary Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>PHYS A211</td>
<td>General Physics I</td>
<td>3</td>
</tr>
<tr>
<td>PHYS A211L</td>
<td>General Physics Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>PHYS A212</td>
<td>General Physics II</td>
<td>3</td>
</tr>
<tr>
<td>PHYS A212L</td>
<td>General Physics II Laboratory</td>
<td>1</td>
</tr>
</tbody>
</table>

2. Choose one of the following specializations:

**Computer Systems Engineering (43 credits)**

Complete the following required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS A330</td>
<td>Algorithms and Data Structures</td>
<td>3</td>
</tr>
<tr>
<td>CSE A205</td>
<td>Introduction to C Programming for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>CSE A215</td>
<td>Object-Oriented Programming for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>CSE A225</td>
<td>Assembly Language Programming for Engineers Using Xilinx</td>
<td>3</td>
</tr>
<tr>
<td>CSE A335</td>
<td>Operating Systems Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CSE A342</td>
<td>Digital Circuits Design</td>
<td>3</td>
</tr>
<tr>
<td>CSE A355</td>
<td>Computer Networking for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>CSE A438</td>
<td>Design of Computer Engineering Systems</td>
<td>3</td>
</tr>
<tr>
<td>EE A203</td>
<td>Fundamentals of Electrical Engineering I</td>
<td>4</td>
</tr>
<tr>
<td>EE A204</td>
<td>Fundamentals of Electrical Engineering II</td>
<td>4</td>
</tr>
<tr>
<td>EE A215</td>
<td>Computer Hardware Concepts</td>
<td>4</td>
</tr>
<tr>
<td>EE A314</td>
<td>Electromagnetics</td>
<td>3</td>
</tr>
<tr>
<td>EE A353</td>
<td>Circuit Theory</td>
<td>3</td>
</tr>
<tr>
<td>ENGR A105C</td>
<td>Engineering Computer-Aided Design III</td>
<td>1</td>
</tr>
</tbody>
</table>

**Electrical Engineering (43 credits)**

Complete the following required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSE A205</td>
<td>Introduction to C Programming for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>CSE A215</td>
<td>Object-Oriented Programming for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>CSE A225</td>
<td>Assembly Language Programming for Engineers Using Xilinx</td>
<td>3</td>
</tr>
</tbody>
</table>

It is very important that students see their faculty advisors and review the rules for selecting these 15 GER credits. A website with the rules is linked on the main School of Engineering website.

**Graduation Requirements**

**A. General University Requirements**

Complete the General University Requirements for All Baccalaureate Degrees listed at the beginning of this chapter.

**B. General Education Requirements**

Every UAA baccalaureate degree requires a minimum of 37 credits of General Education Requirements in eight different categories. The specifically identified courses required for the BSE satisfies five of these categories. However, there are 15 GER credits in the remaining three categories (Social Sciences, Humanities, and Fine Arts) that the student selects:

<table>
<thead>
<tr>
<th>Category</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fine Arts</td>
<td>3</td>
</tr>
<tr>
<td>Humanities</td>
<td>6</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>6</td>
</tr>
</tbody>
</table>

One of the following criteria must be met:

1. Six credits are from courses that are at the 200 level or above.
2. Three credits are from courses that are at the 200 level or above and 6 credits are from a sequence of courses at the 100-level. For example, HIST 101 and HIST 102 is considered to be a 6-credit course sequence.

In addition, the courses selected for Social Science must be from two different disciplines.
3. Advanced Electives

BSE students are required to take 12 credits of advanced engineering/science electives from an approved list of electives for the particular emphasis area. Also, a 3-credit advanced mathematics elective is required that is selected from a single list common for all emphasis areas. Many elective courses require prerequisite courses that are also elective courses. Thus, in selecting elective courses students are strongly advised to work with their advisor to develop a cohesive set of elective courses. Choice of engineering electives is subject to approval by the student’s advisor and the department head.

Advanced Mathematics Electives (3 credits)

BSE Computer Systems Engineering students are required to take the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH A231</td>
<td>Introduction to Discrete Mathematics</td>
<td>3</td>
</tr>
</tbody>
</table>

BSE Electrical Engineering and BSE Mechanical Engineering students are required to take one course from the following list of advanced mathematical elective courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH A314</td>
<td>Linear Algebra (3)</td>
<td>3</td>
</tr>
<tr>
<td>MATH A321</td>
<td>Analysis of Several Variables (3)</td>
<td></td>
</tr>
<tr>
<td>MATH A371</td>
<td>Stochastic Processes (3)</td>
<td></td>
</tr>
<tr>
<td>MATH A407</td>
<td>Mathematical Statistics I (3)</td>
<td></td>
</tr>
<tr>
<td>MATH A410</td>
<td>Introduction to Complex Analysis (3)</td>
<td></td>
</tr>
<tr>
<td>MATH A422</td>
<td>Partial Differential Equations (3)</td>
<td></td>
</tr>
<tr>
<td>MATH A423</td>
<td>Advanced Engineering Mathematics (3)</td>
<td></td>
</tr>
<tr>
<td>MATH A426</td>
<td>Numerical Methods (3)</td>
<td></td>
</tr>
</tbody>
</table>

Advanced Engineering & Science Electives (12 credits)

BSE students are required to take 12 credits from one of the following lists of approved advanced engineering and science elective courses. Students should meet with their faculty advisor for selection of courses.

A. Computer Systems Engineering Specialty Electives (12 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL/CHM/</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYS A456</td>
<td>Nonlinear Dynamics and Chaos (3)</td>
<td></td>
</tr>
<tr>
<td>CE A403</td>
<td>Arctic Engineering (3)</td>
<td></td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ES A411</td>
<td>Northern Design (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> Either CE A403 or ES A411 can be taken but not both for the degree.</td>
<td></td>
</tr>
<tr>
<td>CS A304</td>
<td>Object-Oriented Analysis and Modeling (3)</td>
<td></td>
</tr>
<tr>
<td>CS A331</td>
<td>Programming Language Concepts (3)</td>
<td></td>
</tr>
<tr>
<td>CS A351</td>
<td>Automata, Algorithms, and Complexity (3)</td>
<td></td>
</tr>
<tr>
<td>CS A360</td>
<td>Database Systems (3)</td>
<td></td>
</tr>
<tr>
<td>CS A385</td>
<td>Computer Graphics (3)</td>
<td></td>
</tr>
<tr>
<td>CS A401</td>
<td>Software Engineering (3)</td>
<td></td>
</tr>
<tr>
<td>CS A405</td>
<td>Artificial Intelligence (3)</td>
<td></td>
</tr>
<tr>
<td>CS A413</td>
<td>Computer and Data Security (3)</td>
<td></td>
</tr>
<tr>
<td>CSE A442</td>
<td>VLSI Circuit Design (3)</td>
<td></td>
</tr>
<tr>
<td>CSE A445</td>
<td>Computer Design and Interfacing (4)</td>
<td></td>
</tr>
<tr>
<td>CSE A451</td>
<td>Digital Signal Processing (3)</td>
<td></td>
</tr>
<tr>
<td>CSE A465</td>
<td>Network Security (3)</td>
<td></td>
</tr>
<tr>
<td>EE/ME A308</td>
<td>Instrumentation and Measurement (3)</td>
<td></td>
</tr>
<tr>
<td>EE/PHYS A324</td>
<td>Electromagnetics II (3)</td>
<td></td>
</tr>
<tr>
<td>EE A324L</td>
<td>Electromagnetics Laboratory II (1)</td>
<td></td>
</tr>
<tr>
<td>EE A354</td>
<td>Engineering Signal Analysis (3)</td>
<td></td>
</tr>
<tr>
<td>EE A407</td>
<td>Power Distribution (3)</td>
<td></td>
</tr>
<tr>
<td>EE A441</td>
<td>Integrated Circuit Design (3)</td>
<td></td>
</tr>
<tr>
<td>EE/ME A471</td>
<td>Automatic Control (3)</td>
<td></td>
</tr>
<tr>
<td>EE A453</td>
<td>Introduction to Wi-Fi (1)</td>
<td></td>
</tr>
<tr>
<td>EE A454</td>
<td>Systems Reliability Engineering (1)</td>
<td></td>
</tr>
<tr>
<td>EE A456</td>
<td>Fiber Optic Communications (1)</td>
<td></td>
</tr>
<tr>
<td>EE A458</td>
<td>Antenna Theory (3)</td>
<td></td>
</tr>
<tr>
<td>EE A462</td>
<td>Communication Systems (3)</td>
<td></td>
</tr>
<tr>
<td>EE A465</td>
<td>Telecommunications (3)</td>
<td></td>
</tr>
<tr>
<td>PHYS A303</td>
<td>Modern Physics (3)</td>
<td></td>
</tr>
</tbody>
</table>

B. Electrical Engineering Specialty Electives (12 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE A403</td>
<td>Arctic Engineering (3)</td>
<td></td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ES A411</td>
<td>Northern Design (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> Either CE A403 or ES A411 can be taken but not both for the degree.</td>
<td></td>
</tr>
<tr>
<td>CS A330</td>
<td>Algorithms and Data Structures (3)</td>
<td></td>
</tr>
<tr>
<td>CS A401</td>
<td>Software Engineering (3)</td>
<td></td>
</tr>
<tr>
<td>CS A413</td>
<td>Computer and Data Security (3)</td>
<td></td>
</tr>
<tr>
<td>CSE A445</td>
<td>Computer Design and Interfacing (4)</td>
<td></td>
</tr>
<tr>
<td>CSE A451</td>
<td>Digital Signal Processing (3)</td>
<td></td>
</tr>
<tr>
<td>CSE A465</td>
<td>Network Security (3)</td>
<td></td>
</tr>
<tr>
<td>EE/ME A308</td>
<td>Instrumentation and Measurement (3)</td>
<td></td>
</tr>
<tr>
<td>EE A407</td>
<td>Power Distribution (3)</td>
<td></td>
</tr>
<tr>
<td>EE A453</td>
<td>Introduction to Wi-Fi (1)</td>
<td></td>
</tr>
<tr>
<td>EE A454</td>
<td>Systems Reliability Engineering (1)</td>
<td></td>
</tr>
<tr>
<td>EE A456</td>
<td>Fiber Optic Communications (1)</td>
<td></td>
</tr>
<tr>
<td>EE A458</td>
<td>Antenna Theory (3)</td>
<td></td>
</tr>
<tr>
<td>EE A462</td>
<td>Communication Systems (3)</td>
<td></td>
</tr>
<tr>
<td>EE/ME A471</td>
<td>Automatic Control (3)</td>
<td></td>
</tr>
<tr>
<td>PHYS A303</td>
<td>Modern Physics (3)</td>
<td></td>
</tr>
</tbody>
</table>

C. Mechanical Engineering Specialty Electives (12 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE A403</td>
<td>Arctic Engineering (3)</td>
<td></td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ES A411</td>
<td>Northern Design (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> Either CE A403 or ES A411 can be taken but not both for the degree.</td>
<td></td>
</tr>
</tbody>
</table>

3
FACULTY
Grant Baker, Professor/Chair, AFGCB@uaa.alaska.edu
Muhammad Ali, Assistant Professor, AFMA1@uaa.alaska.edu
Jennifer Brock, Assistant Professor, AFJM5@uaa.alaska.edu
Matt Cullin, Assistant Professor, AFMC2@uaa.alaska.edu
Sun-il Kim, Assistant Professor, AFSK1@uaa.alaska.edu
Nicole Lobontiu, Associate Professor, AFNL@uaa.alaska.edu
John Lund, Assistant Professor, AFJL1@uaa.alaska.edu
Jeff Miller, Assistant Professor, AFJAM5@uaa.alaska.edu
Jpred Davis, Assistant Professor, AFJCM1@uaa.alaska.edu
Jens Munk, Associate Professor, AFJM@uaa.alaska.edu
Anthony Paris, Assistant Professor, AFAJ@uaa.alaska.edu
Todd Petersen, Assistant Professor, AFTP@uaa.alaska.edu

GEOMATICS
Engineering Building (ENGR), Room 213, (907) 786-1972
www.engr.uaa.alaska.edu

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 Geographic Information Systems (GIS). Students seeking the baccalaureate degree may graduate in one of two emphasis areas: Surveying or GIS. 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.

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 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 administrations (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 Bachelor of Science program 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 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, geomaticians 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, geomaticians 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 into the 21st century. While enrolled in the program, students are eligible for cooperative employment programs with government agencies and with private industry during the summer and for intern programs during the school year.

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 or geographic information systems should enroll in the Bachelor of Science program. For the most effective planning, bachelor’s degree candidates should declare their intent by the second semester of their geomatics studies.

Accreditation
The Bachelor of Science program in Geomatics at UAA is accredited by the Applied Science Accreditation Commission (ASAC) of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202.

Program Educational Objectives and Program Outcomes

Program Educational Objectives
The curriculum of the UAA Geomatics program is designed to produce graduates who:
1. Have a basic knowledge of the principles and skills relating to the geomatics disciplines of land surveying, surveying boundary law, surveying computations and adjustments, mapping, geodesy, and photogrammetry, together with the newer disciplines of remote sensing, digital photogrammetry, global positioning systems (GPS), and spatial or geographic information systems (GIS);
2. Have an understanding of the principles related to project delivery;
3. Have sufficient technical competence to obtain employment as an entry-level geomatics professional and to be able to progress professionally within the discipline, and to be prepared for advanced studies;
4. Have a fundamental understanding of the issues relating to geomatics practice in GIS;
5. Are able to communicate their ideas;
6. Are able to work within a team environment; and
7. Are prepared for and understand the need for continued professional development throughout their careers.

Program Outcomes
In keeping with the program educational objectives, it is expected that graduates of the UAA Geomatics program will have:
1. An ability to apply knowledge of mathematics through calculus III and either linear algebra or differential equations or probability and statistics, and general physics;
2. An ability to collect, analyze and interpret data in all of the recognized surveying and mapping areas;
3. An ability to identify, formulate, and design a geomatics system, component or process to meet desired needs;
4. An ability to function on multidisciplinary as well as on interdisciplinary teams;
5. An ability to think critically and to creatively solve geomatics problems;
6. An understanding of professional and ethical responsibility;
7. An ability to communicate effectively;
8. The broad education necessary to understand the impact of geomatics solutions in a global and societal context;
9. A recognition of the need for, and ability to engage in, lifelong learning;
10. A knowledge of contemporary issues in professional practice;
11. An ability to use the techniques, skills and modern geomatics tools necessary for geomatics practice; and
12. An ability to apply knowledge in all six areas of surveying and mapping:
   i. Field surveying and methods;
   ii. Photogrammetric mapping and image interpretation and remote sensing;
   iii. Surveying calculation and data adjustment;
   iv. Geodetic coordinates and astronomy;
   v. Cartographic representation, projections, and map production;
   vi. Computer-based multipurpose cadastral, geographic information systems.

Honors in Geomatics
Undergraduate students may be recognized for exceptional performance by earning Departmental Honors in Geomatics. In order to receive honors in Geomatics, a student must meet each of the following requirements:
1. Complete all requirements for a BS in Geomatics.
2. Be an active member for at least one year of both a national and an on-campus student chapter of a professional geomatics society that addresses issues relevant to the geomatics profession.
3. Have a GPA of 3.50 or higher in their Geomatics and Geographic Information System courses of their catalog year. Have a GPA of 3.30 or higher for their overall cumulative GPA.
4. Pass the Fundamentals of Surveying Examination prior to the completion of the first semester of their senior year.
5. Document a minimum of eight weeks work experience while a student at the University of Alaska in a geomatics or geomatics-related position.

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.

Prerequisites
All prerequisites for geomatics courses must be completed with a grade of C or higher.

Preparation
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 either degree.

Students seeking the Undergraduate Certificate in Geographic Information Systems, the Associate of Applied Science or Bachelor of Science in Geomatics should prepare for entrance into the program by completing the following high school courses:

<table>
<thead>
<tr>
<th>Mathematics</th>
<th>Science</th>
<th>English Composition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algebra II</td>
<td>Physics</td>
<td>Skill level as demonstrated by ACT,</td>
</tr>
<tr>
<td>Trigonometry</td>
<td></td>
<td>SAT or approved placement test to qualify for enrollment in ENGL A111</td>
</tr>
</tbody>
</table>

Undergraduate Certificate, Geographic Information Systems (GIS)

Admission Requirements
Satisfy the Admission to Certificate and Associate's Degree Programs Requirements in Chapter 7, Academic Standards and Regulations.

Course Requirements
Certain courses require prerequisites or faculty permission. Call (907) 786-1972 for further information.

Major Requirements
In order to receive an Undergraduate Certificate in GIS, students must achieve a grade of C or higher in all courses applied to the certificate.

1. Complete the following required courses (23 credits):
   - GEO A137 Principles of Mapping 3
   - GEO A167 Remote Sensing and Image Analysis 4
   - GIS A268 Elements of Geographic Information Systems (GIS) 4
   - GIS A366 Spatial Information Analysis and Modeling 3
   - GIS A367 GIS and Remote Sensing 3
   - GIS A458 Design and Management of Spatial Data 3
   - GIS A460 GIS Senior Project 3
2. Complete 9 credits from the following elective courses:
   - GEO A490 Selected Advanced Topics in Geomatics (3)
   - GIS A295 Internship in Geographic Information Systems I (3)
   - GIS A495 Internship in Geographic Information Systems II (3)
   - GIS A369 Land Information Systems (3)
   - GIS A370 GIS and Remote Sensing for Natural Resources (3)
   - GIS A375 GIS and Public Health (3)
   - GIS A433 GIS and the Marine Environment (3)
   - GIS A468 Integration of Geomatic Technologies (3)
   - GIS A470 GIS for Facility Management and Transportation Systems (3)
   - GIS A490 Selected Advanced Topics in GIS (3)
3. A maximum of 3 credits of Internship (GIS A295 or GIS A495) and 3 credits of Advanced Topics in Geomatics (GEO A490) or Advanced Topics in GIS (GIS A490) can be counted toward the Certificate in GIS. Faculty approval of the GEO A490 or GIS A490 topic is necessary for application of the course to the certificate program.

4. A total of 32 credits is required for the Certificate in GIS.

**Associate of Applied Science, Geomatics**

**Admission Requirements**
Satisfy the Admission to Undergraduate Certificate and Associate’s Degree Programs Requirements in Chapter 7, Academic Standards and Regulations.

**General University Requirements**
Complete the Associate of Applied Science General Degree Requirements located at the beginning of this chapter. Some of the major requirements also fulfill Associate of Applied Science degree general requirements. Students should coordinate choices carefully with their academic advisor in the Department of Geomatics.

**Academic Progress**
Students must complete all major requirement courses with a grade of C or higher. A student who is unable to earn a satisfactory grade 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 will result in removal from the Geomatics program.

**Major Requirements**
1. Complete 4 credits in physics:
   - PHYS A123 Basic Physics I (3)
   - PHYS A123L Basic Physics I Laboratory (1)
   - PHYS A211 General Physics I (3)
   - PHYS A211L General Physics I Laboratory (1)

2. Complete the following required courses (48 credits):
   - ENGL A212 Technical Writing (3)
   - GEO A137 Principles of Mapping (3)
   - GEO A146 Surveying Computations (3)
   - GEO A155 Fundamentals of Surveying (3)
   - GEO A157 Analytical and Digital Cartography (3)
   - GEO A158 Geomatics Computer Fundamentals (3)
   - GEO A166 Advanced Surveying (4)
   - GEO A167 Remote Sensing and Image Analysis (4)
   - GEO A248 Digital Terrain Cartography (3)
   - GEO A256 Municipal and Civil Geomatics (4)
   - GEO A257 Elements of Photogrammetry (3)
   - GEO A267 Boundary Law I (4)
   - GIS A268 Elements of Geographic Information Systems (GIS) (4)
   - MATH A200 Calculus I (4)

3. Electives to total of 60 credits.

**Bachelor of Science, Geomatics**

**Admission Requirements**
Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.

**Graduation Requirements**

**A. General University Requirements**
Complete the General University Requirements for All Baccalaureate Degrees at the beginning of this chapter.

**B. General Education Requirements**
Complete the General Education Requirements for Baccalaureate Degrees at the beginning of this chapter.

**Academic Progress**
Students must complete all courses under major requirements with a grade of C or higher. A student who is unable to earn a satisfactory grade 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 will result in removal from the Geomatics program.

**C. Major Requirements**
1. Complete 8 credits in physics from one of the following sequences:
   - PHYS A123 Basic Physics I (3)
   - PHYS A123L Basic Physics I Laboratory (1)
   - PHYS A124 Basic Physics II (3)
   - PHYS A124L Basic Physics II Laboratory (1)
   - 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 A213L General Physics II Laboratory (1)
   - PHYS A215 General Physics III (3)
   - PHYS A215L General Physics III Laboratory (1)
   - PHYS A216L General Physics III Laboratory (1)
   - PHYS A217 General Physics IV (3)
   - PHYS A217L General Physics IV Laboratory (1)
   - PHYS A218L General Physics IV Laboratory (1)
   - PHYS A219L General Physics IV Laboratory (1)

2. Complete the following (18 credits):
   - ENGL A212 Technical Writing (3)
   - GEO A137 Principles of Mapping (3)
   - GEO A146 Surveying Computations (3)
   - GEO A155 Fundamentals of Surveying (3)
   - GEO A157 Analytical and Digital Cartography (3)
   - GEO A166 Advanced Surveying (4)
   - GEO A167 Remote Sensing and Image Analysis (4)
   - GEO A248 Digital Terrain Cartography (3)
   - GEO A256 Municipal and Civil Geomatics (4)
   - GEO A257 Elements of Photogrammetry (3)
   - GEO A267 Boundary Law I (4)
   - GEO A285 Land Development and Design (3)
   - GEO A359 Geodesy and Map Projections (3)
   - GEO A365 Geomatic Adjustment and Analysis (4)
   - GEO A457 Boundary Law II (4)
   - GEO A466 Geomatics Design Project (3)
   - GEO A466 Geodesy (3)
   - GIS A268 Elements of Geographic Information Systems (GIS) (4)
   - GIS A366 Spatial Information Analysis and Modeling (3)

3. Complete one of the following:
   - MATH A301 Ordinary Differential Equations (3)
   - MATH A314 Linear Algebra (3)
   - STAT A307 Probability (3)

4. Complete all of the following (62 credits):
   - GEO A137 Principles of Mapping (3)
   - GEO A146 Surveying Computations (3)
   - GEO A155 Fundamentals of Surveying (3)
   - GEO A157 Analytical and Digital Cartography (3)
   - GEO A166 Advanced Surveying (4)
   - GEO A167 Remote Sensing and Image Analysis (4)
   - GEO A248 Digital Terrain Cartography (3)
   - GEO A256 Municipal and Civil Geomatics (4)
   - GEO A257 Elements of Photogrammetry (3)
   - GEO A267 Boundary Law I (4)
   - GEO A285 Land Development and Design (3)
   - GEO A359 Geodesy and Map Projections (3)
   - GEO A365 Geomatic Adjustment and Analysis (4)
   - GEO A457 Boundary Law II (4)
   - GEO A466 Geomatics Design Project (3)
   - GEO A466 Geodesy (3)
   - GIS A268 Elements of Geographic Information Systems (GIS) (4)
   - GIS A366 Spatial Information Analysis and Modeling (3)

5. Complete at least 12 credits in one of the emphasis areas.

**Surveying Emphasis**
a. Complete the following 6 credits:
   - GEO A358 Programming for Digital Cartography (3)
   - GEO A433 Hydrographic Surveying (3)
   - GEO A457 Boundary Law II (4)
   - GEO A460 Geomatics Design Project (3)
   - GEO A466 Geodesy (3)
   - GEO A467 Analytical and Digital Photogrammetry (3)
MINORS IN THE SCHOOL OF ENGINEERING

To meet a variety of student needs, the School of Engineering offers several minors.

A choice of two types of engineering minors are offered. The first is a minor in General Engineering, which is for students who are majoring in a non-engineering baccalaureate degree. This program offers foundation coursework in core engineering topics.

The second is an Engineering Specialty minor which is for students majoring in an engineering baccalaureate degree who, therefore, have completed much of the coursework in the Bachelor of Science in Engineering (BSE) or Civil Engineering (CE) program. Students within the engineering program may choose to pursue an Engineering Specialty minor in Civil Engineering, Computer Systems Engineering, Electrical Engineering, or Mechanical Engineering.

Students enrolling in either engineering minor must satisfy all prerequisite requirements for the courses required for the chosen minor. Non-engineering majors, such as students in the sciences or mathematics, will likely be better positioned to meet the prerequisite requirements in the General Engineering minor. Students majoring in engineering disciplines will likely be better positioned to meet the prerequisite requirements for courses in the Engineering Specialty minor.

Additionally, a minor in Geographic Information Systems (GIS) is offered for students who are majoring in baccalaureate degrees in a variety of disciplines and who are seeking strong GIS knowledge and skills to enhance their specialty and further their professional career.

Course Requirements for Minors

A minor of study must consist of a minimum of 18 credit hours. At least 6 credits must be upper division. Students must earn a cumulative GPA of at least 2.00 (C) in the minor. A minor may only be issued simultaneously with a baccalaureate degree. For general information about minor requirements, see the minors section at the beginning of this chapter.

The course requirements for each of the minors are listed below. In cases where students have unique backgrounds or interests, course selection may be adapted accordingly through consultation with the School of Engineering faculty advisors.

A. General Engineering, Minor

The following courses are required:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR A151</td>
<td>Engineering Practices I</td>
<td>3</td>
</tr>
<tr>
<td>ENGR A161</td>
<td>Engineering Practices II</td>
<td>3</td>
</tr>
<tr>
<td>ES A208</td>
<td>Engineering Mechanics</td>
<td>4</td>
</tr>
</tbody>
</table>

In addition, at least three courses must be selected from the following list:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EE/ME A308</td>
<td>Instrumentation and Measurement</td>
<td>3</td>
</tr>
<tr>
<td>ES A309</td>
<td>Elements of Electrical Engineering</td>
<td>3</td>
</tr>
<tr>
<td>ES A331</td>
<td>Mechanics of Materials</td>
<td>3</td>
</tr>
<tr>
<td>ES A341</td>
<td>Fluids Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>ES A341L</td>
<td>Fluid Mechanics Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ES A346</td>
<td>Basic Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>ESM A450</td>
<td>Economic Analysis and Operations</td>
<td>3</td>
</tr>
<tr>
<td>ME A334</td>
<td>Elements of Material Science</td>
<td>3</td>
</tr>
</tbody>
</table>

B. Engineering Specialty Minors

Minor, Civil Engineering

A minimum of 18 credits must be selected from:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE A334</td>
<td>Properties of Materials</td>
<td>3</td>
</tr>
<tr>
<td>CE A344</td>
<td>Water Resources Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CE A402</td>
<td>Transportation Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CE A422</td>
<td>Foundation Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CE A425</td>
<td>Highway Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CE A431</td>
<td>Structural Analysis (4)</td>
<td>4</td>
</tr>
<tr>
<td>CE A432</td>
<td>Steel Design (3)</td>
<td>3</td>
</tr>
<tr>
<td>CE A433</td>
<td>Reinforced Concrete Design</td>
<td>3</td>
</tr>
<tr>
<td>CE A434</td>
<td>Timber Design (3)</td>
<td>3</td>
</tr>
<tr>
<td>CE A435/L</td>
<td>Soil Mechanics with Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>CE A441</td>
<td>Introduction to Environmental Engineering (3)</td>
<td>3</td>
</tr>
<tr>
<td>CE A442</td>
<td>Environmental Systems Design</td>
<td>3</td>
</tr>
</tbody>
</table>

Minor, Computer Systems Engineering

A minimum of 18 credits must be selected from:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS A330</td>
<td>Algorithms and Data Structures</td>
<td>3</td>
</tr>
<tr>
<td>CS A331</td>
<td>Programming Language Concepts</td>
<td>3</td>
</tr>
<tr>
<td>CS A401</td>
<td>Software Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CS A405</td>
<td>Artificial Intelligence</td>
<td>3</td>
</tr>
<tr>
<td>CS A413</td>
<td>Computer and Data Security</td>
<td>3</td>
</tr>
<tr>
<td>CSE A335*</td>
<td>Operating Systems Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CSE A342</td>
<td>Digital Circuits Design</td>
<td>3</td>
</tr>
<tr>
<td>CSE A355*</td>
<td>Computer Networking for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>CSE A442</td>
<td>VLSI Circuit Design</td>
<td>3</td>
</tr>
<tr>
<td>CSE A445*</td>
<td>Computer Design and Interfacing</td>
<td>4</td>
</tr>
<tr>
<td>CSE A451*</td>
<td>Digital Signal Processing</td>
<td>3</td>
</tr>
<tr>
<td>CSE A465*</td>
<td>Network Security (3)</td>
<td>3</td>
</tr>
</tbody>
</table>

Minor, Electrical Engineering

A minimum of 18 credits must be selected from:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EE A203*</td>
<td>Fundamentals of Electrical Engineering I (4)</td>
<td>4</td>
</tr>
<tr>
<td>EE A204*</td>
<td>Fundamentals of Electrical Engineering II (4)</td>
<td>4</td>
</tr>
<tr>
<td>EE/CS A241</td>
<td>Computer Hardware Concepts (4)</td>
<td>4</td>
</tr>
<tr>
<td>EE/ME A308</td>
<td>Instrumentation and Measurement</td>
<td>3</td>
</tr>
<tr>
<td>EE A314*</td>
<td>Electromagnetics</td>
<td>3</td>
</tr>
<tr>
<td>EE A324*</td>
<td>Electromagnetics II</td>
<td>3</td>
</tr>
<tr>
<td>EE A324L*</td>
<td>Electromagnetics Laboratory II (1)</td>
<td>3</td>
</tr>
<tr>
<td>EE A353*</td>
<td>Circuit Theory (3)</td>
<td>3</td>
</tr>
<tr>
<td>EE A407</td>
<td>Power Distribution</td>
<td>3</td>
</tr>
<tr>
<td>EE A441</td>
<td>Integrated Circuit Design</td>
<td>3</td>
</tr>
</tbody>
</table>
Minor, Mechanical Engineering
A minimum of 18 credits must be selected from:
- EE A465 * Telecommunications (3)
- EE/ME A471 Automatic Control (3)

18 credits
- ES A341 * Fluid Mechanics (3)
- ES A341L Fluid Mechanics Laboratory (1)
- ES A346 * Basic Thermodynamics (3)
- ME A302 * Mechanical Design I (4)
- ME/EE A308 * Instrumentation and Measurement (3)
- ME A334 * Elements of Material Science (3)
- ME A313 Mechanical Engineering Thermodynamics (3)
- ME A334 * Elements of Material Science (3)
- ME A402 * Mechanical Design II (3)
- ME A408 Dynamics of Systems (3)
- ME A414 Thermal System Design (3)
- ME A441 * Heat and Mass Transfer (3)
- ME A403 Mechanical Design II (3)
- ME/EE A471 Automatic Control (3)
- ME A664 Corrosion Processes and Engineering (3)
- ME A685 Arctic Heat and Mass Transfer (3)

C. Geographic Information Systems (GIS), Minor
A minimum of 18 credits must be selected from:
- GEO A167 Remote Sensing and Image Analysis (4)
- GIS A268 Elements of Geographic Information Systems (GIS) (4)
- GIS A366 Spatial Information Analysis and Modeling (3)
- GIS A367 GIS and Remote Sensing (3)
- GIS A369 Land Information Systems (3)
- GIS A370 GIS and Remote Sensing for Natural Resources (3)
- GIS A375 GIS and Public Health (3)
- GIS A433 GIS and the Marine Environment (3)
- GIS A458 Design and Management of Spatial Data (3)
- GIS A468 Integration of Geomatic Technologies (3)
- GIS A470 GIS for Facility Management and Transportation Systems (3)
- GIS A490 Selected Advanced Topics in GIS (1-6)

Note #1: MATH A200, MATH A201, MATH A202, MATH A302, PHYS A211, PHYS A212, CHEM A105, and CHEM A106 are prerequisites for most of the Engineering minor listed. Students should plan and review the requirements for their specific minor to determine exactly what prerequisites will be required.

Note #2: An * indicates a recommended set of courses for the minor.

Note #3: BSE or CE majors may pursue a BSE Engineering Specialty minor but may not pursue the BSE General Engineering minor.

Collaborative Programs With Other UA Campuses
Two-Year (2+2) Programs of Electrical or Mechanical Engineering with UAF
The School of Engineering offers a program that allows the completion of the first two years of a four-year program leading to the Bachelor of Science in Electrical Engineering or a Bachelor of Science in Mechanical Engineering. The program is coordinated with the University of Alaska Fairbanks (UAF) College of Engineering and Mines so that students may transfer from UAF to UAA, or from UAA to UAF, with little or no loss of credit. For more information, please contact the UAA School of Engineering at (907) 786-1900.
UNIVERSITY HONORS COLLEGE

Academic Affairs, Edward & Cathryn Rasmussen Hall (RH), Room 115, (907) 786-1086
http://honors.uaa.alaska.edu

The mission of the University Honors College is to be a catalyst for scholarly excellence in undergraduate education. The college advances, coordinates, and administers active learning and undergraduate research opportunities for students across the campus. Through its multi-disciplinary academic and student support programs, the college serves as a locus for inquiry, discovery, leadership and engagement.

The college houses the Office of Undergraduate Research and Scholarship, and three university honors programs: the University Honors Core Program, the Natural and Complex Systems Program, and the Forty-Ninth State Fellows Program. Students enrolled in these programs are also enrolled in the disciplinary school or college in which they complete their degree programs. University Honors students may pursue any major or minor they wish at the university, and foundation University Honors courses will satisfy General Education Requirements 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 in good standing will graduate as 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 and diplomas.

University Honors 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 approach the course subject matter with more intensity and rigor than is demanded of typical courses. Students will also participate in a range of honors activities together, designed to enhance intellectual and personal opportunities. Intensive advising by college faculty and staff is an important element of University Honors, and Honors students are required to meet regularly with advisors.

Academic Programs

There are various options that students can select within the University Honors College: the Honors Core Program, the Natural and Complex Systems Program, and the Forty-Ninth State Fellows Program. The Honors Core Program requirements, taken by all Honors students, include courses in humanities, social science 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.

The Natural and Complex Systems (NCS) Program includes additional courses that focus on scientific, research-based projects that integrate student work across the natural, physical, engineering, mathematical, and computer sciences. This option is open to honors students in all disciplines but is targeted particularly toward students in science-oriented degrees. Honors students may take courses in the NCS Program if they meet the course prerequisites.

The Forth-Ninth State Fellows Program includes additional and extracurricular activities. Spaces are limited in this intensive program and students typically apply prior to their freshman year to begin the program as they start their studies at UAA.

A limited number of students are admitted to the Honors Core Program, the Natural and Complex Systems Program, and the Forty-Ninth State Fellows Program each year. All baccalaureate degree-seeking students who are motivated to pursue honors-level work are encouraged to apply.

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.

2. Students must submit a completed University Honors College application, including supporting documents, to the University Honors College Office (RH 119). Supporting documents include (1) high school transcripts and SAT or ACT scores for incoming freshmen, (2) university transcripts and GPA for transfer students, (3) an essay on personal goals, and (4) a completed reference form from two previous teachers (either high school or college). Application packets may be obtained from the University Honors College office.

3. 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.

4. Admission to the University Honors College will be determined by the Honors College Admission Committee. 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. The committee may ask the applicant for additional information and/or suggest an interview. Applicants will be ranked, and admitted on a space-available basis. In some cases the committee may initially grant conditional admission, which will be changed to formal admission if the student demonstrates ability to do honors work.

Requirements to Graduate as a “University Honors Scholar”

1. Students must meet all General University Requirements, General Education Requirements, School/College requirements, and major requirements as printed in the UAA catalog.

2. Students must complete the following University Honors Core Curriculum requirements (16 credits) with a grade of C or higher (* indicates courses that satisfy GER requirements):

Honors Foundation Courses (Honors Core):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HNRS A192*</td>
<td>Honors Seminar: Enduring Books</td>
<td>3</td>
</tr>
<tr>
<td>HNRS A292*</td>
<td>Honors Seminar in Social Science</td>
<td>3</td>
</tr>
<tr>
<td>HNRS A310</td>
<td>Community Service: Theory and Practice</td>
<td>3</td>
</tr>
</tbody>
</table>

Honors Senior Project/Thesis Requirements (Honors Core)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HNRS A392</td>
<td>Honors Thesis Seminar</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>and one of the following options to total 6 credits</td>
<td>6</td>
</tr>
</tbody>
</table>

A. HNRS A490* Senior Honors Seminar (6 credits over two semesters) 3

B. 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 Honors Thesis) 6

C. An upper division course listed in the catalog as a specific departmental honors requirement (3 credits minimum) 3
Senior thesis or project (3 credits minimum; either departmental thesis/project, or HNRS A499 Honors Thesis) or

D. Six-credit thesis/project (either departmental thesis/project, and/or HNRS A499 Honors Thesis). Total University Honors Program credits required

(9 core + 7 upper division): 16

3. Students must have earned a cumulative grade point average of 3.50 or higher, as defined under Graduation with Honors in Chapter 7, Academic Standards and Regulations.

4. As part of the advising/mentoring process, Honors students’ progress will be evaluated every semester. Students whose performance indicates potential difficulties in meeting the Honors 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**

The Natural and Complex Systems Program focuses on scientific, research-based projects that integrate student work across the natural, physical, engineering, mathematical and computer sciences. Students admitted to the Natural and Complex Systems Program receive the designation “University Honors Scholar: Natural and Complex Systems” on their transcripts upon successful completion of the program requirements.

**Admission to the Natural and Complex Systems Program**

The NCS program is open to students in all disciplines who have been admitted to the University Honors College. Honors students may take courses in the NCS Program if they meet the course prerequisites. Students wanting to enroll in this program should contact the University Honors College office for permission to register.

**Requirements to Graduate as a “University Honors Scholar: Natural and Complex Systems”**

1. Students must meet all General University Requirements, General Education Requirements, School/College requirements, and major requirements as printed in the UAA catalog.

2. Students must complete the following University Honors Core requirements and the Natural and Complex Systems Program requirements with a grade of C or higher (22 credits; * indicates courses that satisfy GER requirements):

   **Honors Foundation Courses (Honors Core)**

   - HNRS A192* Honors Seminar: Enduring Books 3
   - HNRS A292* Honors Seminar in Social Science 3
   - HNRS A310 Community Service: Theory and Practice 3

   **NCS Program Courses**

   - CPLX/ BIOL A200* Introduction to Complexity 3
   - HNRS A309 Interdisciplinary Team-Based Research Methods 3

   **Honors Senior Project/Thesis Requirements (Honors Core)**

   - HNRS A392 Honors Thesis Seminar 1
   - HNRS A490* Senior Honors Seminar 6
   (special section designated for NCS Program)

   3. Students must have earned a cumulative grade point average of 3.50 or higher, as defined under Graduation with Honors in Chapter 7, Academic Standards and Regulations.

   4. As part of the advising/mentoring process, Honors students’ progress will be evaluated every semester. Students whose performance indicates potential difficulties in meeting the Honors 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.

**Forty-Ninth State Fellows Program**

The Forty-Ninth State Fellows Program offers a limited number of students the opportunity to participate in an intensive, intellectually challenging four-year undergraduate program to develop new Alaskan leaders. Forty-Ninth State Fellows study the roots of liberty in Western civilization, the founding and development of American political institutions, and the challenges of self-government in Alaska, to become knowledgeable about American and Alaskan history, politics, and cultural diversity, and familiar with the application of leadership skills and ideas.

In addition to their common curriculum, Forty-Ninth State Fellows enjoy many activities together, including opportunities for summer internships, membership in civic organizations, lectures and colloquia, weekly tutorials, and special events. Intensive advising by program faculty and staff is an important element of the program, and Fellows are required to meet regularly with advisors.

Forty-Ninth State Fellows may pursue any major they wish at the university. They take selected courses together in economics, history, and political science, as well as the required courses for the University Honors Core. Many of these courses satisfy General Education Requirements (GER) at UAA and/or requirements for those pursuing degrees in the College of Arts and Sciences. Students admitted to study as Forty-Ninth State Fellows receive the designation “Forty-Ninth State University Honors Scholar” on their transcripts upon successful completion of the option requirements.

**Admission to the Forty-Ninth State Fellows Program**

1. Admission to the Forty-Ninth State Fellows Program is limited each year to a small group of baccalaureate degree-seeking students. At the time of application, students are considered for admission to both the University Honors College and the Forty-Ninth State Fellows Program. Students should meet the general criteria for admission to University Honors (Admission to University Honors College No. 3).

2. Students must submit a completed Forty-Ninth State Fellows Program application, including supporting documents, to the University Honors College Office (RH 119). Supporting documents include (1) high school transcripts and SAT or ACT scores for incoming freshmen, (2) high school and university transcripts and GPA for transfer students, (3) a letter of application explaining their background and interests, and why they want to be Forty-Ninth State Fellows and members of the University Honors College, (4) a short paper or essay (750-1000 words) addressing a contemporary social, political, or economic problem in Alaska, and (5) three letters of reference commenting on their academic ability and promise, one of which must be from an unrelated adult outside of high school who can speak to their skills and potential. Application forms may be obtained from the University Honors College office or website.

3. Admission to the Forty-Ninth State Fellows Program will be determined by the Forty-Ninth State Admission Committee. The Committee may ask the applicant for additional information and/or request an interview. Applicants will be ranked and admitted on a space-available basis.

**Requirements to Graduate as a “Forty-Ninth State University Honors Scholar”**

1. Students must meet all General University Requirements, General Education Requirements, School/College requirements, and major requirements as printed in the UAA catalog.

2. Students also must complete all requirements to graduate in the University Honors College as a “University Honors Scholar,” including Honors Core Program (see above), GPA requirements and completion of an Honors Senior Thesis.

3. Students must complete the following Forty-Ninth State Fellows curriculum requirements with a grade of C or higher:

   **First-year Forty-Ninth State Fellows Program Requirements:**

   - HIST A101† Western Civilization I 3
   - HIST A102† Western Civilization II 3
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Undergraduate Programs, University Honors College

FACULTY

University Honors draws its faculty from across the schools and colleges.

Ronald Spatz, Dean/Professor, AFRMS1@uaa.alaska.edu
Marian Bruce, Assistant Dean, mariobrute@uaa.alaska.edu
Steve Colt, Associate Professor, AFSGC@uaa.alaska.edu
Janet Emerman, Clinical Associate Professor, AFJLE@uaa.alaska.edu
Diane Erickson, Assistant Professor, danierickson@uaa.alaska.edu
Larry Foster, Associate Professor, AFLMF@uaa.alaska.edu
George Geistauts, Professor, AFGAG@uaa.alaska.edu
Paula Guetschow, Adjunct Associate Professor, AFPJG@uaa.alaska.edu
Songho Ha, Assistant Professor, AFSH2@uaa.alaska.edu
Mari Hahn, Associate Professor, AFMH@uaa.alaska.edu
Steve Haycox, Forty-Ninth State Faculty Director/Distinguished Professor, stevehaycox@uaa.alaska.edu

The program uses an interdisciplinary approach to the liberal arts. The Forty-Ninth State Fellows Program provides intellectual support, mentorship, enrichment opportunities, and personalized advising to University of Alaska Anchorage students who are serious about doing their best in the Hat. Forty-Ninth State Fellows Program is designed to help University Honors and Honors students achieve their academic goals. The program offers a unique opportunity for students to take part in a specialized learning experience. Forty-Ninth State Fellows Program is open to students who are interested in pursuing an Honors degree. Forty-Ninth State Fellows Program is open to students who are interested in pursuing an Honors degree. Forty-Ninth State Fellows Program is open to students who are interested in pursuing an Honors degree. Forty-Ninth State Fellows Program is open to students who are interested in pursuing an Honors degree.

University Honors College is committed to providing students with a challenging and supportive learning environment. University Honors College is committed to providing students with a challenging and supportive learning environment. University Honors College is committed to providing students with a challenging and supportive learning environment. University Honors College is committed to providing students with a challenging and supportive learning environment. University Honors College is committed to providing students with a challenging and supportive learning environment. University Honors College is committed to providing students with a challenging and supportive learning environment. University Honors College is committed to providing students with a challenging and supportive learning environment. University Honors College is committed to providing students with a challenging and supportive learning environment. University Honors College is committed to providing students with a challenging and supportive learning environment. University Honors College is committed to providing students with a challenging and supportive learning environment. University Honors College is committed to providing students with a challenging and supportive learning environment.

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University of Alaska Anchorage 2010-2011 Catalog
www.uaa.alaska.edu
Post-Baccalaureate Certificates

Study

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.

Admissions

(907) 786-1480
www.uaa.alaska.edu/admissions

All students intending to register for one or more courses must apply for admission. Applications for admission are available online from the Office of 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; see Incomplete Admission later in this section. Applicants must meet the 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.

Applicants with transcripts from institutions outside the United States or Canada must submit official transcripts and English translations as well as an official statement of educational equivalency from a recommended international credentials evaluation service. A list of evaluation services may be obtained from the Office of Admissions. Fees depend upon the agency performing the evaluation. The evaluation service will require a separate transcript and copy of the English translation.

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 scores from the Test of English as a Foreign Language (TOEFL). TOEFL scores may be waived if the applicant has been a long-term resident of the United States or of another English-speaking country and demonstrates fluency in reading, writing and speaking in English.

Applications, official transcripts and required test scores (if any) must be submitted to the Office of 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, department chair, or designee for consideration.

Each certificate program has individual admission standards and document requirements. Additional information such as writing samples, goal statements, letters of recommendation, research proposals, and/or interviews may be required by specific programs. When required, these materials must be submitted directly to the department chair or designee.

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 Student Services
(907) 786-1558

International students who will attend UAA as F-1 visa students and who need a Form I-20 Certificate of Eligibility for Nonimmigrant F-1 status must meet university and degree program admission requirements. In addition to being admitted to a post-baccalaureate certificate program, international students must submit the following:

1. An official TOEFL (Test of English as a Foreign Language) score of at least 550 for the paper-based test or 213 for the computer-based test.
2. A statement of financial support for the anticipated period of study and evidence of availability of funds such as a bank statement.
3. An English translation of all required documents.
4. Students who earned their baccalaureate degree outside the United States or Canada must submit an official statement from a recommended international credentials evaluation service stating that their degree is the equivalent of a U.S. bachelor's degree. A list of evaluation services may be obtained from the Office of Admissions. Fees depend upon the agency performing the evaluation. The evaluation service will require a separate transcript and copy of the English translation.

International students in F-1 visa status must be formally admitted, full-time, degree-seeking students. Health insurance is also mandatory. Contact the International Student Advisor in the Office of Admissions for details.

Application and Admission Status for Post-Baccalaureate Certificate-Seeking Students: Terms and 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 reapply 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 degree from a regionally accredited institution within two semesters (three if including summer) may apply for admission. Formal acceptance becomes final only after the baccalaureate degree is completed and conferred, and all other admission requirements are met.

Provisional Admission
University admission requirements have been met, but the students still need to complete one or more department-specified provisions.

Postponed Admission
Students may postpone their admission to a future semester by notifying the Office of Admissions 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 by the end of their admission semester. Students whose admissions have been withdrawn must apply for admission if they later choose to attend UAA.

Related Post-Baccalaureate Certificate Policies

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.

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 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 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.

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 completed after the awarding of the previous certificate. The student must meet all Post-Baccalaureate Certificate University Requirements, School or College Requirements, 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.

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.

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 Chapter 7, Academic Standards and Regulations, for further information.)

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.

Catalog Year for Post-Baccalaureate Certificate Programs
Students may elect to graduate under the requirements of the catalog in effect at the time of formal acceptance to a post-baccalaureate certificate program, or the catalog in effect at the time of graduation.

If the requirements for a post-baccalaureate certificate program as specified in the entry-level catalog are not met within seven years of formal acceptance into the program, admission expires and the student must reapply for admission and meet the current admission and graduation requirements in effect at the time of readmission or graduation.

All credits counted toward the degree, including transfer credit, must be earned within the consecutive seven-year period prior to graduation.

Good Standing for Post-Baccalaureate Certificate-Seeking Students
Post-baccalaureate certificate-seeking students who maintain a 2.50 (C) cumulative GPA in courses on their official Certificate Studies Plan are considered in good standing.

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 school or college has procedures to deal with appeals arising from removal from certificate-seeking status.

**Academic Appeals**
Students have the right to appeal academic actions (See Academic Dispute Resolution Procedures in the UAA Fact Finding/Student Handbook for information).

**Reinstatement to Post-Baccalaureate Certificate-Seeking Status**
Students who have been removed from post-baccalaureate certificate-seeking status for not making satisfactory progress must reapply for a post-baccalaureate certificate program and pay the appropriate fee.

**Post-Baccalaureate Certificate Advisor**
The dean or designee of the appropriate school or 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.

**Official Studies Plan for Post-Baccalaureate Certificates**
The official Certificate Studies Plan formally establishes the specific program requirements which, upon satisfactory completion, entitle the student to receive the post-baccalaureate certificate. The program plan is based upon the catalog requirements for the certificate program to which the student is accepted. The plan becomes official once it is approved by the dean or designee and is filed with the Office of the Registrar. Students are expected to complete all requirements listed on their official Certificate Studies Plan, as well as all post-baccalaureate certificate university requirements. Any revision to the plan must be submitted to the Office of the Registrar through the certificate advisor/committee.

**Determining Program Requirements**
A post-baccalaureate certificate student's program is based upon the catalog requirements for the relevant certificate program which are in effect at the time the student was accepted to the program.

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**Post-Baccalaureate Certificate University Requirements**
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. A GPA of at least 2.50 (C) must be earned in courses identified in the official Certificate Studies Plan.
4. Courses at the 500-level are for professional development and are not applicable toward any certificate, even by petition.
5. At all course levels, a grade of C is minimally acceptable.
6. At least two-thirds of the credits required for the certificate must be taken at the upper division (300-400) or graduate (600) level.
7. Up to one-third of the semester credits earned after the posting of their previous degree may be transferred to UAA from a nationally 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.
8. Individual program 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.
9. 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.
10. If the requirements for a post-baccalaureate certificate as specified in the entry-level catalog 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 and graduation requirements in effect at the time of readmission or graduation.
11. All credits counted toward the post-baccalaureate certificate, including transfer credits, must be earned within the consecutive seven-year period prior to graduation.

**Application for Graduation**
Post-baccalaureate certificate students must submit an Application for Graduation with the required fee to the Office of the Registrar. Application for Graduation deadlines are July 1 for summer graduation, November 1 for fall graduation and March 1 for spring graduation. Upon receipt of the student’s Application for Graduation, a review is completed by the Office of the Registrar. If the student meets all requirements by the end of the semester, the certificate is awarded after completion of the semester. Students are held responsible for meeting all academic regulations and certificate requirements.

Students who apply for graduation and do not complete their certificate requirements by the end of the semester in which they have been approved to graduate, but are within 6 credits of completion, will have their application request changed to the following semester by the Office of the Registrar. 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.
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 College of Education for a copy of the completed report.

The College of Education comprises a community of educators dedicated to improving the quality of education. The mission of the College 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. Our 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 opportunities across the life span. We are confident that this preparation will result in educators' significant contributions to society.

The College 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.

We believe that learning must be designed, delivered, and evaluated within the contexts of these core values and program outcomes.

The College 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 College of Education is accredited by the National Council for Accreditation of Teacher Education (NCATE). Our professional preparation programs are approved by the Alaska Department of Education and Early Development and are based on NCATE standards.

The Department of Educational Leadership with programs in counselor education, special education, early childhood education, elementary education, and secondary education.

The Department of Teaching and Learning with programs in teaching and learning, language and literacy, educational technology, school leadership.

The Department of Creative Arts with programs in music education, dance education, and theater education.

The Department of English with programs in English education.

The Department of Social Work with programs in social work.

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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 dean of the College of Education is authorized to recommend candidates for the appropriate certificate or endorsement.

In each of the college’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 college offers high-quality, distance-delivered coursework in order to improve access for rural students and provide flexible scheduling for practicing educators. Additionally, the college partners with UAA community campuses in optimizing the use of technology for distance delivery through intercampus collaboration.

All students who desire a degree, certification or endorsement must apply for admission to the University of Alaska Anchorage and to the College of Education. 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 College of Education’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 College 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 College of Education website.

Applicants admitted to a post-baccalaureate program work with a faculty advisor from the major. The advisor develops a Post-Baccalaureate Studies Plan with each candidate based upon transfer credits, prerequisites, and program requirements. The plan must include the State “approved program” certification or endorsement requirements.

The College 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) 786-4481

2. The Department of Counseling and Special Education with programs in counselor education, special education, early childhood education, and opportunities in speech and language pathology. (907) 786-6317

3. The Department of Educational Leadership with programs in educational leadership (principal, superintendent, and teacher leadership preparation). (907) 786-4450

Professional Field Practice

Prior to permitting the candidate to enter the final stage of preparation, which is characterized by participation in an 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 post-baccalaureate program. Difficulties including inadequate academic performance, unprofessional behavior, unsatisfactory field reports, or other factors, may result in denial of entry to the internship. Performance in the 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.

Field Placements

All College of Education post-baccalaureate programs require field experiences in school or agency settings.

Criminal History Background Clearance

The College of Education requires compliance with specific background clearance policies and procedures for candidates participating in university-sponsored fieldwork.

There are two types of background clearances required. In general, Alaska Public Safety Information Network (APSIN), also known as an Interested Person Report (IRP), clearance is required for lecture courses that include a fieldwork component as part of the course. Courses that are primarily field-based, such as practica or internships, require fingerprinting and a national (FBI) criminal history background check.
Various agencies and centers may have additional requirements. In some cases, criminal history background clearance is required for admission to a department or program.

Failure to comply with the College 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 located at http://coe.uaa.alaska.edu/background.cfm.

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 College 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.

Program Descriptions and 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 recommendations 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 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. 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. Outcomes for the post-baccalaureate program include the following:

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.

Admission Requirements

Admission to the University of Alaska Anchorage: Early Childhood Pre-K-Third Grade Post-Baccalaureate Certificate
See information on post-baccalaureate certificate programs at the beginning of this chapter. Complete the UAA Undergraduate Application for Admission, available on the UAA website at www.uaa.alaska.edu/admissions.

Admission to the Department of Teaching and Learning, College of Education: Early Childhood Pre-K-Third Grade Post-Baccalaureate Certificate
In order to be admitted to the College of Education as an Early Childhood Pre-K-Third Grade Post-Baccalaureate Certificate Program candidate, applicants must meet the following requirements.

1. Complete a Department of Teaching and Learning application for admission to the Early Childhood Pre-K-3rd Grade Post-Baccalaureate Certificate 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 Department of Teaching and Learning. 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.

PROFESSIONAL AND CONTINUING EDUCATION (PACE)
Professional Studies Building (PSB), Room 221, (907) 786-1934
http://coe.uaa.alaska.edu/pace

Quality professional learning enriches the knowledge and skills of educators and improves the educational experiences of all students. Therefore, the Office of Professional and Continuing Education (PACE) 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.

EARLY CHILDHOOD
Professional Studies Building (PSB), Room 220, (907) 786-4481
http://coe.uaa.alaska.edu/earlychildhood

Post-Baccalaureate Certificate, 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.
3. Successfully complete the Praxis I and the Praxis II examinations. Contact the College of Education for current passing scores.

Note: Qualified applicants are accepted on a space-available basis. Admission to the Department of Teaching and Learning does not guarantee admission to the internship.

Admission to Internship

The Admission Committee has the responsibility of determining a candidate's readiness to enroll in and continue progress in methods and the internship. The candidate must realize that standards set forth below constitute minimum preparation, and it may be the judgment of the committee that the candidate needs further work to develop content, methodology, or classroom experience.

1. Meet all the requirements for and be admitted to the Department of Teaching and Learning as an Early Childhood Pre-K-Third Grade Post-Baccalaureate Certificate program candidate.
2. Submit an application form for admission to methods and internship. Contact the Office of Clinical Services and Certification for appropriate deadlines.
3. Submit one letter of recommendation from someone who can speak to the applicant's potential as a future early childhood teacher.
4. Demonstrate general content knowledge competency through successful completion of a baccalaureate degree and a passing score on the Praxis II. Contact the College of Education for details.
5. Provide evidence of successful experiences working with children.
6. Interview.
7. Initiate fingerprinting and criminal background check.
8. Provide evidence of current physical examination. This service is available free at the UAA Student Health and Counseling Center for current UAA students.
9. Maintain health insurance throughout internship. Candidates may purchase this insurance through UAA.

Note: Qualified applicants are accepted on a space-available basis. Admission to the Department of Teaching and Learning does not guarantee admission to the internship.

Academic Progress

All Early Childhood 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

Candidates must complete the following graduation requirements:

A. General University Requirements for Post-Baccalaureate Certificates

Complete the General University Requirements for Post-Baccalaureate Certificates listed at the beginning of this chapter.

B. Background Check Requirements

See Field Placements located at the beginning of the College of Education section of this chapter.

C. Major Requirements

1. Complete the following foundation area course work (27 credits):

   Field experience in early childhood programs may be required as part of the courses.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDEC A242</td>
<td>Family and Community Partnerships</td>
<td>3</td>
</tr>
<tr>
<td>EDEC A303</td>
<td>Young Children in Inclusive Settings</td>
<td>3</td>
</tr>
<tr>
<td>EDEC A407</td>
<td>Observation and Documentation in Early Childhood</td>
<td>4 or</td>
</tr>
<tr>
<td>EDEC A607</td>
<td>Observation and Documentation: Inquiry in Action</td>
<td>4</td>
</tr>
</tbody>
</table>

2. Complete the following methodology requirements (10 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDEC A403</td>
<td>Mathematics and Science in Early Childhood</td>
<td>3</td>
</tr>
<tr>
<td>EDEC A404</td>
<td>Literacy for Young Children</td>
<td>3</td>
</tr>
<tr>
<td>EDEL A327</td>
<td>Teaching Social Studies in Elementary Schools</td>
<td>2</td>
</tr>
<tr>
<td>PEP A345</td>
<td>Incorporating Health and Physical Activity into the Pre-K-6 Classroom</td>
<td>2</td>
</tr>
</tbody>
</table>

3. Complete the following internship and seminar requirements (14 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDEC A492</td>
<td>Early Childhood Seminar (1+1)</td>
<td>2</td>
</tr>
<tr>
<td>EDEC A495</td>
<td>Early Childhood Internship (3+9)</td>
<td>12*</td>
</tr>
</tbody>
</table>

   Special note: Completion of 12 credits required for degree and certification.

4. Satisfaction of all major requirements, totaling 51 credits, must be demonstrated through coursework completed either before or after the award of the student's first baccalaureate degree. However a minimum of 31 approved credits, including EDEC A495, must be completed after the award of the baccalaureate degree.

Alaska certification note: If the candidate is seeking certification in the state of Alaska, the candidate must complete a state-approved Alaska studies course (EDFN A478 Issues in Alaska Native Education, K-12 or HIST A341 Alaska History or ANTH A200 Natives of Alaska is recommended).

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 2.75 in the Pre-K-Third Grade Post-Baccalaureate Certificate courses.
3. Passing scores on the Praxis I and II examinations.
4. Internships satisfactorily completed.

Post-Baccalaureate Certificate, 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.
Student Outcomes
Student outcomes for the program are based on the Standards for Alaska's Teachers located at www.eed.state.ak.us/standards and the Association for Childhood Education International (ACEI) standards located at www.acei.org.

Admission Requirements

Admission to the University of Alaska Anchorage: Elementary Education Post-Baccalaureate Certificate
See information on Post-Baccalaureate Certificate programs at the beginning of this chapter. Complete the UAA Undergraduate Application for Admission, available on the UAA website at www.uaa.alaska.edu/admissions.

Admission to the Department of Teaching and Learning, College of Education: Elementary Education Post-Baccalaureate Certificate
Admission to the Department of Teaching and Learning is a prerequisite for all education coursework with the exceptions of EDFN A101 Introduction to Education, EDFN A300 Philosophical and Social Context of American Education, and EDFN A304 Comparative Education. In order to be admitted to the Department of Teaching and Learning as an Elementary Education Post-Baccalaureate Certificate candidate, applicants must meet the following requirements.

1. Complete a Department of Teaching and Learning, College of Education, application for admission to the Elementary Education Post-Baccalaureate Certificate 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 Department of Teaching and Learning. 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 3.00 for the baccalaureate degree.

3. Successfully complete the Praxis I examination and Praxis II: Elementary Content Knowledge examination. With the exceptions of EDFN A101 Introduction to Education, EDFN A300 Philosophical and Social Context of American Education, and EDFN A304 Comparative Education, students may not enroll in education courses without passing these examinations at the level established by the College of Education. Contact the College of Education for current passing scores.


Note: Admission to the Department of Teaching and Learning is competitive. Qualified applicants are accepted on a space-available basis.

Admission to Internship
The Admission Committee has the responsibility of determining a candidate’s readiness to enroll in and continue progress in methods and the internship. The candidate must realize that standards set forth below constitute minimum preparation, and it may be the judgment of the committee that the candidate needs further work to develop content, methodology, or classroom experience.

1. Meet all the requirements for and be admitted to the Department of Teaching and Learning as an Elementary Education Post-Baccalaureate Certificate candidate.

2. Submit an application form for admission to methods and internship by February 15.

3. Submit one letter of recommendation from someone who can speak to the student’s potential as a future elementary teacher.

4. Demonstrate general content knowledge competency through successful completion of a baccalaureate degree and a passing score on Praxis II: Elementary Content Knowledge. Contact the College of Education for details.

5. Provide evidence of successful experiences working with children.

6. Interview.

7. Initiate fingerprinting and criminal background check.

8. Provide evidence of current physical examination. This service is available free at the UAA Student Health and Counseling Center for current UAA students.

9. Maintain health insurance throughout internship. Students may purchase this insurance through UAA.

Note: Qualified applicants are accepted on a space-available basis. Admission to the Department of Teaching and Learning does not guarantee admission to the internship.

Academic Progress
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
Candidates must complete the following graduation requirements:

A. General University Requirements for Post-Baccalaureate Certificates
Complete the General University Requirements for Post-Baccalaureate Certificates listed at the beginning of this chapter.

B. Background Check Requirements
See Field Placements located at the beginning of the College of Education section of this chapter.

C. Major Requirements
It is recommended that candidates complete EDFN A101 Introduction to Education prior to enrolling in a 300-level education course.

1. Complete the following core courses. (21 credits)
   - 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 (3)
   - EDFN A301 Foundations of Literacy and Language Development (3)
   - EDFN A302 Foundations of Educational Technology (2)
   - EDFN A303 Foundations of Teaching and Learning (3)
   - EDSE A212 Human Development and Learning (3)
   - or
   - PSY A245 Child Development (3)
   - EDSE A212L Human Development and Learning Lab (1)
   - or
   - PSY A245L Child Development Laboratory (1)
   - EDSE A482 Inclusive Classrooms for All Children (3)
   - MATH A205 Communicating Mathematical Ideas (3)

2. Complete the following method courses. Concurrent enrollment in an internship may be required. See Admission to Internship. (19 credits)
   - EDEL A327 Teaching Social Studies in Elementary Schools (2)
   - EDEL A425 Teaching Reading in Elementary Schools (4)
   - EDEL A426 Teaching Mathematics in Elementary Schools (3)
   - EDEL A428 Teaching Science in Elementary Schools (2)
   - EDEL A430 Teaching Language Arts in Elementary Schools (3)
EDEL A431 Creative Expression: Music, Art, and Drama for Elementary Teachers 3
PEP A345 Incorporating Health and Physical Activity into the Pre-K-6 Classroom 2

3. Complete the following internships. (9 credits)
EDEL A495A Internship I 3
EDEL A495B Elementary Education Internship (6-9) 6

4. Satisfaction of all major requirements, totaling 49 credits, must be demonstrated through coursework completed either before or after the award of the baccalaureate degree. However, a minimum of 29 approved credits, including the courses EDFN A495A and EDFN A495B must be completed after the award of the baccalaureate degree.

Alaska certification note: If the candidate is seeking certification in the State of Alaska, the candidate must complete a state-approved Alaska studies course (EDFN A478 Issued in Alaska Native Education, K-12 or HIST A341 Alaska History or ANTH A200 Natives of Alaska is recommended).

Institutional Recommendation, Elementary Teacher Certification (K - 6)
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 Elementary Education Post-Baccalaureate Certificate courses.
3. Passing scores on the Praxis I and II examinations.
4. Internships satisfactorily completed.

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Graduate Study
Interdisciplinary Studies Degree
Graduate Certificates
Medical School
(WWAMI program)
Graduate Degree Program
Descriptions
Graduate Study

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 and master's 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 skill 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.

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.

Admissions

(907) 786-1480
www.uaa.alaska.edu/admissions

All students intending to register for one or more courses must apply for admission. Applications for admission are available online via www.uaa.alaska.edu/admissions or from the Enrollment Management One-Stop.

Admission Requirements for Master's Degrees

To qualify for admission to graduate 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 graduate admission; see Incomplete Admission later in this section. 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 of 3.00 (B average on a 4.00 scale) or meet the grade point average (GPA) requirements of the specific graduate program to which they are applying.

All graduate students must submit official transcripts showing completion and conferral of all baccalaureate degrees and any transcripts reflecting graduate-level courses. 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.) Individual graduate programs may also require additional transcripts and/or specific entrance examinations such as the Graduate Record Examination (GRE) or the Miller Analogies Test (MAT). See individual program requirements later in this chapter for details.

Applicants with transcripts from institutions outside the United States or Canada must submit official transcripts and English translations, as well as an official statement of educational equivalency from a recommended international credentials evaluation service. A list of evaluation services may be obtained from the Office of Admissions. Fees depend upon the agency performing the evaluation. The evaluation service will require a separate transcript and copy of the English translation.

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 scores from the Test of English as a Foreign Language (TOEFL). TOEFL scores may be waived if the applicant has been a long-term resident of the United States or of another English-speaking country and demonstrates fluency in reading, writing, listening and speaking in English.

Applications, official transcripts and required test scores (if any) must be submitted to the Office of 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, department chair or designee for consideration.

Each graduate program has individual admission standards and document requirements. Additional information such as writing samples, goal statements, letters of recommendation, research proposals and/or interviews may be required by specific programs. When required, these materials must be submitted directly to the department chair or designee.

Deadlines for submission of materials vary by program. Please note that, 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 September 1; and all required application materials by August 1;
- For spring admission: all required application forms no later than December 1, and all required application materials by December 1.

No more than 9 credits may be completed in the student's graduate program before program admission. See individual program listings for further details.

International Graduate Students

Office of Admissions

www.uaa.alaska.edu/iss
(907) 786-1573

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 Nonimmigrant F-1 Student Status must meet university and degree program admission requirements and submit the following:

1. Official TOEFL (Test of English as a Foreign Language) (minimum score of 79-80 IBT) or IELTS (International English Language Testing System) (minimum score of 6-6.5) scores, sealed by the issuing agency. Alternate documentation of English proficiency, such as previous study in a U.S. institution or alternate test scores may be considered on a case-by-case basis. International students...
from English-speaking countries should contact the Office of Admissions to request a waiver of the test score requirement.

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.

4. Students who earned their baccalaureate degree outside the United States or Canada must submit an international credential evaluation from a recommended agency stating that they have earned the equivalent of a U.S. baccalaureate degree. A list of approved international credential evaluation services can be found on the International Student Services web site at www.uaa.alaska.edu/iss. Additional fees will apply to be paid to the evaluating agency, which will require a second official, sealed transcript from the issuing institution.

5. Students transferring from other institutions in the United States 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 web site at www.uaa.alaska.edu/iss for details and forms.

**Application and Admission Status for Master’s Degree-Seeking Students: Terms and 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. The end of each semester, all applications still incomplete or not postponed will be withdrawn. Students whose applications have been withdrawn must reapply 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 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 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 are established and monitored by the dean or designee, and faculty of the program. If the provisions are not met within specified deadlines, the student may be removed from graduate degree-seeking status.

**Postponed Admission**
Students may postpone their admission to a future semester by notifying the Office of Admissions 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 have not postponed their admission by, the end of their admission semester. Students whose admissions have been withdrawn must apply for re-admission if they later choose to attend UAA.

**Related Master’s Degree Policies**

**Transfer Credits**
Up to 9 semester credits or the equivalent earned at a regionally accredited institution and not previously used to obtain any other degree may be transferred to UAA and accepted toward a master’s degree. Acceptance of transfer credits toward program requirements is at the discretion of the individual program. Coursework used to obtain a graduate certificate at another institution, if accepted for inclusion in the Graduate Studies Plan, may be used to satisfy requirements for a master’s degree.

**Change of Major or Emphasis Area**
Students who wish to change majors or emphasis areas within the same degree and school or college should submit a Graduate Change of Major or Emphasis Area Form to the Graduate School. Students will be expected to meet all admission and program requirements of their new major or emphasis area, and must submit a revised official Graduate Studies Plan to the Graduate School through their advisor/committee.

**Change of Degree**
Graduate students who wish to change degree programs must formally apply for admission to the new program through the Office of Admissions and pay the appropriate fee. This applies both to changes between schools/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). Students will be expected to meet all admission and program requirements of the new major or emphasis area.

**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 Graduate Studies Plan, may be used to satisfy requirements for a master’s degree.

**Additional Master’s Degrees**
Students who have received a master’s degree or doctoral degree from a regionally accredited college or university may earn a UAA master’s degree by completing a minimum 21 resident credits not used for any other previous degree. The student must meet all the University Requirements for Master’s Degrees, school or college requirements, and program requirements. Fulfilling all university, college and program requirements may require more than the minimum 21 credits beyond the previous graduate degree. If the 21 additional credits and other requirements have been earned for each additional degree, two or more degrees may be awarded simultaneously.

**Formal Acceptance to Master’s Degree 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 does not establish candidacy in a graduate program (see Advancement to Candidacy).

**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. 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 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 Chapter 7, Academic Standards and Regulations, for further information.)

**Full-Time/Part-Time Status for Master’s Degree Programs**

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 graduate student enrolled at UAA for fewer than 9 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.

**Graduate Assistantships**

Information on graduate assistantships can be found in Chapter 4, Tuition, Fees and Financial Aid.

**Catalog Year for Master’s Degree Programs**

Students may elect to graduate under the requirements of the catalog in effect at the time of formal acceptance to a master’s degree program, or the catalog in effect at the time of graduation. If the requirements for a master’s degree as specified in the entry-level catalog are not met within seven years of formal acceptance into the program, admission expires and the student must reapply for admission and meet the current admission and graduation requirements in effect at the time of readmission or graduation.

All credits counted toward the degree, including transfer credit, must be earned within the consecutive seven-year period prior to graduation.

**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 their graduate program, students have the following options:

- Registering for at least one graduate-level credit applicable to their graduate degree, or
- Paying the continuous registration fee to remain active in the graduate program although not registered in any courses.
- Adhering to the continuous registration policy established by the specific college, school or department. See your program advisor for details.

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. Please contact the individual graduate program for departmental policy/requirements concerning continuous registration. The continuous registration fee may be paid during each semester’s late registration period or in the Cashier’s Office up until the end of late registration. Students not making continuous progress or not on an approved leave of absence (see Leave of Absence policy) may be removed from master’s degree-seeking status.

**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. Inactive status does not negate the policy which requires that all credits counted toward the degree, including transfer credits, be earned within a consecutive seven-year period prior to graduation. Students who fail to make continuous progress (see Continuous Registration) or to obtain an approved leave of absence may be removed from master’s degree-seeking status.

**Academic Standing for Students**

**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. 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 graduate certificate and master’s 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.

**Probation**

Placed on probation is the status assigned to those students whose semester and cumulative GPA falls below 3.00.

**Continuing Probation**

Continued on 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. 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. 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 policy below).

**Removal from Master’s 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. In some cases, students may be removed from master’s degree-seeking status without having first been placed on probation (see Non-Degree-Seeking Students).

**Academic Appeals**

Students have the right to appeal academic actions (See Academic Dispute Resolution Procedures in the current UAA Fact Finder/Student Handbook for information).
Reinstatement to Master's Degree-Seeking Status
Graduate students who have been removed from master's degree-seeking status for failing to meet academic standards may apply for reinstatement to a graduate program after one calendar year from the semester in which they were removed from master's degree-seeking status. When re-applying to graduate studies, it is the student's responsibility to demonstrate ability to succeed in the graduate program.

Graduate students who have been removed from master's degree-seeking status for not making continuous progress (see Continuous Registration) must re-apply for graduate study and pay the appropriate fee.

Graduate Advisor
The dean or designee, in conjunction with the appropriate department chair of the school or college offering the graduate program appoints a graduate advisor for each student accepted to a graduate program. The graduate advisor and the departmental chair will be from the same program.

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. The committee typically consists of three UAA faculty, including the chair, who shall normally be a full-time faculty member. 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 the appropriate professional credentials, may be included with the approval of the dean of the Graduate School, college dean, committee chair and the student. The committee members must agree to serve and the committee must be approved by the dean of the Graduate School and the college dean.

Responsibilities of Graduate Advisor/Committee
The division of responsibility between the advisor and/or committee is determined at the program level. The graduate advisor and/or committee will do the following:

1. Review and approve the graduate student's program, ensuring that it includes: University Requirements for Master's Degrees; 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, or thesis or project defense; any special program requirements; and arrangements to remove any deficiencies in the student's academic background.
2. Monitor the student's progress and timely completion of all requirements (see Continuous Registration).
3. Monitor the timely approval of completed requirements.
4. Review and approve any changes to the 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.
6. Review and approve requests for temporary leaves of absence, which, if approved, will result in the student being placed on inactive status.
7. Administer and assess the comprehensive examination, administer independent scholarship evaluation, or thesis or project defense.

Official Graduate Studies Plan
The official Graduate Studies Plan formally establishes the specific program requirements which will, upon satisfactory completion, entitle the student to receive the master's degree. The plan is based upon the catalog requirements for the graduate degree program to which the student has been accepted. 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 Graduate Studies Plan, as well as all University Requirements for Master’s Degrees. Any revision to the plan will need to be submitted to the Graduate School through the graduate advisor/committee.

University Requirements for Master's Degrees
To complete a master's degree, a student must complete the University Requirements for Master's Degrees, school or college requirements, and program requirements. A graduate student's program is based upon the catalog requirements for the relevant graduate degree which are in effect at the time the student is accepted. University requirements for all graduate degrees are as follows:

1. A student must be admitted to the degree program and establish an approved Graduate Studies Plan.
2. No more than 9 credits may be completed in the student's graduate program before program admission. See individual program listings for further details.
3. The student must complete at least 30 approved semester credits beyond the baccalaureate degree. Typically, at least 24 credits in each graduate degree must consist of courses other than thesis, independent scholarship (independent study) and/or a research project. On approval by the dean of the Graduate School and college dean, an official Graduate Study Plan may stipulate other course credit requirements.
4. Up to 9 semester credits not used toward any other degree (graduate or undergraduate) may be transferred to UAA from an accredited institution and counted toward a master's degree. Acceptance of transfer credit toward program requirements is at the discretion of the individual program faculty.
5. Individual program deans or designees may allow credit earned at other universities within the UA system, excluding thesis credit and credits used toward another degree, to be transferred to UAA, as long as at least 9 credits applicable to the student's program are earned at UAA after acceptance into the program.
6. Only 400- and 600-level courses approved by the graduate student's graduate advisor, dean or designee, and graduate studies committee, may be counted toward graduate program requirements.
7. A cumulative GPA of at least 3.00 must be earned in courses identified in the official Graduate Study Plan.
8. Courses at the 500-level are for professional development and are not applicable toward any degree.
9. 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, independent scholarship or research 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.
10. 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 to establish competency in a subject, thus allowing the advisor/committee to waive certain courses in an established program, as long as the total credits in the program remain the same.
11. If the requirements for a master's degree as specified in the entry-year catalog 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 and graduation requirements in effect at the time of re-admission or graduation.
12. All credits counted toward the degree, including transfer credits, must be earned within the consecutive seven-year period prior to graduation.
13. Students are expected to be continuously registered throughout their graduate program (see Continuous Registration).
14. The student 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. The evaluation, examination or defense must be approved by all graduate committee members as passing the requirement.
15. 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 and to ensure that the evaluation, examination, or defense is fair and appropriate. Typically, the outside reviewer 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.

16. Thesis format must meet the requirements as established by the Graduate School.

Application for Graduation
Graduate students must submit an Application for Graduation, signed by the academic advisor and accompanied by the required fee, to the Office of the Registrar. Application for Graduation deadlines are July 1 for summer graduation, November 1 for fall graduation, and March 1 for spring graduation.

Applications received after the deadline will be processed for the following semester. Students who apply for graduation but do not complete degree requirements by the end of the semester must re-apply for graduation. The application fee must be paid with each Application for Graduation.

This policy is currently under review. Please see the UAA Office of the Registrar website at www.uaa.alaska.edu/records/ for current information regarding graduation and the posting of degrees.

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 degree program (MA or MS). The student must apply and meet all requirements for graduate admission, and specify 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). In addition to the University Requirements for Master’s Degrees listed above, students must comply with the following procedures:

1. The student submits a UAA Graduate Application for Admission (Interdisciplinary Studies Major) with the appropriate fee to the Office of Admissions.

2. The student invites a faculty member to chair their graduate studies committee and to serve as the student’s graduate advisor. The chair shall normally be a full-time faculty member. The chair must agree to serve and must be approved by the appropriate dean(s) or designee(s).

3. The student proposes a graduate studies committee of at least three faculty members 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 appropriate dean(s) or designee(s).

4. The student develops a proposed interdisciplinary Graduate Studies Plan specifying the degree (MA or 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 their proposal all University Requirements for Master’s Degrees and any school or college requirements applicable. Of the minimum 30 credits required for the degree, a minimum of 21 credits must be drawn from existing 600-level courses.

5. The student presents the proposal to the committee and chair for preliminary review and approval. If the committee and chair support the proposal, it will be forwarded to the appropriate dean(s) or designee(s). If the proposal and committee structure are approved, the proposal is then submitted to the Graduate School.

6. The proposal and committee structure, when approved by the dean of the Graduate School, becomes the student’s official Graduate Studies Plan. A copy of the Graduate Studies Plan will be kept in the Graduate School.

7. The Graduate Studies Plan and complete admission packet will then be forwarded to the specific graduate programs for an acceptance decision. Acceptance is determined by the dean and/or faculty of the affected graduate programs, who then inform the Office of Admissions of their decision.

8. Once accepted to graduate study, the students work with their advisors and committees to ensure that satisfactory progress is made toward completing degree requirements. Students are expected to be continuously registered throughout their graduate program (see Continuous Registration).

9. The student must complete all requirements established in the official interdisciplinary Graduate Studies Plan, 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. The evaluation, examination or defense must be approved by all graduate committee members as passing the requirement, by the chair of the department representing the committee chair, and by the dean of the Graduate School.

10. 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 to participate and assure that the evaluation, examination, or defense is fair and appropriate. Typically, the outside reviewer 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.

Graduate Certificates
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. Further, success in a graduate-level certificate program should prepare students to better accomplish the goals of their discipline.

Admissions
(907) 786-1480
www.uaa.alaska.edu/admissions
All students intending to register for one or more courses must apply for admission. Applications for admission are available from the Enrollment Management One-Stop or online via www.uaa.alaska.edu/admissions.

Admission Requirements for Graduate Certificates
To qualify for admission to graduate certificate programs, a student must have earned a baccalaureate or master’s degree from a regionally accredited institution in the United States or a foreign equivalent. Students who expect to receive their baccalaureate or master’s degree within two semesters may also apply for graduate admission; see Incomplete Admission later in this section. Admission is granted to applicants who have received their baccalaureate or master’s degree and whose credentials indicate their ability to pursue graduate work. In general, applicants must either have a cumulative GPA of 3.00 (B average on a 4.00 scale) or meet the GPA requirements of the specific graduate certificate program to which they are applying.

All graduate students must submit official transcripts showing completion and conferral of all baccalaureate and/or graduate degrees and any transcripts reflecting graduate-level courses. 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.) Individual programs may also require additional transcripts and/or specific entrance examinations such as the GRE or the Miller Analogies Test. See individual program requirements later in this chapter for details.

Applicants with transcripts from institutions outside the United States or Canada must submit official transcripts and English translations as well as an official statement of educational equivalency from a recommended
International credentials evaluation service. A list of evaluation services may be obtained from the Office of Admissions. Fees depend upon the agency performing the evaluation. The evaluation service will require a separate transcript and copy of the English translation.

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 scores from the Test of English as a Foreign Language (TOEFL). TOEFL scores may be waived if the applicant has been a long-term resident of the United States or of another English-speaking country and demonstrates fluency in reading, writing and speaking in English.

Applications, official transcripts, and required test scores (if any) must be submitted to the Office of 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, department chair or designee for consideration.

Each graduate certificate program has individual admission standards and document requirements. All of these materials become the property of UAA and are only released or copied for use within the University of Alaska system. Additional information such as writing samples, goal statements, letters of recommendation, research proposals and/or interviews may be required by specific programs. When required, these materials must be submitted directly to the department chair or designee.

Deadlines for submission of materials vary by program. No more than one-third of the credits may be completed in the student's certificate program before application for admission. See individual program listings for information.

International Graduate Certificate Students

Office of Admissions
http://www.uaa.alaska.edu/iss
(907) 786-1573

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 Nonimmigrant F-1 Student Status must meet university and degree program admission requirements and submit the following:

1. Official TOEFL (Test of English as a Foreign Language) (minimum score of 79-80 IBT) or IELTS (International English Language Testing System) (minimum score of 6-6.5) scores, sealed by the issuing agency. Alternate documentation of English proficiency, such as previous study in a U.S. institution or alternate test scores may be considered on a case-by-case basis. International students from English-speaking countries should contact the Office of Admissions to request a waiver of the test score requirement.

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.

4. Students who earned their baccalaureate degree outside the United States or Canada must submit an international credential evaluation from a recommended agency stating that they have earned the equivalent of a U.S. baccalaureate degree. A list of approved international credential evaluation services can be found on the International Student Services web site at www.uaa.alaska.edu/iss. Additional fees will apply to be paid to the evaluating agency, which will require a second official, sealed transcript from the issuing institution.

5. Students transferring from other institutions in the United States 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 web site at www.uaa.alaska.edu/iss for details and forms.

Application and Admission Status for Graduate Certificate-Seeking Students: Terms and 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 are established and monitored by the dean or designee, and faculty of the program. If the provisions are not met within specified deadlines, the student may be removed from graduate certificate-seeking status. All terms of provisional admission must be satisfied prior to advancement to candidacy.

Postponed Admission
Students may postpone their admission to a future semester by notifying the Office of Admissions 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 by the end of their admission semester. Students whose admissions have been withdrawn must apply for admission if they later choose to attend UAA.

Related Graduate Certificate Policies

Graduate Certificate Transfer Credits
Up to one-third of the credits (semester) 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 the individual program.

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.

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 an UAA graduate certificate by completing at least one-third of the certificate credit requirements 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.

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 dean or designee of Admissions, the student’s admission packet is forwarded to the dean or designee of Admissions, the student’s admission packet is forwarded to the dean or designee of Admissions. Acceptance to a graduate certificate program does not guarantee later admission to other graduate certificates or degrees.

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. 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 Nonimmigrant (F-1) Student Status.

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. Courses at the 400-level will count toward full-time status only if they are applicable to the graduate certificate program. A graduate certificate student enrolled at UAA for fewer than 9 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 or part-time status.

Catalog Year for Graduate Certificate Programs
Students may elect to graduate under the requirements of the catalog in effect at the time of formal acceptance to a graduate certificate program, or the catalog in effect at the time of graduation.

If the requirements for a graduate certificate program as specified in the entry-level catalog 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 and graduation requirements in effect at the time of readmission or graduation.

All credits counted toward the certificate, including transfer credit, must be earned within the consecutive seven-year period prior to graduation.

Good Standing for Graduate Certificate-Seeking Students
A graduate certificate-seeking student who maintains a 3.00 (B) cumulative GPA in courses on their official Graduate Certificate Studies Plan is considered in good standing.

Removal from Graduate Certificate-Seeking Status
A graduate certificate student’s academic status may be changed to non-degree-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.

Academic Appeals
Students have the right to appeal academic actions (See Academic Dispute Resolution Procedure in the UAA Fact Finder/Student Handbook for information).

Reinstatement to Graduate Certificate-Seeking Status
Graduate students who have been removed from graduate certificate-seeking status for not making satisfactory progress must reapply for a graduate certificate program and pay the appropriate fee.

Graduate Certificate Advisor
The dean or designee of the appropriate school or college offering the graduate certificate program appoints an advisor for each student accepted to the program.

Responsibilities of the Graduate Certificate Advisor/Committee
The division of responsibility between the advisor and/or committee is determined at the program level. The graduate certificate advisor and/or committee will do the following:

1. Review the student’s Graduate Certificate Studies Plan, ensuring that it includes the Graduate Certificate University Requirements; 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. Approve the official Graduate Certificate Studies Plan.

4. Monitor the student’s progress and timely completion of all requirements.

5. Monitor the timely submission of the official Graduate Certificate Studies Plan and other documents to the Graduate School.

6. Review and approve any changes to the official Graduate Certificate Studies Plan. The Graduate School will forward the original and final documents to the Office of the Registrar.

7. Review and approve the capstone experience or project according to procedures established by the individual program.

8. Administer and assess a comprehensive examination, if required.
Official Graduate Certificate Studies Plan

The official Graduate Certificate Studies Plan formally establishes the specific program requirements which will, upon satisfactory completion, entitle the student to receive the graduate certificate. The program plan is based on the catalog requirements for the graduate certificate program to which the student has been accepted. The plan becomes official once it is approved by the dean or designee and is filed with the Office of the Registrar. Students are expected to complete all requirements listed on the official Graduate Certificate Studies Plan, as well as all Graduate Certificate University Requirements and college requirements for the program. Any revision to the plan will need to be submitted to the Office of the Registrar through the graduate certificate advisor/committee.

Determining Program Requirements

A graduate certificate student’s program is based upon the catalog requirements for the relevant graduate certificate program which are in effect at the time the student was accepted to the program.

Graduate Certificate University Requirements

University requirements for all graduate certificates are as follows:

1. A student must be admitted to the certificate program and establish an approved Graduate Certificate Studies Plan. Students must fulfill all General University Requirements, college requirements and certificate program requirements.
2. The student must complete at least 12 approved semester credits not counted toward the baccalaureate degree.
3. The student must complete all requirements established by the program.
4. A cumulative GPA of at least 3.00 (B) must be earned in courses identified on the official Graduate Certificate Studies Plan.
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. Individual program deans or designees may allow credit earned at other universities in the UA system, to be transferred to UAA, as long as at least 6 credits applicable to the student’s certificate program are earned at UAA 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. If the requirements for a graduate certificate as specified in the entry-level catalog 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 and graduation requirements in effect at the time of readmission or graduation.
13. All credits counted toward the graduate certificate, including transfer credits, must be earned within the consecutive seven-year period prior to graduation.
14. Coursework used to obtain a graduate certificate or graduate degree, if accepted for inclusion in the Graduate Certificate Studies Plan and approved by the dean of the Graduate School and college dean, may be used to satisfy requirements for a graduate certificate.
15. At least one-third of the credits used to satisfy graduate certificate requirements must be UAA resident credit completed after acceptance into the program. See the exception for UA system credits in (10) above.

Application for Graduation

Graduate certificate students must submit an Application for Graduation, signed by the academic advisor and accompanied by the required fee, to the Office of the Registrar. Application for Graduation deadlines are July 1 for summer graduation, November 1 for fall graduation and March 1 for spring. Applications received after the deadline will be processed for the following semester. Students who apply for graduation but do not complete the graduate certificate requirements by the end of the semester must re-apply for graduation. The application fee must be paid with each Application for Graduation.

This policy is currently under review. Please see the UAA Office of the Registrar website at www.uaa.alaska.edu/records/ for current information regarding graduation and the posting of certificates.

MEDICAL SCHOOL

WWAMI BIOMEDICAL PROGRAM

Engineering Building (ENGR), Room 331, (907) 786-4789
http://biomed.uaa.alaska.edu

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). First-year classes for Alaskans are held at the University of Alaska Anchorage. Second-year students from all five states attend classes at the University of Washington in Seattle. 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

Alaskan residents are eligible to apply for admission. Detailed eligibility information is available at http://biomed.uaa.alaska.edu/ak_wwami_eligibility.html. Applicants must meet common requirements established by the institutions in the five WWAMI states. These requirements include prerequisites in biology, chemistry and physics and submission of scores from the Medical College Admission Test (MCAT). Program details can be found at www.uwmedicine.org or by contacting the WWAMI office using the contact information provided below.

Admissions

Applications are accepted through the American Medical College Application Service (AMCAS). WWAMI applications are submitted to the University of Washington School of Medicine (UWSOM). All applications received by UWSOM from Alaskan residents will be considered for the WWAMI Program in Alaska. Complete application information, including details about the selection procedure can be found at www.uwmedicine.org or by contacting the WWAMI office using the contact information provided below.
For more information concerning WWAMI or the biomedical curriculum at UAA, contact the WWAMI Biomedical Office at 786-4789, visit http://biomed.uaa.alaska.edu or visit Engineering Building (ENGR) 331.

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COLLEGE OF ARTS AND SCIENCES

ANTHROPOLOGY

Beatrice McDonald Hall (BMH), Room 214, (907) 786-6840
http://anthro.uaa.alaska.edu

The Master of Arts degree 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 degree requires a research-based thesis. Within the MA program, 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.

Master of Arts, Anthropology

Admission Requirements

See Admission Requirements for Master’s Degrees at the beginning of this chapter. Deadline for application: February 15 for fall semester admission. Students seeking admission into the Anthropology MA degree program must meet the following requirements (1-3) and must submit the following documents (4-9):

1. Although graduating college or university seniors are invited to apply, no student may be formally admitted to graduate study until the baccalaureate degree has been awarded from an accredited college or university.

2. It is strongly recommended that the student has completed a minimum of 18 credits of undergraduate coursework in Anthropology with a GPA of 3.00. An undergraduate major in anthropology is preferred.

3. Students must have at least a 3.00 overall undergraduate GPA.

4. Completed UAA graduate admissions application form.

5. Official transcripts of college-level work from each institution attended.

6. Graduate Record Examination (GRE) results (General Test Scores), taken within five years prior to the application date.

7. Three letters of recommendation from professors or other professionals particularly qualified to attest to the applicant’s qualifications for graduate study.

8. 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.

9. Optional: An example of a substantial paper or research proposal indicative of the applicant’s potential for graduate study.

Applicants may also be requested to complete a personal interview.

Acceptance is determined by the Anthropology Graduate Admissions Committee and is based on:

1. The prospective student’s overall credentials and
2. The availability of appropriate faculty for student research interests.

Failure to meet any of the above criteria may result in conditional admission to the MA program. Conditional admission may be conferred...
on students if important deficiencies are identified in their undergraduate training. Conditionally admitted students are notified of those deficiencies, and required to rectify them 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. Conditional students cannot receive graduate teaching assistantships, research assistantships or departmental travel/research grants.

Prospective graduate students are strongly advised to contact all potential faculty for research/advisor arrangements at an early stage of their admission process. An attempt is made to assign an initial advisor to students based on interests and other academic criteria.

**Academic Progress**
To maintain continuous progress toward the MA degree, a student in the graduate program is expected to complete each semester a minimum of 9 credits of coursework applicable to the program, with grades of A or B, for full-time students, or 3 credits per semester for part-time students. Failure to comply may result in the student being removed from the program. The same is true of students who fail to rectify conditions of their admission. 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 the beginning of this chapter for Advancement to Candidacy requirements. A student may apply for advancement to candidacy by doing the following:

1. Select a graduate studies committee by the end of the first semester of graduate study.
2. Submit an official Graduate Studies Plan, as described in the UAA catalog, 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. Usually, UAA courses such as STAT A252 or STAT A253 or the equivalent, or computer skills such as photogrammetry, SEM image analysis, or GIS analysis will meet this requirement.
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 a written comprehensive examination in anthropology. Normally, this examination is taken before the end of the second year of study, but in any case must be taken by the completion of 30 semester-credits. This examination may be taken twice, but failure to pass the examination a second time will result in removal from the program.
7. Prepare a thesis prospectus for approval by the graduate studies committee.

**Graduation Requirements**
See University Requirements for Master's Degrees at the beginning of this chapter.

**Program Requirements**

1. The following courses must be taken with a grade of A or B.
2. At least 21 credits must be taken at the graduate (600) level.
3. No more than 6 credits of Internship/Pacticum or 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 are available.
4. Courses outside the field of Anthropology may be taken as electives if approved by the student’s advisor.
5. The student must submit a written MA thesis to the graduate studies committee, conforming to UAA specifications.

6. The student must pass an oral defense of the thesis, open to the university community and the general public.
7. The student must submit an Application for Graduation.
8. One of the following study emphases must be chosen:

**General Anthropology Emphasis**

1. Complete the following:
   - ANTH A602 Proseminar in Cultural Anthropology* 3
   - ANTH A605 Proseminar in Biological Anthropology* 3
   - ANTH A611 Proseminar in Archaeology* 3
   - ANTH A699 Thesis Research 1-6
   - 600 level elective courses 6
   - 400 or 600 level elective courses 9-14
   * A total of 30 credits are required for the degree.

**Applied Anthropology Emphasis**

1. Complete the following:
   - ANTH A602 Proseminar in Cultural Anthropology* 3
   - ANTH A605 Proseminar in Biological Anthropology* 3
   - ANTH A611 Proseminar in Archaeology* 3
   - ANTH A699 Thesis Research 1-6
   - 600 level elective courses 6
   - 400 or 600 level elective courses 9-14
   * All proseminar courses must be taken in residence at UAA. These courses may not be taken by directed study or by correspondence. Students may not take any Proseminar until formally admitted to the MA program.

2. Complete one of the following tracks:

   **Applied Cultural Anthropology Track**
   Complete the following courses (9 credits):
   - ANTH A615 Advanced Applied Anthropology 3
   - ANTH A630 Advanced Research Methods in Anthropology* 3
   - ANTH A695 Anthropology Practicum 3
   *If this course was taken as an undergraduate upper division course (ANTH A430 or the equivalent), another course may be substituted with the approval of the student's graduate studies committee.

   **Applied Biological Anthropology Track**
   Complete 9 credits from the following:
   - ANTH A645 Advanced Evolution of Humans and Disease (3)
   - ANTH A655 Advanced Medical Anthropology (3)
   - ANTH A657 Nutritional Anthropology (3)
   - ANTH A685 Advanced Human Osteology (3)
   - ANTH A686 Advanced Applied Human Osteology (3)
   - ANTH A695 Anthropology Practicum (3)

   **Cultural Resource Management Track**
   a. Complete the following:
   - ANTH A675 Cultural Resource Management 3
   b. Complete 6 credits from the following:
   - ANTH A631 Field Methods in Archaeology (1-8)*
   - ANTH A680 Advanced Analytical Techniques in Archaeology (3)
   - ANTH A676 Ethical Issues in Archaeology (3)
   - ANTH A681 Advanced Museum Studies in Anthropology (3)
   - ANTH A695 Anthropology Practicum (3)
   *No more than 3 credits may be applied to this emphasis.

3. Complete 400-level or 600-level elective courses 6-11
4. A total of 30 credits are required for the degree.

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Diane Hanson, Associate Professor, AFDKH@uaa.alaska.edu
Steve Langdon, Professor/Chair, AFSJL@uaa.alaska.edu
BIOLOGICAL SCIENCES

ConocoPhillips Integrated Sciences Building (CPSB), Room 101, (907) 786-4770
http://biology.uaa.alaska.edu
The WWAMI/Biomedical program may be found at http://biomed.uaa.alaska.edu

The graduate program in Biological Sciences offers a research program of study leading to the Master of Science degree. The MS degree 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 department's graduate handbook at www.uaa.alaska.edu/biology/graduate/index.cfm. General guidelines for prospective students can also be found on UAA's Graduate School webpage: www.uaa.alaska.edu/academics/graduatestudies/prospective.cfm.

Master of Science, Biological Sciences

Admission Requirements

Students seeking admission into the Biological Sciences MS degree program should meet the following requirements (1-3). Applicants must submit items 3 through 6 to the university, and items 7 and 8 directly to the department. Applicants should also submit unofficial copies of items 3 through 6 to the Department of Biological Sciences. Details on this process are available at www.uaa.alaska.edu/biology/graduate/paperwork.cfm.

1. Students must have a bachelor's degree in biology, chemistry, or equivalent science to be determined by the Biological Sciences Graduate Committee (BSGC). Although graduating college or university seniors are invited to apply, no student may be formally admitted to graduate study until the baccalaureate degree has been awarded from an accredited college or university.

2. Applicants must take both the general and subject (either biology, biochemistry, or chemistry) Graduate Record Examination (GRE) and have the scores sent directly to the university from the testing agency.

3. Applicants must have at least a 3.00 GPA, or at least a 70th percentile in two out of the six GRE scores (verbal, quantitative, analytical, or three subtests of the subject GRE). Successful applicants ordinarily have no grade lower than a C in undergraduate science courses.

4. Applicants must complete and submit the UAA graduate application form, which is available at http://edit.uaa.alaska.edu/admissions/admin_grad.cfm.

5. Applicants must submit official transcript(s) reflecting graduate-level credits and credits pertaining to the baccalaureate degree from each institution attended. Applicants with transcript(s) from institution(s) outside the United States or Canada must provide an official statement of equivalency from a recommended credentials evaluation service and, if necessary, an English translation of the transcript.

6. Foreign students must submit scores from the Test of English as a Foreign Language (TOEFL) if English is not the applicant's native language or was not the language of instruction for the applicant's baccalaureate degree. TOEFL scores may be waived if the applicant has been a long-term resident of the United States or of another English-speaking country. At a minimum, students must meet the TOEFL score guidelines set by UAA for undergraduate admission. See the UAA website for scoring guidelines.

7. A brief (typically one page) statement of the applicant's research and career goals and 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.

8. A letter of support from a UAA faculty member 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.

Admission deadlines: All materials are due by March 15 for fall admission and by November 15 for spring admission.

Acceptance is determined by the BSGC and is based on the prospective student's overall credentials and the availability of appropriate faculty for student research interests. Because students will not be admitted to the program without a faculty mentor, prospective graduate students are strongly advised to contact faculty for research/advisor arrangements at an early stage of their admission process. Applicants must have a faculty mentor to be accepted into the program. Faculty research interests are available at www.uaa.alaska.edu/biology.

Graduation Requirements

See University Requirements for Master's Degrees at the beginning of this chapter.

Program Requirements

1. Students working toward an MS degree in Biological Sciences must fulfill the following minimum requirements:
   a. A minimum of 30 credits is required, of which at least 21 credits must be at the 600 level.
   b. Complete the following courses:
      - 600-level Science Credits minimum 9
      - BIOL A692, BIOL A693
      - BIOL A694
      - BIOL A695
      - BIOL A696
      - BIOL A697
      - BIOL A698
      - BIOL A699

   *Note: Be aware that the university sets limits on the maximum number of these credits that can be counted toward the degree; see earlier in this chapter.

2. Upper division (400-level) credits may be applied to the degree only with approval of the student's graduate study committee (GSC) via inclusion on the Graduate Studies Plan. 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.

3. 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 research advisor if a full-time UAA faculty member. If the primary research advisor is an affiliate faculty member, the chair will be shared with a full-time UAA faculty member, 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.

4. A student's GSC must meet each semester to review a student's progress. A progress report form must be signed by the GSC each semester and submitted to the chair of the BSGC and filed with the departmental secretary. The departmental report of graduate student progress can be found online. In addition, an annual report on student progress must be filed with the Graduate School no later than May 15 of each year. Failure to file semester and annual progress reports will be taken as an indication of inadequate progress, and is grounds for probation and subsequent dismissal from the program.

5. Each student must submit an official Graduate Study Plan (GSP) form by the end of the first semester of graduate work. The official 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 GSC and also be signed by the chair of the BSCC, the department chair and the dean of the College of Graduate School.

6. All graduate students must remain in good standing throughout their degree. 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 semester in residence.

7. 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 degree program.

8. 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 defended in front of the student's GSC. Upon satisfactory completion of the defense, the student's GSC must signify approval of the proposal by signing the proposal. A copy of the proposal shall be submitted to the BSCC chair and this copy will be placed in the student's departmental file.

9. 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 GSC, the chair 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.

10. 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 GSC to finalize the defense. The student must successfully defend the thesis in order to graduate.

**Doctoral Program, Biological Sciences**

The department also offers PhD degrees in collaboration with the University of Alaska Fairbanks. Because application guidelines and requirements differ among the departments at UAF with which we collaborate, we recommend that you contact the faculty member at UAA with whom you would like to work, and discuss how to proceed.

**FACULTY**

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**CLINICAL PSYCHOLOGY**

Social Sciences Building (SSB), Room 264, (907) 786-1795
http://psych.uaa.alaska.edu

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 degree allows graduates to pursue either the Licensed Professional Counselor (LPC) or the Licensed Psychological Associate (LPA) 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. An important program goal is the recruitment and retention of nontraditional students.

**Master of Science, Clinical Psychology Admission Requirements**

Forms and instructions are available at: www.uaa.alaska.edu/psych/masters/admissions.cfm

1. Application deadline: April 1 for fall admission. This is the only opportunity for program admission each year.
2. Compliance with Admission Requirements for Master's Degrees as given in the University of Alaska Anchorage catalog.
3. 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 A445; PSY A425; PSY A473. Alternative courses and/or experiences will also be considered. Students without an undergraduate degree in psychology must have all prerequisites.
4. Submission of a letter of intent describing the applicant's interest and purpose in pursuing the MS degree 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.
5. Submission of three professional letters of reference that address the applicant's suitability for the program.
6. Submission of Student Disclosure Form. See website.
7. 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.
8. Submit copy of complete application packet to the Psychology program office.

Departmental approval for admission to graduate study is contingent on the applicant's qualifications, interests, and available space.

**Graduation Requirements**

Students must meet all applicable university requirements for master's degrees given earlier in this chapter and achieve a grade of B or better in all coursework applied to the degree. It is required that students 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.
Program Requirements

1. Complete the following required courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY A604</td>
<td>Biological and Pharmacological</td>
<td>3</td>
</tr>
<tr>
<td>PSY A609</td>
<td>Applied Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>PSY A611</td>
<td>Ethics and Professional Practice</td>
<td>3</td>
</tr>
<tr>
<td>PSY A612</td>
<td>Advanced Human Development in a Cultural Context</td>
<td>3</td>
</tr>
<tr>
<td>PSY A622</td>
<td>Multicultural Psychopathology</td>
<td>3</td>
</tr>
<tr>
<td>PSY A623</td>
<td>Intervention I</td>
<td>3</td>
</tr>
<tr>
<td>PSY A624</td>
<td>Group Therapy</td>
<td>3</td>
</tr>
<tr>
<td>PSY A626</td>
<td>Family Therapy</td>
<td>3</td>
</tr>
<tr>
<td>PSY A627</td>
<td>Community-based Intervention Skills</td>
<td>3</td>
</tr>
<tr>
<td>PSY A633</td>
<td>Tests and Measurements in Multicultural Contexts</td>
<td>3</td>
</tr>
<tr>
<td>PSY A654</td>
<td>Cultural Issues in Psychotherapy</td>
<td>3</td>
</tr>
<tr>
<td>PSY A665</td>
<td>Psychotherapy Practicum</td>
<td>3</td>
</tr>
<tr>
<td>PSY A670</td>
<td>Psychotherapy Internship</td>
<td>6</td>
</tr>
<tr>
<td>PSY A681</td>
<td>Substances of Abuse in Alaska</td>
<td>1</td>
</tr>
<tr>
<td>PSY A682</td>
<td>Clinical Interventions for Substance Abuse</td>
<td>1</td>
</tr>
<tr>
<td>PSY A683</td>
<td>Substance Abuse Assessment and Treatment Planning</td>
<td>1</td>
</tr>
</tbody>
</table>

2. Elective: Select 3 credits to be approved by advisor. Some options are the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY A631</td>
<td>Cognitive Behavior Therapy (3)</td>
<td></td>
</tr>
<tr>
<td>PSY A638</td>
<td>Child Clinical Psychology (3)</td>
<td></td>
</tr>
<tr>
<td>PSY A689</td>
<td>Advanced Psychological Assessment (3)</td>
<td></td>
</tr>
<tr>
<td>PSY A690</td>
<td>Selected Topics in Psychotherapy (1-3)</td>
<td></td>
</tr>
<tr>
<td>PSY A699</td>
<td>Thesis (1-6)</td>
<td></td>
</tr>
</tbody>
</table>

3. A total of 48 credits is required for the degree.

PhD, Clinical-Community Psychology

Social Sciences Building (SSB), Room 303, (907) 786-1640
http://psypad.alaska.edu or email AYPHD@uaa.alaska.edu

The PhD program in Clinical-Community Psychology with Rural, Indigenous Emphasis is a program jointly delivered and administered by the Departments of Psychology at the University of Alaska Fairbanks and the University of Alaska Anchorage. Although the degree is awarded by UAF, the only doctoral degree-granting institution in the UA system, students can complete the entire degree program in residence at UAA. All program courses are co-taught across campuses via videoconference and all program components are delivered by faculty at both campuses. The student experience is equivalent regardless of students’ city of residence (Fairbanks or Anchorage). The program focuses on clinical, community and cross-cultural psychology with an emphasis on indigenous and rural issues. As a UAA-UAF partnership, the program integrates the strengths and resources of both campuses to advance academic excellence, promote innovative and practical research, and provide solid graduate training in clinical-community psychology.

The program ensures that graduates have obtained the full range of training and experience required for doctoral-level clinical psychologists and will be adequately prepared for licensure as psychologists. Accreditation for the program is sought from the American Psychological Association as soon as eligibility has been reached.

Application

Students apply to the joint PhD program in Clinical-Community Psychology at both UAA and UAF. All applicants submit identical application materials to both institutions; materials are collected and evaluated by the joint UAA/UAF PhD admissions committee which makes admissions recommendations to the dean of the UAF Graduate School. Applicants may specify a preference for either campus as a location for their studies. For more information about the application process, visit the program website.

Admission Requirements

1. Application deadline: Received by February 1 for the following fall admission. This is the only opportunity for program admission each year.
2. Compliance with the requirements for graduate study as detailed in the UAF catalog.
3. Minimum of a 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.
4. Minimum undergraduate grade point average of 3.00.
5. Minimum 3.00 grade point average in major and in all psychology courses.
6. 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.
7. Letter of intent describing the applicant’s interest and purpose in studying clinical-community psychology, the reasons why a PhD in Clinical-Community Psychology through the joint UAA/UAF program is sought at this point in the applicant’s professional development, and demonstrating an understanding of relevant professional ethics.
8. Professional vita, including documentation regarding academic, research, and professional experiences; special projects and activities; and recognitions or honors.
9. 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).
10. Disclosure statement, located at http://psypad.alaska.edu/approcedures.htm, must accompany the application to the program. Lifetime criminal background check must be submitted by students invited to a personal interview at least two weeks prior to the interview.

Graduation Requirements

1. Complete the general university requirements for graduate programs as outlined in the UAF catalog.
2. Complete the program and additional requirements listed below.

Program Requirements

Students must complete 26 required courses (for a total of 70 credits), 18 credits of dissertation, 18 credits of predoctoral internship, and 9 credits of electives. Students must accumulate a minimum of 115 credits to graduate and must have completed all required coursework. Students entering the program with a master's degree in Psychology or related field must complete at least two years of full-time coursework, 18 credits of dissertation, and one year of predoctoral internship, all as approved by the student's advisory committee.

Students admitted to the PhD program have the option to obtain the UAA MS degree in Clinical Psychology.

1. Cultural experience: During their time in the PhD program, students must participate in a cultural experience as defined by program faculty. The actual experience will vary from year to year and may be adapted to individual student needs.

2. Complete the following required courses.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY A601</td>
<td>Clinical/Community/Cross-Cultural Integration Seminar (3 years, 1 credit per year)</td>
<td>3</td>
</tr>
<tr>
<td>PSY A602</td>
<td>Native Ways of Knowing</td>
<td>3</td>
</tr>
<tr>
<td>PSY A603</td>
<td>Alaskan and Rural Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY A604</td>
<td>Biological and Pharmacological Bases of Behavior</td>
<td>3</td>
</tr>
<tr>
<td>PSY A605</td>
<td>History and Systems</td>
<td>3</td>
</tr>
<tr>
<td>PSY A607</td>
<td>Cognition, Affect, and Culture</td>
<td>3</td>
</tr>
<tr>
<td>PSY A611</td>
<td>Ethics and Professional Practice</td>
<td>3</td>
</tr>
<tr>
<td>PSY A612</td>
<td>Human Development in a Cultural Context</td>
<td>3</td>
</tr>
</tbody>
</table>
### Additional Requirements

#### Clinical-Community Competency

Students must demonstrate clinical-community competency before being allowed to apply for internship. Clinical competency is demonstrated through preparation of a clinical-community portfolio that will be evaluated by an ad hoc committee consisting of four clinically trained faculty members (two per campus) who teach in the doctoral program. Criteria for the portfolio will be clearly defined and samples will be provided for students.

#### Research Competency

Students must demonstrate research competency before being allowed to register for dissertation credits. Research competency is demonstrated through preparation of a research portfolio that will be evaluated by an ad hoc committee consisting of four research-trained faculty members (two per campus) who teach in the doctoral program. Criteria for the portfolio will be clearly defined and samples will be provided for students.

#### Advancement to Candidacy

Before students are allowed to register for dissertation credits, they will be reviewed for performance by the joint UAA/UAF PhD committee, using existing university standards and forms for advancement to candidacy. Review will be based on faculty experience with students to date, submitted paperwork and student's progress through the program. Feedback from the review will be provided to the student by her or his advisor. Students must have passed either the research or clinical-community competency before being able to request advancement to candidacy.

#### 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 or UAF 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. It is recommended that the dissertation chair be on the same campus as the student. There must be at least one committee member from each psychology department at UAF and UAA. Content areas can vary widely, but must be related to clinical, community, or cross-cultural issues and applicable in Alaska settings.

### Advancement to Internship

Students must apply to the local director of Clinical Training (DCT) before being permitted to apply for a predoctoral internship. DCTs will review the students’ coursework, assure that all prior milestones have been mastered (i.e., clinical-community competency, research competency, doctoral dissertation defense and advancement to candidacy) before approving the student for internship and before writing a letter of support for the student (typically required by all approved internship sites). Lifetime criminal background check must also be completed before students can advance to internship.

#### Predoctoral Internship

A full-time, one-year predoctoral internship is required. This internship should meet the criteria laid out by the American Psychological Association; selection of an Association of Psychology Postdoctoral and Internship Centers (APPIC)-approved internship is encouraged. Placements in Alaska are preferred, but not required.

Strict compliance with APA ethical guidelines 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. The disclosure statement may be viewed at http://psyphd.alaska.edu.

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### COMPUTER SCIENCE

**Social Sciences Building (SSB), Room 154, (907) 786-1744/786-4824**

[www.math.uaa.alaska.edu](http://www.math.uaa.alaska.edu)

### Master of Science, Computer Science

The UAA Department of Mathematical Sciences offers the opportunity to pursue a master’s degree in Computer Science while residing in the Anchorage area. The degree is available through a cooperative program with the University of Alaska Fairbanks (UAF) and the degree is awarded by UAF.

The program is designed to accommodate computer science professionals working in the Anchorage area; courses are offered in late afternoon and evening. For more information, contact the Department of Mathematical Sciences at UAA or visit our website at [www.math.uaa.alaska.edu](http://www.math.uaa.alaska.edu).

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University of Alaska Anchorage 2010-2011 Catalog

[www.uaa.alaska.edu](http://www.uaa.alaska.edu)
CREATIVE WRITING AND LITERARY ARTS

The Department of Creative Writing and Literary Arts offers a 45-credit 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 will then conduct one-on-one coursework at a distance during fall and spring semesters, supported by web resources. Mentors will include core faculty members and associate faculty who are established teachers and writers. Residency sessions also will feature annual guests from other disciplines, including scientists, artists, musicians, cultural leaders, and scholars. Students will participate in three residency sessions as part of their workshop credits. During a fourth residency, they will present and defend their thesis projects and give a public reading.

The department offers a studio program 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 and the arts, no matter where these relationships exist or how they are expressed. In their final year, students will prepare and present a thesis that includes a book-length work of original creative writing, a critical analysis, and an annotated bibliography. Through completion of the coursework and the thesis, students will develop and demonstrate an understanding of the history, traditions, theory, and contemporary issues in their genre and be 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.

Master of Fine Arts, Creative Writing and Literary Arts

Admission Requirements

See Admission Requirements for Master’s Degrees at the beginning of this chapter.

In addition, at the time of application, students must submit the following to the Department of Creative Writing and Literary Arts:

1. Personal essay (see website for topic and detailed instructions)
2. List of references, including email addresses; no need to send reference letters
3. Unofficial transcripts
4. 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 the Department of Creative Writing and Literary Arts 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 manuscript sample.

Graduation Requirements

See University Requirements for Master’s Degrees at the beginning of this chapter.

Program Requirements

1. Complete 15 credits in the student’s chosen genre from the following:
   - CWLA A652 Graduate Writer’s Workshop: Poetry 5
   - CWLA A662 Graduate Writer’s Workshop: Fiction 5
   - CWLA A672 Graduate Writer’s Workshop: Literary Nonfiction 5

2. Complete 15 credits of:
   - CWLA A690 Studies in Form and Theory (5) 15
   - This is an umbrella course and may be repeated with changes in subtitle.

3. Complete 5 credits of:
   - CWLA A695 Literary Practicum (1-5) 5

4. Complete 10 credits of:
   - CWLA A699 Thesis (5) 10
   - To produce a book-length creative work, annotated bibliography, and critical essay.

5. Successful presentation of thesis in colloquium.

6. A total of 45 credits is required for the degree.

FACULTY

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ENGLISH

Master of Arts, English

The Department of English offers a 36-credit Master of Arts in English emphasizing balanced coursework in literature, rhetoric, composition, and language theory. This degree prepares students both to pursue a more specialized PhD program and to take a variety of jobs in teaching, writing, and editing. The program culminates in the master’s thesis, a thoroughly researched and carefully argued article-length work that demonstrates the student’s academic achievement. Competitive teaching assistantships and research assistantships are also available. Contact the English Department for details, deadlines, and applications.
Admission Requirements

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. See Admission Requirements for Master’s Degrees at the beginning of this chapter for additional prerequisites. Completed application packets are due by June 15 for fall enrollment and November 1 for spring enrollment. TA/RA applications are due to the department by April 1 (for fall semester).

At the time of application, students must submit the following documents to the Master of Arts program, Department of English:

1. A three- to five-page 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.
2. A recent sample (from within the past five years) of the applicant’s academic or professional writing. (Note: If no samples are available, the applicant should address why in the application essay.)
3. Two letters of recommendation from faculty who know the applicant’s academic work (or professional writing, when appropriate).
4. Official transcripts for all prior coursework.

Admission to the program is based upon the evaluation of the entire application packet in conjunction with the applicant’s undergraduate GPA.

Under-Prepared Students/Admission for Students without an Undergraduate Degree in English (or Related Discipline)

An applicant who does not have sufficient undergraduate experience in English, at the discretion of the department, may be required to take up to 9 credits of additional coursework at the undergraduate level. These preparatory courses do not count toward the MA degree and must be passed with a grade of B or better.

International Students

According to the UAA Admission Requirements for Master’s Degrees, applicants whose native language is not English must submit official TOEFL (Test of English as a Foreign Language) scores, and the department reserves the right to require TOEFL scores above the university requirement for graduate admission.

Teaching and Research Assistantships

Applicants to the graduate program who are also interested in an assistantship should contact the Department of English for an application packet. Students selected for teaching or research assistantships are required (1) to attend all training, informational, and evaluation sessions and (2) to meet the academic and professional standards set by faculty members. If these requirements are not met, students risk forfeiting their assistantships.

Advising and Program Sequence

Admitted students are assigned an initial advisor whose responsibility is to assist the student prior to initial enrollment. Students shall acquaint themselves with different faculty members during the first year and approach a faculty member to serve as a mentor for the duration of the student’s program. It is also expected that the mentor will assist the student in course selection and should serve on the student’s thesis committee, if not direct the thesis itself. Students are advised to complete the required MA courses in the following sequence: ENGL A602, ENGL A603, ENGL A689, ENGL A699 (fall semester). ENGL A687 is offered every fall semester.

The thesis proposal, a requirement of ENGL A689, must be approved by the graduate English coordinator, and students will not be allowed to enroll for ENGL A699 Thesis without completing ENGL A689 and having an approved thesis proposal. Developed in consultation with the mentor and in reference to the program requirements (see below), the Graduate Studies Plan (GSP) detailing the student’s actual coursework should be submitted with the final thesis paperwork. See the beginning of this chapter for a description of the GSP and other university requirements. The Graduate Studies Plan and other paperwork may be found on the UAA Graduate Studies webpage.

Thesis Requirements

The thesis is the culmination of the MA program. It is an extended writing project that demonstrates MA students’ ability to think creatively, research thoroughly, write effectively, and argue analytically at the graduate level. Students are expected to have conversations with faculty members about possible thesis topics during their coursework, and the thesis committee and thesis chair should be chosen in consultation with the graduate English coordinator. MA students are also expected to attend two theses defenses before scheduling their own defense. Additional thesis requirements follow:

1. The thesis should focus upon, and fall within, a disciplinary specialty covered by 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. The thesis should primarily address recognized disciplinary specialties (literary, rhetorical, cinematic, or electronic texts, concepts, and perspectives) and methodologies (literary critical and rhetorical analysis, qualitative or quantitative research).
3. The project may incorporate cultural studies approaches, popular culture topics, or extra-canonical texts, if pertinent and approved by the thesis advisor.
4. The thesis should articulate a critical approach to the topic according to a clearly defined literary theory, rhetorical approach, or linguistic consideration (a key question, idea, concept, theorist, or school of thought).
5. The thesis must be developed out of the thesis proposal required in ENGL A689 and approved by the graduate English coordinator.
6. The completed thesis should be submitted to the thesis committee at least six weeks prior to the expected graduation date and at least two weeks prior to the thesis defense. See the English Department for specific dates and deadlines. If the thesis is not submitted with adequate lead time, and revisions are required, it is unlikely that the thesis can be completed in time to meet graduation deadlines. See the UAA Graduate School website for thesis deadlines.
7. Students must be aware that after the thesis defense is completed, and before the degree can be awarded, the thesis must also be:
   - Revised according to the instructions of the thesis defense committee (if any);
   - Submitted, reviewed and approved in the College of Arts and Sciences Dean’s Office;
   - Revised according to the CAS Dean’s Office’s instructions (if any);
   - Submitted, reviewed and approved by the Graduate School;
   - Revised according to the Graduate School instructions (if any); and
   - Submitted to the Graduate School for binding and archiving (required), and copyrighting (optional) according to current requirements.

Please see the English Department support staff for a detailed description of the procedures to follow after the thesis 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 grades (DF).

Continuous Registration

Students have seven years to complete all requirements for the MA in English, and continuous registration is expected of all students throughout their courses of study. Students planning not to take coursework or register for thesis credit during any fall or spring semester
COLLEGE OF BUSINESS AND PUBLIC POLICY

BUSINESS ADMINISTRATION

Edward & Cathryn Rasmuson Hall (RH), Room 309, (907) 786-4129
www.cbpp.uaa.alaska.edu

The College of Business and Public Policy offers the Master of Business Administration (MBA) degree in General Management. The MBA program is accredited by the Association to Advance Collegiate Schools of Business (AACSB International).

Program Policies and Administration

Students must maintain a minimum 3.00 GPA on all coursework in the MBA program, including foundation courses. A grade of C in a graduate course is minimally acceptable if it is offset with an A grade in another course. Students with a GPA below 3.00 will be placed on probation, and may be dropped from the program if the GPA is not brought up to 3.00 within a reasonable time period. Students are also expected to make reasonable progress toward completion of the degree, and may be placed on probation if they do not complete at least one course applicable to the MBA within any 12 month period. All of the advanced MBA course requirements (core plus electives) must be completed within seven calendar years.

The faculty reserves the right, where warranted by an evaluation of a student’s progress and apparent knowledge, to require additional coursework or other preparation to ensure that the degree recipient possesses adequate professional skills and capabilities. This includes the ability to reason and communicate effectively, both verbally and quantitatively.

The MBA program is the responsibility of the college’s graduate faculty, which acts as a policy-setting body and as an appeals board. The complete MBA program policies, requirements, and procedures may be obtained from the college’s MBA Office. Students are expected to be familiar with and adhere to both the MBA program requirements and procedures, and the general UAA requirements for graduate degrees.

Full program information, including application forms and procedures, may be obtained by contacting:

MBA Office
College of Business and Public Policy
University of Alaska Anchorage
3211 Providence Drive
Anchorage, AK 99508
U.S.A.
Telephone: (907) 786-4129
Facsimile: (907) 786-4119

Master of Business Administration, General Management

The MBA in General Management is designed to provide students with the perspectives and skills which will prepare them for increasingly significant managerial leadership roles in their organizations.

The focus of the program is on management practice, but this focus is based on a recognition that sound practice requires a thorough understanding of underlying management principles and techniques. The MBA graduate should be thoroughly grounded in state-of-the-art management theory and practice, aware of the complex global environment in which modern organizations operate, adaptive to change, articulate, and ethical in dealing with others.

FACULTY

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The program serves both full- and part-time students, and classes are generally scheduled for evenings and Saturdays. While most students are from the greater Anchorage area, the program also attracts students from the rest of the United States and from foreign countries, particularly from those on the Pacific Rim.

Students may enter the program in either the fall or spring semester. A limited number of courses are also offered during the summer. Current application deadlines, as well as other detailed program information, may be obtained by contacting the College of Business and Public Policy MBA Office.

**Admission Requirements**

Applicants must meet both the Admission Requirements for Master's Degrees and the College of Business and Public Policy requirements outlined below.

Admission to the MBA program is restricted to students holding a baccalaureate degree from an AACSB or regionally accredited university, or foreign equivalent. In general, two formulas using undergraduate performance as measured by the GPA on a 4.00 scale and the score on the Graduate Management Admission Test (GMAT) will be used to assess an applicant's potential for success in the MBA program:

1. Undergraduate GPA x 200 + GMAT > 1050
2. Upper division GPA x 200 + GMAT > 1100

GMAT waivers may be considered for applicants meeting any of the following criteria:

1. Hold another master's degree from an accredited university.
2. Have a professional designation beyond the baccalaureate (such as CPA, CFA).
3. Have an undergraduate GPA of 3.00 or higher.

Additional indicators for predicting success in individual cases may be provided through documented performance in extracurricular activities, evidence of creativity and leadership, and a record of accomplishment in business or other professional activity.

Applicants whose native language is not English are required to score at least 550 on the TOEFL examination or otherwise demonstrate competency in English. Students may apply to enter the program at the beginning of either the fall or spring semester. There currently is no specific application deadline, but students should apply before the start of their first semester. In some cases students may be admitted conditionally while their paperwork is completed. Students in conditional admission status are restricted in the number of courses that they can take before being fully admitted.

**General Management Program Structure**

The requirements consist of two parts: foundation courses and advanced courses in business or accounting or relevant experience and expertise. In key functional areas of business, additional foundational coursework may be required. These foundation courses are:

- ACCT A601 Accounting Foundations for Executives 3
- BA A601 Business Statistics and Data Analysis 2
- BA A603 Fundamentals of Finance 3
- BA A604 Marketing Management 3
- BA A606 Fundamentals of Production/Operations Management 2
- ECON A602 Introduction to Economics for Managers 3

In some cases, students may have fulfilled the core foundation requirements in part through undergraduate courses, or some students holding undergraduate business or accounting degrees may not have covered all of the foundation material in their degree program, or some of their foundation work may be dated in comparison to modern business practice. Thus, foundation requirements will be evaluated on an individual student basis to ensure each student is properly prepared for the more advanced MBA courses. Foundation courses may be waived or added to an individual student's program based on previous preparation.

In addition, entering students are expected to have basic mathematical, computer, and communication skills. Students deficient in basic skills will be required to improve them through independent study, noncredit courses, undergraduate coursework, and/or seminars or workshops.

The main body of the MBA curriculum consists of seven core courses (21 credits) and 15 credits of curricular options for a total of 36 credits of advanced coursework:

**Core Courses (21 credits):**

- ACCT A630 Seminar in Executive Uses of Accounting 3
- BA A632 Organizational Behavior and Human Resource Management 3
- BA A633 Problem Formulation and Decision Analysis 3
- BA A675 Current Marketing Issues Seminar 3
- BA A676 Financial Decision Making 3
- BA A685 Strategic Management Seminar 3
- CIS A692 Management Information Systems Seminar 3

In certain cases, where warranted by previous education or experience, an MBA core course may be waived and an elective substituted.

**Curricular Options (15 credits):**

A. **Executive Focus (3 credits):** Select at least one course from the following:

- BA A628 Executive Leadership 3
- BA A629 Negotiation & Conflict Management 3
- BA A631 Business Environment Analysis 3
- BA A634 Organizational Design and Development 3

B. **Elective Coursework (9 credits):**

Students can personally design an area of concentration from courses offered within the College of Business and Public Policy that focus on: Management Theory and Practice; Marketing; Finance; International Business & Global Economics; Management Information Systems; Logistics and Supply Chain Management; or Public Administration. In addition, elective coursework can be selected from graduate courses offered by other colleges and disciplines and/or graduate courses in programs offered at other accredited universities.

C. **Capstone course requirement (3 credits):**

Provides the opportunity to integrate acquired knowledge of business administration. Select one course from the following depending on preferred nature of experience (practical or academic) and application (applied or theoretical):

- BA A656 Management Project 3
- BA A686 Management Simulation 3
- BA A695 Graduate Internship 3
- BA A698 Individual Research 3

**Thesis Option:**

- BA A699 Thesis 6

Studies (especially those who are considering pursuing a PhD degree) may elect to complete a master's thesis.

**FACULTY**

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Master of Science, Global Supply Chain Management

The MS GSCM degree is earned through advanced coursework and study at the graduate level. The focus is on management of global supply chain systems with an emphasis on managerial leadership, information technology and international business practices. The degree is comprised of five courses, 6 credit hours each, to be completed over five consecutive semesters. Time to completion is approximately 20 months for a total of 30 credit hours.

Classes meet exclusively on weekends. Each course requires four weekend meetings per semester. Between weekends, students are engaged in research and online discussions with the instructor and one another. Students apply their coursework to a host company in order to attain hands-on experience and demonstrate value to their hosts.

Classes are kept to a maximum of 25 students and each student proceeds through the five courses in the same order as part of a cohort group.

The degree is a stand-alone program that is not subsidized by the State, and therefore normal tuition fees do not apply. Please contact the College of Business & Public Policy at (907) 786-4101 for tuition and pre-application information.

Program Outcomes
Graduates of the MS GSCM program will be able to assess logistical activities and supply chain relationships in a strategic context within international and cross-cultural business environments. They will be able to demonstrate the role of leadership and team building in fostering and enhancing supply chain integration. Graduates will also be able to apply information technology as a means to manage knowledge; and use financial and cost accounting techniques to effectively measure logistical value within and across companies. Finally, graduates will have developed an appreciation for the complex nature of global supply chain management in an increasingly integrated world that is subject to rapid change.

Admission Requirements
Applicants must have a minimum of seven years of work experience in some function of logistics or supply chain management and a bachelor’s degree in any discipline. Exceptions to work experience may be made for individuals with a bachelor’s degree in logistics, supply chain management, or a discipline comprised of courses that are closely related to logistics and supply chain management.

In addition, applicants must provide two letters of recommendation, undergraduate degree transcripts, and must complete the Graduate Management Admission Test (GMAT). The minimum acceptable GMAT score is determined by:

\[(\text{Undergraduate GPA} \times 200) + \text{GMAT score} > 1050.\]

Conditional admission may be granted if the GMAT has not been completed, but all other required information has been provided. However, the GMAT must be completed with the minimum acceptable score before the start of the third course in the program.

Applicants whose native language is not English are required to score at least 550 on the TOEFL examination or otherwise demonstrate competency in English.

Academic Progress
A minimum GPA of 3.00 is required in order to successfully complete the program. A grade of C is minimally acceptable and must be offset with a grade of A in one of the other courses. After the third grade of C the student will be required to withdraw from the program.

The cohort group format is designed to allow students to develop a working relationship with one another, undertake group activities and research, and share professional experiences with one another.

The MS GSCM program is the responsibility of the Logistics Department, which acts as its policy-making body, and as an appeals board. Students are expected to be familiar with and adhere to the MS GSCM program’s requirements and procedures as well as to the general UAA admissions and graduate degree requirements.

Full program information, including application forms and procedures may be obtained by contacting:

- Student Information Office
- College of Business & Public Policy
- University of Alaska Anchorage
- 3211 Providence Drive
- Anchorage, AK 99508
- U.S.A.
- Telephone: (907) 786-4101
- Facsimile: (907) 786-4119

Program Requirements

1. Complete the following requirements:
   - LOG A661  Supply Chain Strategic Planning  6
   - LOG A662  Supply Chain Knowledge Management  6
   - LOG A663  International Supply Chain Management and Marketing Strategies  6
   - LOG A664  Supply Chain Management Leadership  6
   - LOG A665  Supply Chain Measurement*  6
   *A final research project is required as part of the degree requirements.

2. A total of 30 credits is required for the degree.

FACULTY
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Philip Price, Professor, philip@uaa.alaska.edu
Darren Prokop, Professor/Chair, AFDP1@cbpp.uaa.alaska.edu

Graduate Certificate, Supply Chain Management

University of Alaska Anchorage College of Business and Public Policy is partnering with Boise State University to offer the Graduate Certificate in Supply Chain Management. The certificate requires three core courses, Logistics, Supply Chain Management, and Supply Chain Measurement; one specialty course, Radio Frequency Identification, Travel and Transportation, or Lean Operations; and a capstone course for a total of 15 credit hours.

Classes are delivered online by expert faculty from one of the partnering institutions. All discussion, assignments, and tests will be handled online. Each university will be allotted seats in each course for a maximum enrollment of 30 students per course. Students will move through the program as a cohort.

The certificate will be offered by each institution at the same cost. Courses from any of the partnering institutions serve as resident credit at UAA. Please contact the College of Business & Public Policy at (907) 786-4101 for tuition and pre-application information.

Program Outcomes
A student who successfully completes the Supply Chain Management Graduate Certificate program will apply systems thinking and design principles to effectively and efficiently manage global supply chains, demonstrating:

1. An understanding of pressing organizational challenges and environmental constraints.
2. The integration and management of processes across the supply chain.
3. Leadership and management of the principles of supply chain components.
4. Ability to conduct a cogent analysis of the current state of a supply chain system.
5. An understanding of future trends.
6. Implementation of supply chain management principles.
7. Verbal and written communication skills required in supply chain management.
8. Mastery of team skills required to manage effective supply chains.

**Admission Requirements**

Students with a baccalaureate degree who have professional experience in the field of supply chain management and meet all university admission requirements may be admitted to the graduate certificate program.

Students must provide transcripts from all institutions attended, a statement of job interest, a statement of job experience and TOEFL scores (at least 550) for those applicants whose native language is not English.

See the beginning of this chapter for Admission Requirements for Graduate Certificates.

**Academic Progress**

A minimum GPA of 3.00 is required in order to successfully complete the certificate. A grade of C is minimally acceptable and must be offset with at least a grade of A in one of the other courses. After the third course grade of C the student will be required to withdraw from the program.

The cohort format is designed to allow students to develop a working relationship with one another, undertake group activities and research and share professional experiences with one another. The Supply Chain Management Graduate Certificate is the responsibility of the Logistics Department, which acts as its policy-making body and as an appeals board. Students are expected to be familiar with and adhere to the certificate requirements and procedures as well as to the general UAA admissions and graduate certificate requirements provided in this chapter.

Full program information, including application forms and procedures, may be obtained by contacting:

Student Information Office  
College of Business & Public Policy  
University of Alaska Anchorage  
3211 Providence Drive  
Anchorage, AK 99508  
U.S.A.  
Telephone: (907) 786-4101  
Facsimile: (907) 786-4119

**Program Requirements**

1. Complete the following requirements (15 credits). Meet with an advisor to develop a program plan.

   **Core Courses (9 credit hours)**
   - LOG A601: Supply Chain Management Systems (3)
   - LOG A602: Logistics (3)
   - LOG A603: Measurement in Supply Chains (3)

   **Specialty (6 credit hours)**
   Choose from:
   - LOG A604: Radio Frequency Identification (3)
   - LOG A605: Transportation Systems Management (3)
   - LOG A606: Lean Operations (3)
   - LOG A607: Radio Frequency Capstone (3)
   - LOG A608: Travel/Transportation Capstone (3)
   - LOG A609: Supply Chain Quality Capstone (3)

2. A total of 15 credits is required for the certificate.

**FACULTY**

UAA Faculty  
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**Participating Faculty from Partner Institutions**

Tom Foster, Professor, foster@boisestate.edu  
Lyman Gallup, Associate Professor, lgallup@boisestate.edu  
Patrick Shannon, Professor, pshannon@boisestate.edu

**PUBLIC ADMINISTRATION**

**Edward & Cathryn Rasmuson Hall (RH), Room 203, (907) 786-4101  
www.mpa.alaska.edu**

The Master of Public Administration (MPA) degree provides students with knowledge and skills needed for professional careers in public service. MPA students learn new analytical techniques and add to their expertise in organizational and program management, policy analysis, and related areas. Emphasis is on public policy, management, and administrative issues. Students specialize in one of the following emphasis areas: Public Management, Policy Analysis, Health Administration, or Criminal Justice.

The Public Management emphasis is designed for those working for, or planning to work for, executive agencies of local, state, and federal government; for private, nonprofit organizations; and in government relations units of private corporations. It provides basic tools of public management, understanding of the structure and processes of public organizations, and the history and context of the field of public administration.

The Policy Analysis emphasis is intended to provide the professional staffs of executive and legislative departments of local, state, and federal governments with the capability to analyze the effects of a broad range of actual or hypothetical government policies. It emphasizes the application of economic analysis and other quantitative and qualitative methods to Alaska and national policy issues.

The Health Administration emphasis prepares students to function as health administrators in state, local, or federal agencies; nonprofit organizations; and private companies that do health-related work. 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 will provide graduates with the theoretical basis for management careers in the field of criminal justice. Students will develop knowledge and skills necessary for effective public management: planning and decision making, managing people, money and programs. These skills will be applicable in a wide spectrum of employment areas in law enforcement and the criminal justice system, and will also prepare graduates seeking to earn a terminal degree in justice administration.

Students who have received the MPA degree may earn a Master of Business Administration (MBA) degree by completing a minimum of 21 resident credits not used for any other previous degree. Specific course requirements are at the discretion of the MBA director and will be reflected in the student’s MBA Program Plan prior to beginning coursework toward this second degree.

**Master of Public Administration**

**Admission Requirements**

Students enter the MPA program with a bachelor’s degree from a variety of educational backgrounds. Accordingly, the program is designed to meet the needs of students with a wide mix of professional backgrounds and interests.

Students interested in the Master of Public Administration program may accumulate up to 9 credits in the program as a non-degree-seeking student before applying for admission to the program. To apply for admission, applicants must meet both the University of Alaska Anchorage Admission Requirements for Master’s Degrees and the Department of Public Administration requirements outlined below.
1. Students applying for admission to the MPA program must submit a 300-500 word statement on their career goals and how the MPA degree relates to them.

2. Applicants must submit a professional resume or vita.

3. In addition, applicants must meet one of the following criteria:
   a. 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 master’s degree from a regionally accredited institution in the United States or a foreign equivalent, provided they have an undergraduate GPA of 3.00.
   b. 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)
   c. Complete two PADM core courses with a grade of B or better and complete all PADM core course prerequisites (BA A273, ECON A201 and A202 or ECON A602, and PS A101) or their equivalents.

Detailed admission standards available on our website: www.mpa.alaska.edu.

Academic Progress
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, commencing 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 the student being dropped from the program.

Graduation Requirements
See University Requirements for Master’s Degrees at the beginning of this chapter.

Program Requirements
1. Complete the MPA core courses:
   - ECON A625 Economics and Public Policy 3
   - PADM A601 Introduction to Public Administration 3
   - PADM A602 Seminar in Public Management 3
   - PADM A604 Research Methods in Administration 3
   - PADM A606 The Policymaking Process 3
   - PADM A628 Administration of Financial Resources 3

2. Complete one of the following emphasis areas:
   - **Public Management Emphasis (15 credits)**
     - PADM A603 Management Analysis 3
     - PADM A610 Organizational Theory and Behavior 3
     - PADM A624 Human Resources Administration 3
     - Plus two 600-level electives 6
   - **Policy Analysis Emphasis (15 credits)**
     - Under Revision
     - PADM A632 Policy Analysis 3
     - PADM A688 Program Evaluation and Measurement 3
     - Plus three 600-level electives 9
   - **Health Administration Emphasis (15 credits)**
     - PADM A624 Human Resources Administration 3
     - Choose three courses from the following: 9
       - NS/HS A626 Principles of Epidemiology (3)
       - NS A658 Public Health Policy (3)
       - NS A681 Analysis of Health Services (3)
       - NS A682 Administrative Services (3)
     - Plus one 600-level elective 3
   - **Criminal Justice Emphasis (15 credits)**
     - JUST A625 Seminar in Criminal Violation 3
     - JUST A630 Justice Administration Theory and Practice 3
     - JUST A670 Administrative Law 3

Choose one of the following:
- JUST A640 Corrections Theory and Research (3)
- JUST A650 Policing Theory and Research (3)
- Plus one 600-level elective 3

3. Candidates for the MPA who do not have public administration work experience must complete one additional course (3 credits):
   - PADM A620 Internship in Public Administration/Policy (1-3)

4. Take the core comprehensive examination after completing the core courses. This examination must be passed before the student may enroll in the capstone course.

5. Complete the capstone project course (3 credits):
   - PADM A659 Public Administrative Capstone

6. A total of 36-39 credits is required for the degree.

FACULTY
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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 College of Education for a copy of the completed report.

The College of Education comprises a community of educators dedicated to improving the quality of education. The mission of the College of Education is to prepare educators and support the lifelong learning of professionals to embrace diversity and to be intellectually and ethnically strong, resilient, and passionate in their work with Alaska's learners, families, educators, and communities. Our 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. We are confident that this preparation will result in educators’ significant contributions to society.

The College 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 peoples’ 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.

We believe that learning must be designed, delivered, and evaluated within the contexts of these core values and program outcomes.

The College 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 College of Education is accredited by the National Council for Accreditation of Teacher Education (NCATE). Our professional preparation programs are approved by the Alaska Department of Education and Early Development and are based on NCATE 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 dean of the College of Education is authorized to recommend candidates for the appropriate certificate or endorsement.

In each of the college’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 college offers high-quality, distance delivered coursework in order to improve access for rural students and provide flexible scheduling for practicing educators. Additionally, the college partners with UAA community campuses in optimizing the use of technology for distance delivery through intercampus collaboration.

All students who desire a degree, certification or endorsement must apply for admission to the University of Alaska Anchorage and to the College of Education. 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 College of Education’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 College 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 College of Education website.

Applicants admitted to a graduate program work with an advisor from the major and related areas. The 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 College 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) 786-4481
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) 786-6317
3. The Department of Educational Leadership with programs in educational leadership (principal, superintendent, and teacher leadership preparation). (907) 786-4450

Professional and Continuing Education (PACE)
http://coe.uaa.alaska.edu/pace

Quality professional learning enriches the knowledge and skills of educators and improves the educational experiences of all students. Therefore, the Office of Professional and Continuing Education (PACE) 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.

Master of Arts in Teaching
http://coe.uaa.alaska.edu/secondary

The Master of Arts in Teaching (MAT) degree is 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 program integrates coursework and field experiences to meet Alaska and national teacher education standards. Graduates of the MAT program are prepared to become educators who are:

- Excited about teaching and learning in K-12 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.
Student Outcomes
Student outcomes for the program are based on the Alaska Beginning Teacher Standards located at www.coe.uaa.alaska.edu/dtl/resources.cfm.

Admission Requirements
See the beginning of this chapter for Admission Requirements for Master’s Degrees. The application deadline for the MAT is October 1 for applicants seeking spring admission and February 20 for applicants seeking summer admission. Students must apply for admission to both the University of Alaska Anchorage and the College of Education. Students are admitted and proceed through the program as a cohort. An application packet is on the website.

Applicants for the MAT degree must meet subject area requirements for a teaching endorsement.

Approved secondary (7-12) teaching endorsement areas for the MAT are:
- Business Education
- English as a Second Language
- English/Language Arts
- Family and Consumer Science
- General Science
- Mathematics
- Social Studies
- Technology Education
- World Languages (this endorsement is for a specific language)

Approved K-12 teaching endorsement areas for the MAT are:
- Music
- Physical Education

Note: Teaching endorsements must be completed in accordance with the approved standards-based Initial Endorsement Content Preparation Review on file in the College of Education.

Undergraduates interested in applying to the MAT should see a College of Education faculty advisor early in their program to ensure that subject matter courses taken to fulfill undergraduate degree requirements meet the content preparation standards required by the college’s accrediting association. Additional subject matter coursework may be required before an applicant can be accepted to the MAT. Therefore, individuals with baccalaureate degrees who are considering a career change to become a teacher should see a faculty advisor at least one year before applying to the program.

Applicants are expected to have basic technology skills such as general computer use, email, word processing, Internet research, etc.

Applicants must also provide documentation to the College of Education of qualifications in the following three areas:
1. Academic preparation and demonstrated content knowledge competency in the endorsement area sought.
2. Successful experience with adolescents.
3. Dispositions for teaching, including collaborative skills, fairness, the belief that all students can learn, and the ability to work with adolescents and families from diverse backgrounds.

Admission to the program is competitive and based on a two-part review of the applicant’s credentials. The first committee review is preliminary and based on the documentation submitted by the applicant. If the applicant is recommended as a strong potential candidate for admission, then an admissions interview is scheduled. Applicants’ knowledge, skills and dispositions as documented in the MAT application packet and demonstrated in the admissions interview will be holistically evaluated with two exceptions:
- Passing scores on the Praxis I examination. Scores are determined by the Alaska State Board of Education and Early Development.
- Demonstrated writing ability. Because the MAT is a graduate program, and because teachers are required to communicate effectively with a wide audience, applicants must demonstrate that they are able to meet high expectations for written work.

If the candidate is recommended for admission based on the preliminary review and admissions interview, a physical examination and a background check must be passed prior to admission to the internships.

Stage I: Preliminary Review
Applicants must complete the MAT application packet available from the College of Education. It must include the following:
1. Verification of a baccalaureate with an expected minimum of a 2.75 GPA in the last 30 credits of the baccalaureate degree or subsequent graduate-level coursework. Undergraduates may apply during senior year with anticipated graduation in May.
2. Passing scores on the Praxis I, a test of basic skills in reading, writing, and mathematics. This test is also required by the state of Alaska; the Alaska State Board of Education and Early Development determines passing scores. Contact the College of Education for the passing scores.
3. Scores from the relevant content knowledge Praxis II test. Competitive scores will be at the national median or higher.
4. Demonstrated evidence of content area preparation in the teaching area for which the applicant is seeking endorsement, including the standards-based Initial Endorsement Content Preparation Review that has been signed by an appropriate College of Education faculty advisor.
5. An essay addressing questions based on the MAT program purpose and outcomes, as described in the application packet.
7. Two letters of recommendation that speak directly to the applicant’s qualifications to be admitted to the MAT degree and her/his choice of teaching as a career. At least one of the letters should address the academic expertise in the endorsement area.

Stage II: Admissions Interview
8. After the preliminary review of the required application materials is completed, all applicants who are recommended as potential candidates will be interviewed by an admissions committee. Admission to the MAT degree program is competitive, and final decisions will be based upon consideration of all data. Admission to the MAT program does not guarantee an internship placement (see note under Professional Field Experiences).

Additional Requirements
Applicants accepted for admission must provide the following documents.
9. A completed State of Alaska Student Teacher Certification Authorization application form. The state of Alaska requires fingerprinting and a background check prior to internships in the public schools. The College 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 College of Education background check requirements will result in removal from the program. More information is located at http://coe.uaa.alaska.edu/background.cfm.
10. Documentation of a current physical examination.

Academic Progress
Students enrolled in the MAT must maintain a minimum GPA of 3.00, with no individual course grade lower than a C, or B where specified. EDFN A444 Positive Learning Communities in K-6 Classrooms; EDFN A478 Issues in Alaska Native Education, K-12; EDFN A649 Capstone Seminar: Inquiry in Teaching and Learning; and EDSE A482
Inclusive Classrooms for All Children require a minimum grade of B. Courses with grades less than a C, including those used to demonstrate content knowledge on the Initial Endorsement Content Preparation Review, may not be applied to meet certification or endorsement requirements. Satisfactory progress on all standards must be demonstrated in the internship courses to remain in the program.

**Graduation Requirements**

See the beginning of this chapter for University Requirements for Master’s Degrees.

Teaching Endorsement and Grade Level Options

There are two grade level options in the MAT:

A. Secondary Education (7-12)
   - **EDSY A677** Teaching World Language in Secondary Schools (3)
   - **EDSY A668** Teaching English as a Second Language in Secondary Schools (3)
   - **EDSY A669** Teaching Science in Secondary Schools (3)
   - **CTE A643** Teaching in Career and Technical Education (3)
   - **EDSY A667** Teaching World Language in Secondary Schools (3)
   - **EDSY A668** Teaching English as a Second Language in Secondary Schools (3)
   - **EDSY A669** Teaching Science in Secondary Schools (3)
   - **CTE A643** Teaching in Career and Technical Education (3)

B. K-12
   - **EDSY A666** Teaching World Language in Secondary Schools (3)
   - **EDSY A668** Teaching English as a Second Language in Secondary Schools (3)
   - **EDSY A669** Teaching Science in Secondary Schools (3)
   - **CTE A643** Teaching in Career and Technical Education (3)

4. Required Field Experiences (9 credits)
   - **EDSF A695** Internship (1-9) 9*
     (Career and Technical Education candidates may take CTE A695)

   *Special Note: Completion of 9 credits required for degree and certification.

5. Total credits for degree: 32-35
6. Candidates must successfully complete a comprehensive portfolio demonstrating that they have met all of the applicable standards.

**Program Requirements**

**A. Secondary Education 7-12**

- A teaching endorsement in Business Education, English as a Second Language, English/Language Arts, Family and Consumer Science, General Science, Mathematics, Social Studies, Technology Education or World Languages

1. **Required Foundations Courses (6-9 credits)**
   - **EDSF A478** Issues in Alaska Native Education, K-12 3
   - **EDSF A601** Foundations: Philosophy of Education 2
   - **EDSF A602** Foundations: Educational Psychology 2
   - **EDSF A603** Foundations: Educational History and Sociology 2
   (Career and technical education candidates may take CTE A611 Historical and Philosophical Foundations of Career and Technical Education, instead of EDSF A601 and EDSF A603)

   Notes: Minimum grade of B required in EDSF A478. With departmental approval, the above courses may be taken before formal admission to the MAT program. If EDSF A478 is taken as part of an undergraduate program, it may be waived for the MAT.

2. **Required Core Courses (11 credits)**
   - **EDSF A647** Developing Literacies Across the K-12 Continuum 1
   - **EDSF A649** Capstone Seminar: Inquiry in Teaching and Learning 2
   - **EDSF A637** Inclusive Teaching and Learning in Secondary Schools 2
   - **EDSF A630** Language, Culture, and Teaching in Secondary Schools 2
   - **EDSF A644** Developing a Community of Learners in Middle/High School 3
   - **EDSF A648** Developing Literacies in the Secondary Content Areas 1

   Note: Minimum grade of B required in EDSF A649.

3. **Required Methods Classes (6 credits)**
   - **EDSF A661** General Methods for Secondary Classrooms 3
   - **EDSF A663** Teaching English/Language Arts in Secondary Schools (3)
   - **EDSF A664** Teaching Social Studies in Secondary Schools (3)
   - **EDSF A665** Teaching Mathematics in Secondary Schools (3)

   Choose appropriate two-course sequence:

4. **Required Field Experiences (9 credits)**
   - **EDSF A695** Internship (1-9) 9*

   *Special Note: Completion of 9 credits required for degree and certification.

5. Total credits for degree: 32-35
6. Candidates must successfully complete a comprehensive portfolio demonstrating that they have met all of the applicable standards.
Program Options

A. Fast Track Option
The Fast Track Option is an intensive three-semester program that allows candidates to complete the MAT as full-time students in 12 to 18 months. Candidates admitted in the fall take classes “spring-fall-spring,” candidates admitted in the spring take classes “summer-fall-spring.” The yearlong internship is during the fall and spring semesters.

B. Two-Year Option
The Two-Year Option allows candidates to complete the MAT as part-time students over a period of 24 to 30 months. Depending on admission, candidates take the 9 credits of foundations courses either during the spring or summer semester. Beginning in the fall semester when candidates are enrolled in the core courses and/or methods courses, their schedule includes a required field experience component (internship).

C. Alternate Route to Certification Option
The Alternate Route Option is for candidates who have secured a teaching position with an Alaska school district. Generally this option is available only to those candidates in areas of teacher shortage. Candidates will complete the MAT in 24 to 30 months. Please contact the College of Education for further information about this option.

Professional Field Experiences
The Master of Arts in Teaching 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. Internships follow the K-12 school year calendar and not the university academic year calendar.

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 Guidelines for Preparing Culturally Responsive Teachers for Alaska’s Schools, and the International Society for Technology in Education’s National Education Technology Standards and Performance Indicators for All Teachers.

It is expected that interns will demonstrate appropriate professional dispositions with respect to their actions, attitudes, and performance. Teacher candidates are required to adhere to the characteristics of professionalism as published in the MAT Program Handbook, and to abide by the State of Alaska Code of Ethics of the Education Profession. Unacceptable academic performance, unprofessional attitude, unsatisfactory field reports, violation of professional ethics, or other factors may result in removal from the field experience and denial of the institutional recommendation for teacher certification.

Internship placements are made 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. Thus, while the university will make every effort to identify appropriate field experiences, admission to the Master of Arts in Teaching program does not guarantee an internship placement.

Institutional Recommendation
To obtain an institutional recommendation for teacher certification, candidates must have:

1. Completed all program courses with a minimum grade of C, or B where specified;
2. Maintained a cumulative 3.00 GPA in the MAT;
3. Achieved passing scores on the Praxis I and II examinations;
4. Satisfactorily completed internships; and
5. 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 Department of Education and Early Development (EED) in Juneau. Graduates must meet all requirements specified by EED at the time of application for certificate.

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:

A. Counselor Education
   - School Counseling (K-8, 7-12, or both)
   - Community Agency Counseling

B. Early Childhood Special Education
C. Educational Leadership
   - Principal (K-8, 7-12, or both)
   - Teacher Leadership - admission suspended

D. Master Teacher with Specialty Options - admission suspended

E. Special Education
   - Special Education
   - Special Education Administration - admission suspended

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 department chair and the dean.

Field Placements
Most College of Education graduate programs require field experiences in school or agency settings.

Criminal History Background Clearance
The College of Education requires compliance with specific background clearance policies and procedures for candidates participating in university-sponsored fieldwork.

There are two types of background clearances required. In general, Alaska Public Safety Information Network (APSIN), also known as Interested Person Report (IRP), clearance is required for lecture courses that include a fieldwork component as part of the course. Courses that are primarily field-based, such as practica or internships, require fingerprinting and a national ( FBI) criminal history background check. Various agencies and centers may have additional requirements. In some cases, criminal history background clearance is required for admission to a department or program.

Failure to comply with the College 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 located at http://coe.uaa.alaska.edu/background.cfm.
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 College 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.

Admission Procedures
Individuals applying to the MEd must complete both UAA's graduate application (www.uaa.alaska.edu/admissions/) and the application for the specific program in the College of Education. When all official transcripts and other required materials are received by the Office of Admissions, a copy of the applicant's file is forwarded to the College of Education and combined with the College of Education admission materials for consideration by the appropriate department. 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.

Admission Deadlines
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.

Admission Requirements
1. Satisfy Admission Requirements for Master’s Degrees at the beginning of this chapter.
2. Hold a baccalaureate degree from a regionally accredited institution or equivalent from another country.
3. Have a GPA of 3.00 (on a 4.00 point scale) in the last 30 credits.
4. 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.

Competitive Qualifications
Applicants who meet the above criteria are considered for program admission on a competitive basis.

Continuous Registration
Graduate students must demonstrate continuous progress toward program completion. College 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 policy at the beginning of this chapter) may be removed from master’s degree-seeking status.

Graduate Studies Plan
An official Graduate Studies Plan must be approved before completion of more than 12 credits of coursework.

Graduation Requirements
Candidates completing the Master of Education degree must complete the following requirements:
1. Satisfy University Requirements for Master’s Degrees and master’s level graduation requirements at the beginning of this chapter.
2. Complete a minimum of 30 credits of approved coursework. Specific programs may require more than 30 credits. See appropriate program for credit requirements.
3. Satisfy the requirement of a comprehensive examination, comprehensive portfolio, or other scholarly work as specified by the program.

Cautionary note: Graduate courses completed prior to being admitted as a graduate student will not necessarily be applicable toward a specific graduate degree program. Since recency of credits is of concern to the candidate’s committee when developing the graduate program, coursework must be completed within a consecutive seven-year period prior to graduation in order to fulfill the requirements of the degree.

Institutional Recommendation
Following are the requirements for an institutional recommendation for those programs leading to a recommendation for certification or endorsement:
1. All program courses must be completed with a grade of C or higher.
2. Cumulative GPA of 3.00 in the program coursework.
3. For endorsements, all requirements for a current Teacher Certificate must be successfully met.
4. 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.
5. For the Principal Type B Certificate, the MEd must be conferred.
6. 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.
7. 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.
8. Demonstration of basic computer/technology competence. See specific programs for additional information.

Note: Certification is awarded by the state of Alaska through the 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.

Program Requirements (MEd)
Complete one of the following courses of study:

A. Counselor Education
http://coe.uaa.alaska.edu/coun

The MEd in Counselor Education is designed for individuals who desire initial professional preparation as counselors in public schools or community agencies. The program encompasses theory, research, and practice relating to the delivery of counseling services to children, adolescents or adults who require assistance with developmental, academic, personal, social, or career issues.
Student Outcomes
1. Communicate essential knowledge and understandings of the profession of counseling including an ability to integrate knowledge into personally meaningful frameworks.
2. Apply practical knowledge that is developmentally appropriate to individuals and groups.
3. Utilize assessment, research, and technology to support and improve counseling practices.
4. Show characteristics relating to effective counseling practice.
5. Create positive therapeutic environments for all clients.
6. Engage in work that meets ethical standards and legal mandates in the field of counseling.

Admission Requirements
1. See Admission Requirements for Master’s Degrees at the beginning of this chapter and Admission Requirements for Master of Education degrees at the beginning of this section.
2. Submit Graduate Record Examination (GRE) General Test scores (minimum 800 combined verbal and quantitative and 4.0 analytical writing) or Miller Analogies Test (MAT) score (minimum of 40th percentile).
3. Complete the Counselor Education Application (application packet can be found on the program web site).
4. Submit three letters (or reference forms) of professional recommendation (see application packet for forms).
5. Provide a goal statement of approximately 500 words that contains an autobiography, career goals, and how the MEd program relates to those goals.
6. Participate in an interview (if requested).
7. Provide a writing sample (if requested).

Background Check Requirements
See Field Placements located at the beginning of the College of Education section of this chapter.

Program Requirements
1. Research Core (6 credits):
   - EDRS A660 Fundamentals of Research in Education* 2
   - EDRS A664 Developing and Writing Literature Reviews* 2
   - EDRS A667 Program Evaluation 2
   *Must be taken within the first 12 credits of program coursework.
2. Counselor Education Core (30 credits):
   - EDCN A610 Professional and Ethical Orientation to Counseling 3
   - EDCN A613 Human Development for Helping Professionals 3
   - EDCN A614 Counseling Diverse Populations 3
   - EDCN A616 Counseling Theories 3
   - EDCN A620 Assessment in Counseling 3
   - EDCN A623 Counseling Skills and Techniques 3
   - EDCN A624 Group Counseling 3
   - EDCN A632 Lifespan Career Development 3
   - EDCN A634 Counseling Practicum 3
3. Choose one of two options:
   a. School Counseling
   b. Community Agency Counseling.

   The School Counseling option addresses the State of Alaska Department of Education and Early Development (EED) requirements for a Type C Special Services Certificate with an endorsement in School Counseling. Both options address the academic requirements for the credential of National Certified Counselor (NCC). Additional requirements apply. See the National Board for Certified Counselor for more information: www.nbcc.org. Both options also address partial academic requirements for the credential of Licensed Professional Counselor (LPC). Candidates must have a total of 60 credits approved by the LPC Board. Additional requirements apply. See the Alaska Board of Professional Counselors website for more information: www.commerce.state.ak.us/occ/ppco.htm. Also see the Graduate Certificate in Counselor Education.

   a. School Counseling (12 credits)
   The School Counseling option is designed for individuals who want to work as counselors in public school settings.
   - EDCN A625 Administration and Practices in School Counseling 3
   - EDCN A633 Counseling Children and Adolescents 3
   - EDCN A695E* Counseling Internship: Elementary School (3-6) 3
   - EDCN A695S* Counseling Internship: Secondary School (3-6) 3
   Electives** by Advisement 3

   *EDCN A695E Counseling Internship: Elementary School and EDCN A695S Counseling Internship: Secondary School cannot be used to fulfill elective course requirements for the degree.

   Alaska certification note: The School Counseling option may lead to an institutional recommendation for a Type C Special Services Certificate with an endorsement in School Counseling. Candidates will be considered for endorsement at the elementary (K-8) or secondary (7-12) level upon completion of an internship at the appropriate level. Thus, candidates seeking institutional recommendation for grades K-12 must successfully complete internships at both elementary and secondary levels. Candidates will need additional coursework not required for the degree. EED requires approved coursework in multicultural education/cross-cultural communication and Alaska studies. The multicultural education/cross-cultural communication requirement is met through completion of EDCN A614 Counseling Diverse Populations if taken after May 2008. For a list of all approved courses, see the EED website: www.eed.state.ak.us.

   b. Community Agency Counseling (12 credits)
   The Community Agency Counseling option is designed for individuals who want to work as counselors in community agency settings.
   - EDCN A627 Counseling in Community Agencies 3
   - EDCN A690 Current Topics in Counseling (1-3) 3
   - EDCN A695C* Counseling Internship: Community Agency (3-6) 3
   Electives** by Advisement 3

   *EDCN A695C Counseling Internship: Community Agency cannot be used to fulfill elective course requirements for the degree.

   **Students seeking a concentration in career education counseling should choose CTE A611 Historical and Philosophical Foundations of Career and Technical Education.

3. See College of Education Graduation Requirements at the beginning of this section.
4. A portfolio is required.
5. A total of 48 credits is required for the degree.

B. Early Childhood Special Education
http://coe.uaa.alaska.edu/ecs

The MEd in Early Childhood Special Education is designed for individuals who desire initial professional preparation in early intervention and early childhood special education. The program encompasses theory, research, and practice relating to children birth to 5 years of age who experience developmental delays and disabilities. In addition to the degree, this program may also lead 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).

**Student 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/Content/NavigationMenu/ProfessionalDevelopment/ProfessionalStandards/EthicsPracticeStandards/SpecialEdTeachers/default.htm

Students who complete this program will be able to:

1. Apply legal and ethical policies that affect young children with developmental delays and disabilities, families, and programs for young children.
2. Use intervention strategies with young children having developmental delays and disabilities and their families that affirm and respect family, cultural, and linguistic diversity.
3. Develop and apply instructional practices based on knowledge of the child, family, community, and the curriculum.
4. Design, implement, and evaluate environments to assure developmental and functional appropriateness.
5. Assess the development and learning of young children with developmental delays and disabilities and use that information to direct intervention.
6. Critically analyze and apply principles of research in the area of early childhood special education.

**Admission Requirements**

1. Satisfy Admission Requirements for Master’s Degrees at the beginning of this chapter and Admission Requirements for Master of Education degrees at the beginning of this section.
2. Provide transcripts documenting a GPA of 3.00 in most recent 30 credits.
3. Submit a resume documenting educational experience and at least one year of appropriate professional experience. See department for more information.
4. Submit a goal statement on career goals and how they relate to the MEd program.
5. Submit three letters of recommendation or rating forms from professional references.
6. Participate in an interview if requested by the department.

**Background Check Requirements**

See Field Placements located at the beginning of the College of Education section of this chapter.

**Program Requirements**

This program includes courses delivered by distance. Admitted students must have the technological knowledge and skills to engage in distance learning.

1. Complete required courses (36 credits):
   - EDRS A660 Fundamentals of Research in Education 2
   - Research courses by advisement 4
   - EDSE A474 Special Children from Birth through Five 3
   - EDSE A610Y Assessment: Early Childhood Special Education 3
   - EDSE A620Y Advanced Internship: Early Childhood (3-6) 6
   - EDSE A622Y Strategies: Early Childhood Special Education 3
   - EDSE A633 Autism: Communication and Social Disorders 3
   - EDSE A674 Families: Developing Parent Professional Partnerships 3
   - EDSE A681 Issues in Early Childhood Special Education 3
   - Electives by advisement 6

2. Complete a portfolio documenting attainment of CEC standards.
3. Take the Praxis II Special Education: Preschool/Early Childhood examination.
4. Satisfy College of Education Graduation Requirements at the beginning of this section.
5. Complete a total of 36 credits for the degree.

Alaska certification note: Prior to receiving an institutional recommendation for initial teacher certification, candidates must: a. pass the Praxis 1 or other EED-approved test at the level established by EED, b. successfully complete 3 credits of multicultural education/cross-cultural communication and 3 credits of Alaska studies from the state’s approved list; and c. provide documentation of appropriate field experience in a public school setting (see advisor for details). Also, prior to advancing to the professional certificate, EED requires passing scores on the Praxis I examination for elementary teachers. EED may have additional requirements for certification/endorsement. See the EED website for more information: www.eed.state.ak.us.

**C. Educational Leadership**

http://coe.uaa.alaska.edu/edleadership

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:

a. Principal (with Type B certificate)
   - Satisfy Admission Requirements for Master’s Degrees at the beginning of this chapter and Admission Requirements for Master of Education degrees at the beginning of this section.
   - Have at least one year of experience as a certificated elementary teacher, secondary teacher, or special services provider (Type C).
   - Hold a current teacher certificate or provide evidence of eligibility for an Alaska Teacher Certificate.

**Student Outcomes**

Student 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:

1. Facilitate the development, implementation, and monitoring of a 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.

a. **Principal (with Type B Administrator Certificate)**
   - Students completing this program are eligible for an institutional recommendation for an administrator certificate to serve as school principals.
Background Check Requirements
See Field Placements located at the beginning of the College of Education section of this chapter.

Program Requirements
This program includes courses delivered by distance. Admitted students must have the technological knowledge and skills to engage in distance learning.

1. Foundation Core (12 credits):
   - EDFN A636 Innovations in Teaching and Learning 3
   - EDRS A660 Fundamentals of Research in Education 2
   - Research courses by advisement 4
   - 600-level electives by advisement 3

2. Principal Core (24 credits):
   - EDL A637 Educational Leadership and Organizational Behavior 3
   - EDL A638 Instructional and Curricular Leadership 3
   - EDL A639 The Politics of Education 3
   - EDL A640 Law and Ethics in Education 3
   - EDL A641 Principal Internship (3-6) 6
   - EDL A642 Principal's Seminar I 3
   - EDL A643 Principal's Seminar II 3

3. Comprehensive portfolio required.

4. A total of 36 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).
   - Alaska certification note: EED requires 3 credits of multicultural education/cross-cultural communication and 3 credits of Alaska studies for state licensure. See the Alaska Department of Education and Early Development website for more information: www.ed.state.ak.us.

b. Teacher Leadership
   - Admission to the Teacher Leadership Option is suspended.

D. Master Teacher with Specialty Options
http://coe.uaa.alaska.edu

Admission to the MEd in Master Teacher Specialty Options is suspended. The Department of Teaching and Learning is revising the curriculum and plans to reopen this program for admission in 2011.

E. Special Education
http://coe.uaa.alaska.edu/sped

Speech-Language Affiliated Program
UAA is affiliated with two graduate schools outside Alaska to provide a master’s degree in speech-language pathology. The graduate schools offer academic coursework by distance education while UAA sponsors internships and leveling courses. Contact the project director at slp@uaa.alaska.edu for further information.

The MEd in Special Education has two options:
- Special Education Concentration
- Special Education Administration Concentration - admission suspended.

a. Special Education Concentration
The MEd in Special Education with the 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.

Student 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.

- Students who complete this program will be able to:
  1. Utilize a variety of assessments to identify specific areas of student strengths and weaknesses and use the results to guide instruction.
  2. Individualize instruction to meet the specific needs of students with disabilities in inclusive settings.
  3. Support and promote inclusiveness and equity for students with diverse cultural and ethnic backgrounds.
  4. Apply the legal and ethical principles associated with special education.
  5. Promote a positive social environment for all students, particularly those with significant emotional and/or behavioral disorders.
  6. Develop and maintain an atmosphere of collaboration with teachers, parents, administrators, and paraprofessionals.
  7. Critically analyze and apply principles of research.
  8. Demonstrate literacy regarding theoretical perspectives associated with human development and learning.

Admission Requirements

1. Satisfy Admission Requirements for Master’s Degrees at the beginning of this chapter and Admission Requirements for Master of Education degrees at the beginning of this section.
2. Provide transcripts documenting a minimum GPA of 3.00 in the most recent 30 credits.
3. Provide evidence of a current teaching certificate or proof of eligibility for obtaining a teaching certificate.
4. Submit a resume documenting educational experience with at least one year of appropriate professional experience.
5. Submit a goal statement on career goals and how they relate to the MEd program.
6. Submit three letters of recommendation or rating forms from professional references.
7. Participate in an interview if requested by the department.

Background Check Requirements
See Field Placements located at the beginning of the College of Education section of this chapter.

Program Requirements
This program includes courses delivered by distance education. Students must have the technological knowledge and skills to engage in distance learning.

1. Complete required courses (36 credits):
   - EDRS A660 Fundamentals of Research in Education 2
   - Research courses by advisement 4
   - EDSE A622 Theories and Strategies 3
   - EDSE A633 Autism: Communication and Social Disorders 3
   - Electives by advisement 21

2. Complete portfolio documenting attainment of CEC standards.
3. Satisfy College of Education Graduation Requirements at the beginning of this section.
4. Complete a total of 36 credits for the degree.

Alaska certification note: Students who already hold a teaching certificate may receive an institutional recommendation for a special education endorsement at the developmental level listed on the existing certificate. (See section on Graduate Certificate in Special Education. The certificate courses may be used to fulfill elective requirements for the MEd.) The Alaska Department of Education and Early Development (EED) requires 3 credits of multicultural education/cross-cultural communication and 3 credits of Alaska studies for the professional certificate. See the EED website for more information: www.eed.state.ak.us.

b. Special Education Administration Concentration
Admission to the Special Education Administration Concentration is suspended

Graduate Certificates
The College of Education offers six graduate certificate programs:

1. Graduate Certificate in Counselor Education
2. Graduate Certificate in Educational Leadership: Principal
3. Graduate Certificate in Educational Leadership: Superintendent
4. Graduate Certificate in e-Learning - admission suspended
5. Graduate Certificate in Language Education: English for Speakers of Other Languages (ESOL) 7-12 Concentration
6. Graduate Certificate in Special Education.

Each program is designed to provide the student with initial or advanced preparation in professional education. With the exceptions of Counselor Education and e-Learning, 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 Master of Education section for description of requirements for admission and performance in internships.

Field Placements
See Master of Education section for description of factors affecting field placements with cooperating school districts.

Admission Deadlines
Individuals applying to the graduate certificate programs must complete UAA's graduate application and the College of Education application. Applicant files are reviewed throughout the year. However, applications for admission need to be submitted by specific dates (June 15, November 1, and May 1) to qualify for financial aid.

Continuous Progress
College 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.

A. Graduate Certificate, Counselor Education

http://coe.uaa.alaska.edu/gounggradcert

The Graduate Certificate in Counselor Education provides graduates of counseling programs with continuing professional preparation as counselors in public schools and community agencies. The graduate certificate program builds on the knowledge and skills acquired through previous master’s level study in counselor education and related fields.

This graduate certificate provides structured support to those seeking continuing education for maintaining current certifications or obtaining additional credentials through the Alaska Board for Professional Counselors and/or the National Board of Certified Counselors. It is designed to supplement each candidate’s existing experience and academic preparation and the degree to which each candidate achieves the program outcomes. Therefore, specific required courses are not listed since individual graduate studies plans may vary considerably based on prior coursework of each candidate. The faculty advisors will use the academic preparation requirements set forth by the licensing boards to guide the coursework selections included on the graduate studies plan.

Student Outcomes
The outcomes for the program are based on the National Board of Certified Counselors standards located at www.nbcc.org. Students who complete this program will be able to:

1. Articulate a personalized meaning of the professional and ethical issues in the counseling field.
2. Demonstrate mastery in the counseling field content areas of:
   a. Research including program evaluation
   b. Appraisal of the individual
   c. Social and cultural foundations
   d. Human growth and development
   e. Group work
   f. Career development through the lifespan
   g. Helping relationships

Admission Requirements
1. Satisfy the University Graduate Certificate Admission Requirements at the beginning of this chapter.
2. Complete the Counselor Education Application (application can be found on the program website).
3. Hold a master’s degree in counselor education or closely related field from a regionally accredited institution with a grade point average of 3.00 on a 4.0 scale.
4. Submit three letters (or reference forms) of professional recommendation (see application packet for forms).
5. Provide a goal statement of approximately 500 words that contains an autobiography, career goals, and how the certificate program relates to those goals.
6. Participate in an interview (if requested).
7. Submit a writing sample (if requested).

Graduation Requirements
1. Satisfy university Graduate Certificate Requirements found at the beginning of this chapter.
2. Complete program requirements below.

Background Check Requirements
See Field Placements located at the beginning of the College of Education section of this chapter.

Program Requirements
1. Submit all graduate transcripts to the advisor for review.
2. Collaborate with the advisor to create a Graduate Studies Plan within the first semester of program admission.
3. Complete a total of 12 – 18 selective credits of coursework as specified on the student's Graduate Studies Plan.
4. Maintain an overall GPA of 3.00 in the program with no more than one C.
5. Submit a Professional Disclosure Statement.
6. Pass the Counselor Preparation Comprehensive Examination.
Alaska Type C Special Services Certification Note: This program does not lead to certification or endorsement from the Alaska Department of Education and Early Development. Individuals holding master’s degrees in counseling related fields who are interested in certification as an Alaska school counselor should consider applying to the MEd in Counselor Education as a second master’s degree candidate.

Alaska Licensed Professional Counselor and National Certified Counselor Note: This program addresses academic preparation requirements for the Alaska Licensed Professional Counselor (LPC) and the National Certified Counselor (NCC). Other requirements apply. Completion of the graduate certificate program does not automatically result in an LPC or NCC credential, but focuses on professional development and advanced practice for counseling professionals under the guidance of a faculty advisor. However, through advisement, candidates completing the graduate certificate program are well prepared to take the examinations and fulfill other requirements set forth by the licensing boards.

Candidates seeking the Alaska LPC credential must have a total of 60 credits approved by the Alaska Board of Professional Counselors. See www.eed.state.ak.us for more information: www.commerce.state.ak.us/occ/ppco.htm.

The credential of NCC is awarded by the National Board of Certified Counselors (NBCC). See their website for more information: www.nbcc.org.

B. Educational Leadership Graduate Certificates

Principal and Superintendent
http://coe.uaa.alaska.edu/edleadership

The Educational Leadership Certificate programs are designed for individuals with master’s degrees who are seeking advanced professional preparation to become principals or superintendents.

Student 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 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.

Admission Requirements

1. Satisfy Admission Requirements for Graduate Certificates found at the beginning of this chapter.
2. Hold a master’s degree from a regionally accredited institution with a grade point average of 3.00 on a 4.00 scale.
3. Hold appropriate certification:
   a. Current teacher or special services provider (Type C) certificate or equivalent for Educational for Educational Leadership Certificate: Principal.
3. Provide a resume documenting educational experience including at least one year of experience as a certificated elementary teacher, secondary teacher, or special services provider (Type C).
4. Submit an educational goal statement.
5. Submit three letters of recommendation or rating forms from professional references.

Graduation Requirements

1. Satisfy Graduate Certificate University Requirements found at the beginning of this chapter.
2. Complete program requirements below.

Educational Leadership: Principal (K-8, 7-12, or K-8 & 7-12), Graduate Certificate

Background Check Requirements
See Field Placements located at the beginning of the College of Education section of this chapter.

Program Requirements
This program includes courses delivered by distance. Admitted students must have the technological knowledge and skills to engage in distance learning.

1. Complete required courses (24 credits):
   EDL A638 Instructional and Curricular Leadership 3
   EDL A639 The Politics of Education 3
   EDL A640 Law and Ethics in Education 3
   EDL A641 Principal Internship (3-6) 6
   EDL A642 Principal's Seminar I 3
   EDL A643 Principal's Seminar II 3
2. Complete portfolio documenting attainment of ELCC standards.
3. Complete a total of 24 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.

Alaska certification note: The Alaska Department of Education and Early Development requires 3 credits of multicultural education/cross-cultural communication and 3 credits of Alaska studies for state licensure. See www.eed.state.ak.us for more information.

Educational Leadership: Superintendent (K-12), Graduate Certificate

Program Requirements

This program includes courses delivered by distance. Admitted students must have the technological knowledge and skills to engage in distance learning.

1. Complete required courses (24 credits):
   EDL A671 Superintendent Stewardship and Systemic Change 3
   EDL A672 Student Performance: Academic and Developmental 3
   EDL A673 Human Resource Management and Labor Relations 3
   EDL A674 Public School Finance and Facilities 3
   EDL A675 Superintendent Internship (3-6) 6
   EDL A676 Superintendent Seminar I 3
   EDL A677 Superintendent Seminar II 3
2. Complete portfolio documenting attainment of ELCC standards.
3. Complete a total of 24 credits for the certificate and to apply for an institutional recommendation for the superintendent endorsement from the Alaska Department of Education and Early Development. Alaska certification note: The Alaska Department of Education and Early Development requires 3 credits of multicultural education/cross-cultural communication and 3 credits of Alaska studies for state licensure. See www.coe.sate.ak.us for more information.

Institutional Recommendation
Principal Type B Administrator Certificate or Superintendent Endorsement
Following are the requirements for an institutional recommendation. The candidates must have:

a. Completed all program courses with a grade of C or higher.
b. Received a cumulative GPA of 3.00 in the program coursework.
c. Met all requirements for a current Alaska Teacher Certificate, or Type C Special Services Certificate or equivalent from another state.
d. Acquired appropriate professional experience:
   • For Principal Type B Administrator Certificate, candidates must have three years of successful certified contract experience as a teacher or special services provider (Type C).
   • For a Superintendent’s endorsement, candidates must have five years (minimum three years as a teacher and one as an administrator) of experience.
e. Earned a master’s degree from a regionally accredited institution.
f. Demonstrated basic computer/technology competence.
g. Demonstrated mastery of the relevant standards through a professional portfolio.

C. Graduate Certificate, e-Learning
Admission to the Graduate Certificate in e-Learning (electronic learning) is suspended. See the Department of Teaching and Learning for more information.

D. Graduate Certificate, Language Education
http://coe.uaa.alaska.edu/langgradcert
The Graduate Certificate in Language Education is designed for individuals seeking advanced professional preparation to increase knowledge and skills in working with language learners. 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 For Speakers of Other Languages (ESOL) 7-12 Concentration
The ESOL 7-12 concentration is for candidates who are seeking one of the following:

1. Institutional Recommendation for an English as a Second Language (ESL) 7-12 endorsement on a current secondary teacher certificate, or
2. Advanced preparation in ESOL for increasing professional performance in community programs.

Student Outcomes
The student outcomes for this concentration are based on the Teachers of English to Speakers of Other Languages (TESOL)/National Council for Accreditation of Teacher Education (NCATE) Standards for P-12 Teacher Education Programs. More information about these standards may be found at www.tesol.org/. Students who complete the Graduate Certificate in Language Education will:

1. 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.
2. 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.
3. 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.
4. Know, understand, and use knowledge of how cultural groups and students’ cultural identities affect language learning and school achievement.
5. Know, understand, and apply concepts from research and best practice to plan instruction in a supportive learning environment for language learners.
6. Understand various issues of measurement (e.g., equity, cultural and linguistic bias, political, social, and psychological factors) in language assessment, IQ, and special education testing; the importance of standards; and the difference between language proficiency and other types of assessment.
7. Serve as a professional advocate and resource for language learners and the community.

Admission Requirements
1. Satisfy Admission Requirements for Graduate Certificates found at beginning of this chapter.
2. Document professional background (must meet one of the two criteria):
   a. Hold or be eligible to hold a secondary teacher certificate, OR
   b. Hold a baccalaureate degree from a regionally accredited institution or foreign equivalent and document appropriate professional experience or personal background in the field of English Language Learners (ELL). (See department for specific requirements.)
3. Provide a minimum of three references addressing the candidate’s potential for program success.
4. Submit a current resume.
5. Submit a writing sample including an educational goal statement.
6. Provide evidence of preparation in Language Analysis and Awareness - for example, coursework such as LING A201, or ENGL A475 or equivalents.

Graduation Requirements
1. Satisfy Graduate Certificate University Requirements found at the beginning of this chapter.
2. Complete program requirements below.

Background Check Requirements
See Field Placements located at the beginning of the College of Education section of this chapter.

Program Requirements
This program includes courses delivered by distance. Admitted students must have the technological knowledge and skills to engage in distance learning.

1. Complete a minimum of 12 credits beyond the baccalaureate degree. Most students will be expected to complete the following 23 to 25 credits:
   - ENGL A450 Linguistics and Language Teaching 4
   - ENGL A452 English Grammar and Language Teaching 4
   - EDSY A630 Language, Culture, and Teaching in Secondary Schools 2

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Student 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. Students who complete this program will be able to:

1. Utilize a variety of assessments to identify specific areas of student strengths and weaknesses and use the results to guide instruction.
2. Individualize instruction to meet the specific needs of students with disabilities in inclusive settings.
3. Support and promote inclusiveness and equity for students with diverse cultural and ethnic backgrounds.
4. Apply the legal and ethical principles associated with special education.

5. Promote a positive social environment for all students, particularly those with significant emotional and/or behavioral disorders.
6. Develop and maintain an atmosphere of collaboration with teachers, parents, administrators, and paraprofessionals.
7. Critically analyze and apply principles of research.
8. Demonstrate literacy regarding theoretical perspectives associated with human development and learning.

Admission Requirements

1. Satisfy Admission Requirements for Graduate Certificates found at the beginning of this chapter.
2. Hold a baccalaureate degree from a regionally accredited institution or foreign equivalent and have appropriate experience in the field of special education. (See department for specific requirements).
3. Provide transcripts documenting a minimum GPA of 3.00 in the most recent 30 credits of academic coursework.
4. Submit a resume documenting educational experience and at least one year of appropriate, recent experience with children experiencing disabilities at the developmental level in which the special education endorsement is sought.
5. Submit an essay of 300-500 words addressing career goals and how the program relates to these goals.
6. Provide three letters of recommendation or rating forms from professional references.
7. Participate in an interview if requested by the department.

Graduation Requirements

1. Satisfy Graduate Certificate University Requirements found at the beginning of this chapter.
2. Complete program requirements below.

Concentrations

There are two concentrations within the program leading to a Graduate Certificate in Special Education:

a. Special Education with Initial Certification
b. Special Education Endorsement

The concentration one completes is based on the professional background an applicant brings to the program.

Special Admission Requirements

1. Provide documentation of passing scores on the Praxis I or other EED-approved basic skills test.
2. Submit Interested Person Report.
3. Complete up to 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 completion of an equivalent course at another regionally accredited institution or appropriate work experience that meets the intent of the course goals and outcomes.

| EDEL A426 | Teaching Mathematics in Elementary Schools | 3 |
| EDFN A303 | Foundations of Teaching and Learning | 3 |
| EDSE A212 | Human Development and Learning | 3 |
EDSE A482  Inclusive Classrooms for All Children  3
EDSE A483  Language and Literacy: Assessment and Interventions  3

Background Check Requirements
See Field Placements located at the beginning of the College of Education section of this chapter.

Program Requirements
This program includes courses delivered by distance. Admitted students must have the technological knowledge and skills to engage in distance learning.

1. Complete required courses (24 credits):
   EDSE A610  Clinical Assessment: Eligibility and Program Planning  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
   EDSE A634  Support and Supervision of Paraeducators  3
   EDSE A695E  Advanced Internship in Special Education: Elementary (3-6) or  6
   EDSE A695S  Advanced Internship in Special Education: Secondary (3-6)

Note: 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.

2. Complete a total of 24 credits for the graduate certificate and application for an institutional recommendation for initial teacher certification with an endorsement in special education.

b. Special Education Endorsement Concentration, Graduate Certificate
The Special Education Endorsement Concentration is for currently certified teachers who wish to add a special education endorsement to an existing teaching certificate.

Special Admission Requirements
Provide documentation of a current teaching certificate.

Background Check Requirements
See Field Placements located at the beginning of the College of Education section of this chapter.

Program Requirements
This program includes courses delivered by distance. Admitted students must have the technological knowledge and skills to engage in distance learning.

1. Complete one advisor-approved prerequisite course in special education or provide documentation of other appropriate experience with children or adults with disabilities. Course may be taken concurrently with other program requirements.

2. Complete required courses (24 credits):
   EDSE A610  Clinical Assessment: Eligibility and Program Planning  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
   EDSE A634  Support and Supervision of Paraeducators  3
   EDSE A695E  Advanced Internship in Special Education: Elementary (3-6) or  6
   EDSE A695S  Advanced Internship in Special Education: Secondary (3-6)
   EDSE A632  Special Education Law: Principles and Practices  3
   EDSE A634  Support and Supervision of Paraeducators  3
   EDSE A695E  Advanced Internship in Special Education: Elementary (3-6) or  6
   EDSE A695S  Advanced Internship in Special Education: Secondary (3-6)

Note: Alaska certification note: The institutional recommendation for an initial certificate with a special education endorsement will be at the level of the internship. The institutional recommendation for special education endorsement on an existing teaching certificate will be at the level of that certificate. EED may have additional requirements for certification/endorsement.

For those graduates receiving an initial certificate, prior to advancing to the professional certificate, EED requires completion of 3 credits of approved Alaska studies coursework and 3 credits of approved multicultural/cross-cultural communications coursework. See the EED web site for more information: www.eed.state.ak.us.

Institutional Recommendation
Following are the requirements for an institutional recommendation for a special education certificate or endorsement. The candidate must have:

1. Completed all applicable prerequisite courses with a minimum grade of B.
2. Completed all required courses with a minimum overall GPA of 3.00, with no grade lower than a C.
3. Earned a baccalaureate degree from a regionally accredited institution, or foreign equivalent.
4. Completed internships and professional portfolio documenting attainment of CEC standards.
5. Passed applicable examinations. For candidates in the Special Education with Initial Certification Concentration, passing scores on the Praxis I, or other EED-approved basic skills examination, and the Praxis II are required. The passing scores are established by EED. Elementary special education teachers must take one of the Praxis II examinations designated for elementary teachers; middle and high school teachers must take one of the Praxis II examinations in Mathematics, English, Science, or Social Studies.

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Graduate Certificate, Advanced Human Service Systems

The Graduate Certificate in Advanced Human Service Systems prepares students with a Bachelor of Human Services or related degree for a broad array of mid-level and advanced occupations within the behavioral health/community and social services clusters. Students will develop advanced knowledge and skills in program evaluation, family and community service delivery, organizational development and leadership, professional ethics and decision making, as well as current and continuing issues in human development.

Student Outcomes
Graduates of the Certificate in Advanced Human Service Systems will be able to demonstrate knowledge and skills necessary to perform organizational and human service management/practice roles using a broad array of knowledge based skills.

Students who complete this program will be able to:
1. Demonstrate ethical leadership and decision making in human service organizations.
2. Apply management skills at multiple levels within an organization.
3. Utilize human service family and community service delivery systems to enhance the mission of their respective programs and organizations.
4. Utilize program evaluation and research techniques to accurately design and measure performance outcomes to objectively assess the effectiveness of programs in applied settings.

Admission Requirements
1. Satisfy university Graduate Certificate Admission Requirements found at the beginning of this chapter.
2. Complete a Bachelor of Human Services or equivalent degree from an accredited institution;
3. Have a cumulative undergraduate grade point average of 3.00.
4. Complete an admission application for the Graduate Certificate in Advanced Human Service Practice, including a writing sample and a barrier crimes screening.

Graduation Requirements
1. Satisfy university Graduate Certificate Requirements found at the beginning of this chapter.
2. Complete program requirements below.

Program Requirements
1. Complete core courses (15 credits):
   - HUMS A610 Program Evaluation in Applied Settings 3
   - HUMS A630 Family and Community Systems 3
   - HUMS A650 Leadership and Organizational Development in Human Services 3
   - HUMS A670 Professional Ethics in Human Services 3
2. Complete one of the following courses in human development:

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Janet Steinhauser, Term Assistant Professor, ANJLS3@uaa.alaska.edu
Allan Turner, Professor, AFAAT@uaa.alaska.edu
Amina Turton, Assistant Professor, AFAT1@uaa.alaska.edu
HUMS A680 Advanced Topics in Human Development: Childhood (3)
HUMS A681 Advanced Topics in Human Development: Adolescence (3)
HUMS A682 Advanced Topics in Human Development: Adulthood and Aging (3)
EDCN A613 Human Development for the Helping Professionals (3)

3. Complete one of the following elective courses: 3
   HUMS A640 Contemporary Issues in Rehabilitation (3)
   HUMS A660 Promoting Positive Development in At-Risk Youth (3)
   EDCN A614 Counseling Diverse Populations (3)
   PADM A601 Introduction to Public Administration (3)
   PADM A628 Administration of Financial Resources (3)
   SWK A665 Comparative Group Work (3)
   Other coursework may fulfill the elective requirements with the prior approval of a graduate advisor.

4. Earn an overall cumulative GPA of 3.00 or better.
5. A total of 18 credits is required for the certificate.
6. Note: Coursework in the Graduate Certificate in Advanced Human Services does not fulfill the requirements for licensure as a professional counselor (AS 08.29).

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SCHOOL OF NURSING
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Graduate studies at the master’s level place primary emphasis upon advanced professional nursing practice, theory, research, and health care delivery systems. Students may develop a specialized practice focus in Nursing Education as a Family Nurse Practitioner or Psychiatric-Mental Health Nurse Practitioner. Master’s level studies provide the student with a basis for further study at the doctoral level. The graduate program is accredited by the National League for Nursing Accreditation Commission (3343 Peachtree Road NE, Suite 500, Atlanta, GA 30326; (404) 975-5000). Graduates in the Family Nurse Practitioner option are eligible to write the national certification examination for advanced professional practice as a family nurse practitioner. Graduates of the Psychiatric-Mental Health Nurse Practitioner Option are eligible to write the national certification for advanced practice as a psychiatric-mental health nurse practitioner-adult, or psychiatric mental health nurse practitioner-family. Graduates of the Nursing Education option who have had two years of full-time academic teaching experience are eligible to take the NLN Certified Nurse Educator Examination.

Program Outcomes
The graduate is prepared to:
1. Engage in scholarly inquiry including evaluation and application of evidence-based research to advanced to nursing practice.
2. Practice in a manner that incorporates ethical, legal, and professional standards for advanced nursing practice.
3. Collaborate across disciplines and in partnership with communities, groups, families and individuals through culturally sensitive practice.
4. Demonstrate competence and caring in the role of the advanced practice nurse 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.

Master of Science, Nursing Science
Admission Requirements

UAA Admission Requirements
See the beginning of this chapter for Admission Requirements for Master’s Degrees. The following application submission deadlines are recommended to ensure full processing of application and transcripts:
November 1 for March 1 applicants
June 15 for November 1 applicants

School of Nursing Admission Requirements
Students applying to the Master of Science in Nursing Science must also submit documentation of having met the following requirements:

1. Hold a bachelor’s or a master’s degree in nursing from a program accredited by the National League for Nursing Accrediting Commission or the Commission on Collegiate Nursing Education.
2. Have a minimum undergraduate (and graduate, if applicable) GPA of at least a 3.00 (B) on a 4.00 scale.*
3. Submit Graduate Record Examination scores with a minimum Analytic Writing score of 3.50 and a minimum cumulative GRE (quantitative plus verbal) of 800.*
4. Have a grade of 2.00 (C) or higher in an undergraduate research methods course and a statistics course that covers descriptive and inferential statistics.
5. Submit the School of Nursing graduate admission application directly to the School of Nursing.
6. Submit three letters of professional recommendation. Letter must be submitted directly to the School of Nursing from the person writing the reference. References may be contacted by a member of the admissions committee.
7. Complete a minimum of one year of half-time clinical experience as a registered nurse.
8. Prior to the beginning of the first clinical course, hold an active unencumbered Alaska State RN license.

*For students seeking a second master’s degree, the GRE is waived and only graduate GPA is considered.

The following School of Nursing application submission deadlines are required to ensure full processing of application:
November 1 for Graduate study and/or clinical specialty
March 1 for Graduate study and/or clinical specialty

Applicants who meet the above criteria are considered for program admission on a competitive basis. Meeting all admission criteria does not guarantee admission. Nor does prior acceptance into graduate study status guarantee admission into the clinical nursing tracks. Special consideration may be given to candidates with portfolios that document exceptional clinical experience and a proven record of professional contributions. To the extent that there are limited seats 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.

Academic Progress
Students enrolled in the graduate degree program must:
• Maintain at least a 3.00 (B) GPA in all required coursework.
• Earn a grade of 3.00 (B) or higher in all specialty courses.
• Receive no more than one 2.00 (C) grade in core and elective courses.
• Earn all credits, including transfer credits within a consecutive seven-year period prior to graduation. See UAA catalog for additional information.
Noncompliance with academic progress expectations will result in probation and possible dismissal from the program. See the Academic Good Standing Policy in the School of Nursing Graduate Handbook for more information.

**Part-Time/Full-Time Study**
This program is designed to be completed in six semesters of part-time study, although students can take longer. Prior to being formally admitted to graduate study, students may complete up to 9 credits of degree-applicable course-work, either UAA credit or transfer credit. Students who are not formally admitted will be allowed to register on a space-available basis and with instructor permission.

For part-time students, admission to graduate study only is recommended, with formal admission to a specialty track being delayed until core course requirements have been completed. Enrollment in any clinical course requires formal admission to graduate study and to the specialty track.

**Additional School of Nursing Requirements**
All students enrolled in UAA nursing programs must provide:
- 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 School of Nursing-sanctioned national-level criminal background check.

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. All students are expected to have basic computer and typing skills prior to entry into the nursing program, for example:
- Word processing (preferably MS Word),
- Sending and receiving e-mail with attachments,
- Accessing and navigating the Internet/World Wide Web, and
- Basic understanding of hardware, software, and operating systems.

**Scheduling of Courses**
Graduate nursing courses are offered in an alternative scheduling format consisting of intensive classroom sessions presented in short time blocks on the UAA campus and/or periodic class meetings throughout the semester that are available via computer and/or audio-conference. Thus, it is possible for students who reside outside of Anchorage to take advantage of the opportunity to pursue graduate study 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.

**Graduation Requirements**
See the beginning of this chapter for University Requirements for Master’s Degrees.

**Program Requirements**
1. Complete the following required core courses (18 credits)*:
   - NS A618 Role Development in Advanced Practice Nursing 2
   - NS A619 Health Policy Issues in Advanced Practice Nursing 2
   - NS A620 Nursing Research Methods 4
   - NS A621 Knowledge Development for Advanced Nursing Practice 3
   - HS/NS A625 Biostatistics for Health Professionals 3

   Choose one of the following courses for a total of 4 credits taken over two semesters
   - NS A696 Individual Project (2)
   - NS A699 Thesis (2)

   *Students seeking a second master’s degree may petition to have core courses waived based on evaluation of prior graduate degree and any thesis or project done for that degree.

2. Complete one of the following options:
   - **Family Nurse Practitioner Option (32 credits)**
     - NS A601 Advanced Pathophysiology 3
     - NS A602 Advanced Health Assessment in Primary Care 3
     - NS A610 Pharmacology for Primary Care 3
     - NS A660 Family Nurse Practitioner I 4
     - NS A661 Family Nurse Practitioner II 5
     - NS A662 Family Nurse Practitioner III 5
     - NS A663 Family Nurse Practitioner IV 6
     - Elective Advisor approved 3
   - **Psychiatric-Mental Health Nursing Option (32 credits)**
     - NS A601 Advanced Pathophysiology 3
     - NS A602 Advanced Health Assessment in Primary Care 3
     - NS A610 Pharmacology for Primary Care 3
     - NS A670 Advanced Psychiatric/Mental Health Nursing I 5
     - NS A671 Advanced Psychiatric/Mental Health Nursing II 5
     - NS A672 Advanced Psychiatric/Mental Health Nursing III 5
     - NS A674 Advanced Psychiatric/Mental Health Nursing IV 5
     - Elective Advisor approved 3
   - **Nursing Education Option (24 credits)**
     - NS A601 Advanced Pathophysiology 3
     - NS A602 Advanced Health Assessment in Primary Care 3
     - NS A640 Teaching and Learning in Nursing 3
     - NS A641 Curriculum Development and Evaluation 3
     - NS A643 Assessment and Evaluation in Nursing 3
     - NS A644 Distance Education in Nursing 3
     - NS A647 Teaching Practicum in Nursing 3
     - Elective Advisor approved 3

3. A total of 42-50 credits is required for the degree.

**Thesis or Project Option**
A total of 4 credits of either NS A696 Individual Project or NS A699 Thesis, taken over two semesters, are required for the degree. Students who are unable to complete the thesis or project after two semesters will be required to complete the graduate continuous registration procedures (at the beginning of this chapter) and pay all fees.

Students who are unable to complete the thesis or project during three semesters will be required to register for 2 credits of NS A699 Thesis or NS A696 Individual Project every semester thereafter (excluding summer sessions) until the thesis or project is satisfactorily completed. In the event a student wants to work on the thesis or project during a summer semester, utilizing faculty and UAA resources, they must get approval from their committee and register for a 1-credit independent study (P/F). The independent study credit does not count toward the 4 required thesis or project credits. There is no limit to the number of thesis or project credits that may be accrued; however, no more than 12 credits of thesis or project may be accrued without the student being required to take additional coursework at the graduate level. Specific requirements for additional coursework will be determined by the director of the Graduate Program in Nursing, the coordinator of the specialty track, and the thesis or project chair.
The nursing graduate certificate programs were designed for individuals who have previously acquired their master’s degree in nursing from a regionally accredited institution with a nursing program accredited by a nationally recognized accrediting agency (the National League for Nursing Accrediting Commission or the Collegiate Commission on Nursing Education), who wish to expand their nursing competencies or practice to include the role of a family nurse practitioner, psychiatric-mental health nurse practitioner or nurse educator.

The 15-29 credit graduate certificate curriculum builds on the student’s prior master’s 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 of the nurse practitioner graduate certificate programs, the individual must already be certified as a nurse practitioner in another specialty.

Admissions Requirements
See the beginning of this chapter for Admission Requirements for Graduate Certificates.

UAA Admission Requirements
See the beginning of this chapter for Admission Requirements for Graduate Certificates. The following UAA application submission deadlines are recommended to ensure full processing of application and transcripts:
- November 1 for March 1 applicants
- June 15 for November 1 applicants

School of Nursing Admission Requirements
Students applying to the graduate certificate program must also submit documentation of having met the following requirements:
- Earned graduate degree in nursing (master’s or doctoral) from a school of nursing accredited by the National League for Nursing Accrediting Commission or the Commission on Collegiate Nursing Education.
- Graduate GPA of at least a 3.00 (B) on a 4.00 scale.

Additional requirements for students applying for the Family Nurse Practitioner or Psychiatric-Mental Health Nurse Practitioner Graduate Certificate include:
- Current licensure as an advanced practice nurse in the state of Alaska, concurrent with enrollment in first clinical course.
- Documentation of national certification as an advanced practice practitioner.

Applicants who meet the above criteria are considered for program admission on a competitive basis. Meeting all admission criteria does not guarantee admission. Prior acceptance into graduate study status does not guarantee admission into the clinical nursing tracks. Special consideration may be given to candidates with portfolios that document exceptional clinical experience and a proven record of professional contributions. To the extent that there are limited seats 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.

The School of Nursing will consider applications for the Graduate Certificate during fall and spring semesters. Following are the deadlines for submission to ensure full consideration by the admissions committee:
- November 1: Graduate Certificate
- March 1: Graduate Certificate

Academic Progress
Students enrolled in the graduate certificate program must:
- Maintain at least a 3.00 (B) GPA in all required coursework.
- Earn a grade of 3.00 (B) or higher in all specialty courses.

- Receive no more than one 2.00 (C) grade in core or elective courses (if required).

In addition, students in the family nurse practitioner or psychiatric-mental health nurse practitioner programs must complete additional clinical hours (2 credits) if they have not completed degree requirements within 12 months after finishing their last clinical course.

Twelve months after completing the additional clinical hours, if the degree has not still been conferred, an additional 2 credits of clinical must be completed. More information on this policy can be found in the School of Nursing Graduate Handbook.

Noncompliance with academic progress expectations will result in probation and possible dismissal from the program. See the Academic Good Standing Policy in the School of Nursing Graduate Handbook for more information.

Additional School of Nursing Requirements
All students enrolled in UAA nursing graduate certificate programs must provide:
- 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 School of Nursing-sanctioned national level criminal background check.

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. All students are expected to have basic computer and typing skills prior to entry into the nursing program, for example:
- Word processing (preferably MS Word);
- Sending and receiving e-mail with attachments;
- Accessing and navigating the Internet/World Wide Web; and
- Basic understanding of hardware, software, and operating systems.

Graduation Requirements
See the beginning of this chapter for University requirements for Graduate Certificates.

Graduate Certificate, Family Nurse Practitioner
The Family Nurse Practitioner (FNP) Graduate Certificate for psychiatric nurse practitioners is designed for nurses who are already certified as psychiatric nurse practitioners. This 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 approximately 720 clinical hours in practicum coursework. 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 an FNP. These examinations are given nationwide throughout the year.

The FNP Graduate Certificate for primary care specialties was developed for nurses who are already certified in one of the primary care nurse practitioner specialties (adult, child, or women). Students who successfully complete it will be eligible to take the family nurse practitioner
examination offered by the ANCC, or the AANP to become certified as an FNP. These examinations are given nationwide throughout the year.

**Graduate Certificate, Psychiatric-Mental Health Nurse Practitioner**

The Psychiatric-Mental Health Nurse Practitioner (PMH) Graduate Certificate for advanced nurse practitioners is designed for nurses who already certified as advanced practice nurses in fields other than psychiatric-mental health. Students who successfully complete the graduate certificate program will be eligible to take the psychiatric and mental health nurse practitioner examination offered by the ANCC. This examination is given nationwide throughout the year.

**Graduate Certificate, Nursing Education**

The specialty certificate in Nursing Education is designed for nurses who have previously acquired a minimum of a master’s degree in nursing and are seeking to develop advanced knowledge and skills in order to teach in academic or clinical settings. The coursework leading to the graduate certificate 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 AACN (1996), as well as the newly developed Core Competencies of Nurse Educators proposed by the National League for Nursing (NLN).

All courses for this certificate will be offered using distance-delivery technologies, including but not limited to Blackboard web-based approaches, CD-ROMs, and audio-conferencing or video-conferencing as appropriate and available. Teaching practice may be completed in the student’s community, or in some cases may require visits to the UAA campus. Faculty may also validate teaching competencies through site visits and/or conference calls.

The 15-credit graduate certificate includes graduate-level coursework in nursing education with practicum opportunities in classroom and clinical settings.

**Program Requirements**

**Graduate Certificate, Family Nurse Practitioner (FNP)**

1. Complete one of the following tracks:

   **Adult Nurse Practitioner (15 credits):**
   - NS A660 Family Nurse Practitioner I
   - NS A661 Family Nurse Practitioner II
   - NS A663 Family Nurse Practitioner IV

   **Pediatric Nurse Practitioner (15 credits):**
   - NS A631 Family Nurse Practitioner Focus on Women’s Health and Obstetrics I
   - NS A635 Family Nurse Practitioner Focus on Women’s Health and Obstetrics II
   - NS A662 Family Nurse Practitioner III
   - NS A663 Family Nurse Practitioner IV

   **Psychiatric Mental Health Nurse Practitioner (29 credits):**
   - NS A601 Advanced Pathophysiology
   - NS A602 Advanced Health Assessment in Primary Care
   - NS A610 Pharmacology for Primary Care
   - NS A660 Family Nurse Practitioner I
   - NS A661 Family Nurse Practitioner II
   - NS A662 Family Nurse Practitioner III
   - NS A663 Family Nurse Practitioner IV

   **Women’s Health Nurse Practitioner (15 credits):**
   - NS A632 Family Nurse Practitioner Focus on Pediatrics I

   **NS A636 Family Nurse Practitioner Focus on Pediatrics II**
   - NS A662 Family Nurse Practitioner III
   - NS A663 Family Nurse Practitioner IV

2. A total of 15-29 credits is required for the certificate.

**Graduate Certificate, Psychiatric and Mental Health Nurse Practitioner (PMH)**

1. Complete the following required courses (20 credits):
   - NS A670 Advanced Psychiatric/Mental Health Nursing I
   - NS A671 Advanced Psychiatric/Mental Health Nursing II
   - NS A672 Advanced Psychiatric/Mental Health Nursing III
   - NS A674 Advanced Psychiatric/Mental Health Nursing IV

2. A total of 20 credits is required for the certificate.

**Graduate Certificate, Nursing Education**

1. Complete the following required courses (15 credits):
   - NS A640 Teaching and Learning in Nursing
   - NS A641 Curriculum Development and Evaluation
   - NS A643 Assessment and Evaluation in Nursing
   - NS A644 Distance Education in Nursing
   - NS A647 Teaching Practicum in Nursing

2. A total of 15 credits is required for the certificate.

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**HEALTH SCIENCES**

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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, business, 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 degree, 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.

**MPH Program Goals and Program-Level Objectives**

Based on national accreditation criteria and quality standards, the program goals are:

**Service**

A. 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**

B. 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**

C. 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**

D. 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

E. 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.

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.

Admission Requirements

See the beginning of this chapter for Admission Requirements for Master’s Degrees. In addition, students should also meet the following criteria when applying for admission to the MPH program:
1. Have earned a baccalaureate degree from a regionally accredited institution in the United States, or a foreign equivalent.
2. Have a GPA of at least 3.00 (B average on a 4.00 scale) in their baccalaureate degree.
3. Submit documentation indicating a grade of 2.00 (C or higher) in an introductory statistics course which covers descriptive and inferential statistics.
4. Provide copies of one or more substantial professional writing samples.
5. Submit an essay explaining how and why obtaining the MPH degree would contribute to the student’s career goals.
6. 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.
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.

Academic Progress

In order to maintain satisfactory academic progress toward the degree, 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. For satisfactory academic progress, 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 student being removed from the degree program. See the beginning of this chapter for additional requirements to remain in good standing, and to maintain satisfactory academic progress toward the degree.

Candidacy Requirements

See the section Advancement to Candidacy at the beginning of this chapter.

Graduation Requirements

See University Requirements for Master’s Degrees at the beginning of this chapter.

Program Requirements

1. Complete the MPH core courses (33 credits total):
   - HS A605 Public Health and Society
   - HS A610 Environmental and Occupational Health
   - HS A615 Health Services Administration
   - HS/NS A625 Biostatistics for Health Professionals
   - HS/NS A626 Principles of Epidemiology
   - HS/SWK A628 Program Evaluation
   - HS A629 Public Health Research Tools and Methods
   - HS A630 Public Health Emergencies and Disasters
   - HS A690 Selected Topics in Public Health (1-4)
   - HS A699 Thesis Practicum

2. Complete the interdisciplinary emphasis (9 credits total):
   - Three focused public health-related elective courses at the 600-level (graduate) with advisor approval.

3. A total of 42 credits are required for the degree.

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SCHOOL OF SOCIAL WORK

Gordon Hartlieb Hall (GHH), Room 106, (907) 786-6900
http://socialwork.uaa.alaska.edu

The mission of the UAA Master of Social Work program is to prepare advanced 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. 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.

Based upon the mission established for the MSW program, the program goals are to prepare advanced generalist social work practitioners who are:
- Competent in multiple practice roles across client systems, particularly within the state of Alaska.
- Committed to the enhancement of human well-being.
- Committed to the promotion of social and economic justice for people of all backgrounds, particularly those in Alaska.
- Guided by the values and ethical standards of the social work profession.
- Prepared to enhance the quality of service delivery systems.
- Knowledgeable, skillful, and sensitive with people from diverse backgrounds.
MSW program admission and curriculum requirements are consistent with MSW licensing requirements in the state of Alaska. The MSW program does not grant social work course credit for life experience or previous work experience.

The MSW degree is structured to allow students to participate in full-time, part-time, or distance education plans requiring from one to four years of study, dependent upon prior academic preparation for graduate studies in social work. The foundation curriculum is comprised of 32 semester credits and is required for students who have not earned a baccalaureate degree in social work from an accredited program within the past seven years. The foundation curriculum is sequenced to provide professional preparation for advanced generalist social work education. All students will waive, test out, or successfully complete all courses required in the foundation curriculum of the program. Students who have earned a Bachelor of Social Work from a CSWE-accredited program within the past seven years and who are judged to be ready for advanced graduate studies may be admitted with advanced placement to the concentration curriculum. The concentration curriculum is comprised of 31 credits and is required for all MSW students. All students entering the program will have an official Graduate Studies Plan tailored to meet their own educational needs.

Master of Social Work
Admission Requirements
1. Deadline for application: January 15. This is the only application date for the year. Admission review is performed once a year following the January 15 deadline for application.
2. Submit UAA graduate application for admission with fee and meet requirements found at the beginning of this chapter.
3. Submit complete undergraduate transcripts demonstrating an earned bachelor’s degree from an accredited college or university.
4. Submit the complete MSW admissions packet, available through the School of Social Work.
5. Admission to the MSW program with advanced standing status must be exercised within seven years of receiving the BSW degree.
6. 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 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. Honors students interested in admission with advanced standing must apply for this status.

The MSW program reserves the right to request additional materials and/or interviews pertaining to program admission.

Liberal Arts Requirements for Admissions
The MSW program requires that all incoming students have successfully completed a baccalaureate degree in the liberal arts from an accredited institution of higher learning. The liberal arts baccalaureate should include successful coursework in the following areas:
1. Two university courses in the humanities (history, philosophy, languages, literature, or similar disciplines);
2. Two university courses in the social sciences (political sciences, sociology, anthropology, psychology, or similar disciplines; see note below concerning human development);
3. One university course in the fine arts (music, theater, art appreciation or similar disciplines);
4. One university course in oral communication;
5. One university course in written communication;
6. Two university courses in the natural sciences and/or mathematics (biology, chemistry, physics, geology, astronomy or similar disciplines; algebra, calculus, trigonometry, statistics, or similar disciplines; see notes below concerning human biology and statistics).
7. A minimum of 45 semester credits or 68 quarter credits which in total reflect the courses identified in the above list of liberal arts classes. The remaining earned academic credits can be distributed in any combination of coursework.

As part of the liberal arts preparation, the MSW program has established the following three specific prerequisites to admission: prior coursework in human biology (one course); human development over the entire life span (one course); and applied statistics (one course). The human biology and human development courses provide educational background for understanding the bio-psycho-social determinants of human behavior. The applied statistics course provides exposure to objective knowledge development. A minimum grade of C is required for each of the prerequisite courses.

Admission to the MSW degree program is based on the professional judgment of the social work faculty. Only students eligible to be licensed in the state of Alaska will be admitted to the MSW degree program. Please contact the department for further information.

Academic Progress
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 A644, SWK A645, SWK A646, SWK A647, SWK A639).

Field placements may become competitive if the number of applicants exceeds the number of spaces. The program and agencies also 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 MSW program does not guarantee acceptance by cooperating social services agencies.

Transfer Credits
Up to 9 semester credits from a CSWE-accredited MSW program 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.

Candidacy for a Master of Social Work Degree
1. Refer to Advancement to Candidacy criteria found at the beginning of this chapter.
2. Submit the Application for Advancement to Candidacy packet available through the School of Social Work.
3. Successfully complete MSW comprehensive examination, given in the Advanced Generalist Integrative Seminar (SWK A635) during spring semester of the concentration year of the program.

Graduation Requirements
1. See the beginning of this chapter for University Requirements for Master’s Degrees.
2. Successful completion of research project (SWK A698).
3. Successful completion of all required academic coursework specified on the Official Graduate Studies Plan, with a GPA of 3.00 or better, no course grade lower than a C, and no practicum course grade lower than a B (SWK A644, SWK A645, SWK A646, SWK A647, SWK A639).

Program Requirements
The following outlines course requirements for the full-time program plan. Students admitted to the program on a part-time basis or in the distance-delivered program take from 2 to 7 credits each semester:
fall, spring, and summer, for two to four years dependent upon prior academic preparation. A copy of the part-time program plan is available from the School of Social Work.

1. **Foundation Curriculum:** Complete, test out of, or waive the following required courses in the foundation sequence:

   **Fall - Year One**
   - SWK A630 Practice Skills Lab 1
   - SWK A631 Foundation Practice 3
   - SWK A632 Direct Practice I 3
   - SWK A642 Human Behavior in the Social Environment 3
   - SWK A643 Human Diversity in Social Work Practice 3
   - SWK A644 Generalist Practicum I 3

   **Spring - Year One**
   - SWK A607 Social Welfare Policy and Services 3
   - SWK A624 Foundation Research Methods 4
   - SWK A636 Community Practice 3
   - SWK A645 Generalist Practicum II 3
   - Graduate-level Social Work elective. 3

2. **Concentration Curriculum:**

   **Fall - Year Two**
   - SWK A608 Social Policy for Advanced Generalist Practice 3
   - SWK/HS A628 Program Evaluation 3
   - SWK A633 Direct Practice II 3
   - SWK A646 Advanced Generalist Practicum I 3

   **Spring - Year Two**
   - SWK A635 Advanced Generalist Integrative Seminar 3
   - SWK A647 Advanced Generalist Practicum II 4
   - SWK A698 MSW Research Project 3
   - Graduate-level Social Work elective. 3
   - Graduate-level Social Work elective. 3

3. A minimum of 31 credits is required for the Master of Social Work degree.

A total of 6 credits of electives to pursue professional emphasis may be selected from outside the School of Social Work offerings. Only 400- and 600-level courses approved by the MSW faculty advisor and program coordinator may count toward graduate program requirements. Courses at the 500 level are not applicable toward the MSW degree requirements. No more than 3 credits at the 400 level may be counted toward the MSW degree requirements. Contact the School of Social Work for a full list of available electives and scheduled class offerings.

### Research Project

All students are required to complete a research project (SWK A698) in the concentration year of study. The project is an opportunity for the student to conduct an original research project under the guidance of a faculty member. Students attend a seminar to facilitate the process. The research process includes formulating the research question, conducting a literature review, designing and conducting the study, analyzing the data, writing the research report, and disseminating the results to faculty, fellow students, and the practice community. Students are expected to comply with UAA policies and procedures for the protection of human subjects.

### Graduate Certificate in Social Work Practice

The Graduate Certificate in Clinical Social Work Practice prepares MSW graduates to practice clinical social work using social work principles and methods to assist in the treatment of mental and emotional conditions of individuals, families or groups. The certificate includes the option of 50 hours of post-MSW group supervision of clinical social work practice. The 15-credit graduate certificate uses the MSW program elective sequence as a platform for developing advanced knowledge and skills for clinical social work practice and partially preparing students for licensure as a licensed clinical social worker (LCSW) in Alaska.

Courses are offered on a two-year rotation, including evening, weekend and summer intensives. Group supervision courses are offered between January and December, meeting weekly for 1.25 hours. Students must be in post-MSW practice to participate in group supervision. Application deadline is November 15 for a spring semester start date.

### Admission Requirements

Applicants for the Graduate Certificate in Clinical Social Work Practice must:

1. Be in the concentration year of the UAA MSW program or have completed an MSW degree from a program accredited by the Council on Social Work Education (CSWE);
2. Have a cumulative grade average of B (3.00 on a 4.00 scale);
3. Provide a written summary of social work practice experience and career goals; and
4. Be eligible for licensure in Alaska.

### Curriculum Requirements

**Total = 15 credits:**

1. Required courses (7 credits):
   - SWK A663 Clinical Social Work with Children and Adolescents 2
   - SWK A651 Social Work Practice in Addictions and Mental Health 3
   - SWK A664 Clinical Social Work with Adults 2
2. Plus completion of 8 credits from the following:
   - SWK A656 Treatment of Families (3)
   - SWK A672 Social Work with Families and Couples (2)
   - SWK A665 Comparative Group Work (3)
   - SWK A667 Clinical Group Therapy (2)
   - SWK A668 Group Supervision I (1)
   - SWK A669 Group Supervision II (1)
   - SWK A670 Group Supervision III (1)

### Certificate Completion Requirements

Students enrolled in the graduate certificate program are required to complete the curriculum requirements with a cumulative GPA of 3.00 or better.

### Student Outcomes

The program is designed to expand the diversity of clinical experiences and allows students to increase confidence in their clinical judgment through clinical supervision. The program provides the opportunity for students to enhance their practice skills and to mature in their professional use of self. In the program the students demonstrate their abilities to:

- Practice within the legal and ethical parameters of the profession.
- Identify clients who are at risk and intervene properly.
- Apply a variety of theories and use a variety of methods in their practice.
- Maintain integrity in all aspects of their practice.
- Define their professional stance vis-à-vis the realities of the practice environment.
- Define and accept their practice limitations.
- Develop a concept and a plan for their future professional development.

### Graduate Certificate in Social Work Management

The Graduate Certificate in Social Work Management prepares MSW graduates to be managers in social service settings. Students develop advanced knowledge and skills in organizational practice, supervisory management, leadership and decision making, marketing in the social sector, financial resource development, budgeting and
fiscal management. The curriculum is based on the Leadership and Management Practice Standards established by the National Network for Social Work Managers. Application deadline is November 15 for a spring semester start date.

Admission Requirements
Applicants for the Graduate Certificate in Social Work Management must:
1. Be in the concentration year of the UAA MSW program or have completed an MSW degree from a program accredited by the CSWE;
2. Have a cumulative graduate GPA of 3.00 (B average on a 4.00 scale);
3. Provide a written summary of social work practice experience and career goals.

Curriculum Requirements
Total = 15 credits:
1. MSW Required Course (3 credits):
   SWK A634 Organizational Practice 3
2. MSW Elective Courses (12 credits):
   SWK A654 Supervisory Management in Social Work 3
   SWK A659 Leadership and Decision Making in Social Work 3
   SWK A660 Financial Leadership for Social Work Administrators 2
   SWK A661 Marketing in the Social Sector 2
   SWK A662 Financial Resource Development for Social Services 2

Certificate Completion Requirements
Admitted students are required to complete the curriculum requirements for the graduate certificate with a cumulative GPA of 3.00 or better.

Student Outcomes
Graduates of the Graduate Certificate in Social Work Management will be able to demonstrate the knowledge and skills to perform organizational social work practice roles using multiple interventions directed at multiple levels. They will be able to:
- Demonstrate the role of leadership and decision making in social service organizations;
- Apply supervisory management skills at multiple levels within an organization;
- Integrate budget development and fiscal analysis into social services program planning;
- Utilize social sector marketing concepts to enhance the mission of their respective programs and organizations; and
- Design and implement financial resource development plans for social programs/social service agencies.

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COMMUNITY & TECHNICAL COLLEGE
CAREER AND TECHNICAL EDUCATION

Master of Science, Career and Technical Education

University Center (UC), Room 130, (907) 786-6423
www.uaa.alaska.edu/ctc/career/mscte.cfm

The Master of Science in Career and Technical Education program at UAA provides instruction for teachers, administrators, industry trainers, and workforce development professionals specializing in career and technical education at the secondary and postsecondary level. Face-to-face and distance-delivery options meet the learning needs of students while making instruction available statewide. Internships are available for students interested in updating their skills in an aspect of industry. Each student's program is jointly designed by the student and a faculty advisor.

Upon completion the graduate will be able to:
- Defend a philosophy of career and technical education using literature and personal experience.
- Facilitate discussions on and advocate for or argue against career and technical education.
- Design and implement curriculum using methodology that meets the needs of diverse learners.
- Develop, organize, and critically analyze research for a specific audience.
- Apply leadership and management theory through research and practice in organizations.
- Incorporate technology to facilitate learning.

Admission Requirements
1. See the beginning of this chapter for Admission Requirements for Master's Degrees.
2. Complete a writing exercise.
3. Participate in a program interview with faculty advisor.

Graduation Requirements
1. See the beginning of this chapter for University Requirements for Master's Degrees.
2. Complete 36 credits of approved coursework (up to 9 credits may be at the 400 level).
3. Complete, present, and obtain approval from graduate committee for individual research project or thesis.
4. Pass an oral or written examination based on the core program of study.

Program Requirements
1. Develop an official Graduate Studies Plan with faculty advisor and obtain approval before completion of more than 9 credits of coursework.
2. Complete the Career and Technical Education core courses (12 credits):
   CTE A611 Historical and Philosophical Foundations of Career and Technical Education 3*
   CTE A633 Current Issues in Career and Technical Education 3

University of Alaska Anchorage 2010-2011 Catalog
www.uaa.alaska.edu
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 mid-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 the surrounding communities.

Program Outcomes
At the completion of this program, students are able to:

- Demonstrate ability to adapt to the ever-changing scientific, technical and professional environment, including knowledge of public policy, legislative issues, ethics and lifelong learning. [Professional skills]
- Practice communicating effectively through the development of writing, speaking, listening, and problem-solving skills. [Communication skills]
- Integrate efficient and effective use of techniques and tools for managing foodservice systems in a variety of situations. [Foodservice management]
- Apply knowledge and skills in medical nutrition therapy in a variety of settings. [Clinical nutrition]
- Design interventions to combine knowledge and skills in community nutrition that enhance health and promote wellness. [Community nutrition]
- Recognize the impact of Alaska Native culture and Alaska's unique healthcare delivery system on the practice of dietetics in Alaska. [Specialty emphasis]
- Pass (national) registration examination, over a five-year period, on the first attempt 80 percent of the time.*
- Achieve a knowledge-based score of at least “satisfactory” on evaluation by employers of alumni.*
- Indicate feelings of being “well-prepared” for practice as a registered dietitian (program alumni).*

*These outcomes are required by the Commission on Accreditation for Dietetics Education, the accrediting body for the UAA DI.

Upon successful completion of all parts of the dietetic internship, students are given an ADA Verification Statement showing completion of the internship. With the Verification Statement graduates can apply to take the RD examination.

Admission Requirements
See the beginning of this chapter for Admission Requirements for Graduate Certificates.

Additional Departmental Admission Requirements
1. The application process adheres to the deadlines and procedures outlined by the American Dietetic Association. For the current year deadlines see the Dietetic Internship website: http://di.uaa.alaska.edu.
2. Baccalaureate degree (minimum) in dietetics or foods and nutrition.
3. 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.
4. GPA of 3.00 or higher (4.00 scale).
5. Evidence of ability and willingness to work productively (prior work or volunteer experience).
6. Current resume and three letters of recommendation (one must be from an employer and one must be from a professor or academic advisor).
8. Provide documentation of all necessary immunizations required to work in hospitals and other healthcare facilities.
9. Provide documentation of all necessary security background checks to meet state and federal requirements.
10. Provide documentation of necessary insurance coverage required to work in hospitals and healthcare facilities.
11. 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**
See the beginning of this chapter for Graduate Certificate University Requirements.

**Program Requirements**
1. Complete the following courses:
   - 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
2. A total of 15 credits is required for this certificate.

**FACULTY**

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**SCHOOL OF ENGINEERING**

The School of Engineering offers graduate degrees in Arctic Engineering, Civil Engineering, Engineering Management, Science Management, Applied Environmental Science and Technology, and Project Management. The three engineering degree programs require a baccalaureate degree in engineering for admission while the two science degree programs require a baccalaureate degree in science as an entrance requirement. The Project Management program requires a baccalaureate degree in engineering, science, or equivalent areas. The graduate offerings of the School 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 School of Engineering.

**APPLIED ENVIRONMENTAL SCIENCE AND TECHNOLOGY**

Engineering Building (ENGR), Room 201, (907) 786-1900
www.engr.uaa.alaska.edu/programs/environmental

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 in biology, chemistry, geology, statistics and environmental engineering.

This program offers a graduate certificate and two degree options:

**Graduate Certificate, Environmental Regulations and Permitting**

The UAA Graduate Certificate in Applied Environmental Science & Technology (AEST) program offers a cohesive sequence of courses in key federal environmental laws and regulations and federal and state environmental permitting. The series is intended to provide specialized education to enhance the knowledge and practical understanding of environmental regulations and the permitting process. Upon completion of the certificate program, students will have specialized knowledge and skills applicable to Alaska and other areas in the United States.

**Student Outcomes**

Students will be able to:
1. Apply the principles and requirements of major federal environmental laws and regulations, including the National Environmental Policy Act (NEPA) and the Clean Water Act (CWA), and state laws and regulations to projects, policy changes and other applicable activities;
2. Synthesize practical challenges facing applicants, policy-makers, agency personnel and the public in working with federal and state laws and regulations;
3. Understand the environmental data needs and data management options associated with federal and state permitting requirements for proposed development projects;
4. Specify NEPA, CWA and other state and federal permitting requirements for Alaska-based projects;
5. Understand and anticipate the positions and interests of various Alaska stakeholders (including government policy-makers, agency
Admission Requirements and Related Graduate Certificate Policies

See the beginning of this chapter for Graduate Certificates University Admissions Requirements. Admission to the Environmental Regulations and Permitting Graduate Certificate program requires that a student must have earned a Bachelor of Science in a science or engineering discipline from an accredited institution in the United States or a foreign equivalent.

Graduation Requirements

See the beginning of this Chapter for Graduate Certificates University Graduation Requirements.

Program Requirements

Students must complete the first three courses before they may enroll in the Environmental Permitting Project (fourth) course. Complete the following requirements (12 credits):

- AEST A604 Environmental Law, Regulations and Permitting 3
- AEST A605 National Environmental Policy Act 3
- AEST A606 Clean Water Act 3
- AEST A607 Environmental Permitting Project 3

FACULTY
John Olafsson, Professor, AFJAR@uaa.alaska.edu
Andy Soria, Research Assistant Professor, FF/AS3@uaf.edu

Master of Science Applied Environmental Science & Technology (MS-AEST)

This degree is designed for those students who wish to pursue specialized advanced study and original research. The MS-AEST is excellent preparation for both the practicing professional and the doctoral candidate.

Master of Applied Environmental Science & Technology (M-AEST)

This is a nonthesis degree designed for students who seek to enhance their education for professional practice without having to conduct original research.

Both options promote meaningful collaboration between the students and an interdisciplinary faculty team, and both provide an excellent foundation for a career in the applied environmental fields.

Program Objectives and Expected Outcomes

The objective of the AEST program is 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.

In keeping with these objectives, the expected outcome of the AEST program is that the graduates will have:
- An ability to use advanced methods of analysis;
- An ability to understand and apply advanced environmental engineering theory;
- An ability to understand and apply advanced scientific theory;
- An ability to integrate advanced technical information from different science and engineering disciplines;
- An ability to conduct advanced environmental science research (MS-AEST option only); and
- An ability to manage projects and function in a professional environment.

Admission Requirements

See the Admissions Requirements for Master’s Degrees at the beginning of this chapter. In addition, students must meet the requirements specified below.

In order to be considered for full admission into the program, students will be able to demonstrate:
- Successful completion of a Bachelor of Science degree from a regionally accredited undergraduate program;
- A minimum undergraduate GPA of 3.00 in the natural/physical sciences or engineering;
- Successful completion of two or more consecutive semesters (or equivalent) in two of the following subject areas: chemistry, physics, biology, or geology;
- Successful completion of one or more year of calculus; and
- Satisfactory verbal and quantitative GRE scores as determined by the admissions committee. The general GRE requirement may be waived at the discretion of the admissions committee for applicants with five or more years of professional experience in environmental engineering, environmental science or a related field.

In most instances, undergraduate degrees in the physical sciences, life sciences, or engineering will provide sufficient background to meet course prerequisites. Students without the appropriate background to meet course prerequisites may be required to complete undergraduate courses that will not be applied toward the graduate degree.

Applicants not meeting the admissions requirements may be provisionally accepted at the discretion of the admissions committee. In this case, the candidate’s continuation in the program after the first semester will be contingent upon successful completion of a student-specific remedial plan formulated by the admissions committee.

Application Procedures

All application materials must be received by the UAA Office of Admissions, per department request, by March 1 for fall admission, and October 1 for spring admission. The required application materials to be submitted to the Office of Admissions include:
- A completed UAA graduate application form;
- Official transcripts of all college-level work;
- Official GRE scores (general examination or subject-specific in a relevant subject area)

In addition, please submit to the School of Engineering:
- Three letters of recommendation from people familiar with the applicant’s technical aptitude; and
- A one-page statement of the applicant’s career goals.

Beginning the Program

Upon admission to the AEST program, students will complete the following actions:
- Meet with an academic advisor prior to the start of classes to plan coursework for the first semester of study. Academic advisors will be assigned by the admissions committee, and named in the acceptance letters sent to successful applicants;
• Select a graduate study committee (GSC) consisting of three UAA faculty members, to be chaired by the student's academic advisor. The GSC must be selected during the first semester of study; and
• Prepare a Graduate Study Plan for approval by the student's GSC by the end of the first semester of study. It is during the development of the Graduate Study Plan that the students will decide whether to pursue the MS-AEST or the M-AEST degree option. The study plan will include core competency courses and technical electives designed to meet the student's professional or research interests. The approved study plan and any subsequent changes should be submitted to the associate dean of graduate studies of the SOE, a copy filed in the department office, and the original sent to the Office of the Registrar.

Course Requirements

Courses for the AEST program must be selected from the following list of approved courses. In order to ensure that the students achieve a balanced graduate education, at least one course must be completed with a grade of B or better in each of the core competency areas: analysis, biology, chemistry, environmental engineering, and geology. The remaining technical elective credits can be selected from any of the approved courses listed below. A minimum of 21 credits must be drawn from approved 600-level courses.

Analysis

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESM A620</td>
<td>Statistics for ESM</td>
<td>(3)</td>
</tr>
<tr>
<td>STAT A402</td>
<td>Scientific Sampling</td>
<td>(3)</td>
</tr>
<tr>
<td>STAT A403</td>
<td>Regression Analysis</td>
<td>(3)</td>
</tr>
<tr>
<td>STAT A404</td>
<td>Analysis of Variance</td>
<td>(3)</td>
</tr>
<tr>
<td>STAT A405</td>
<td>Nonparametric Statistics</td>
<td>(3)</td>
</tr>
<tr>
<td>STAT A407</td>
<td>Time Series Analysis</td>
<td>(3)</td>
</tr>
<tr>
<td>STAT A408</td>
<td>Multivariate Analysis</td>
<td>(3)</td>
</tr>
<tr>
<td>STAT A601</td>
<td>Statistical Methods</td>
<td>(3)</td>
</tr>
</tbody>
</table>

Biology

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL A478</td>
<td>Biological Oceanography</td>
<td>(4)</td>
</tr>
<tr>
<td>BIOL A650</td>
<td>Advanced Microbial Ecology</td>
<td>(3)</td>
</tr>
<tr>
<td>BIOL A661</td>
<td>Advanced Molecular Biology</td>
<td>(3)</td>
</tr>
<tr>
<td>BIOL A677</td>
<td>Advanced Tundra and Taiga Ecosystems</td>
<td>(3)</td>
</tr>
<tr>
<td>BIOL A690</td>
<td>Advanced Lecture Topics in Biology</td>
<td>(1-3)</td>
</tr>
</tbody>
</table>

Chemistry

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AEST A601</td>
<td>Aquatic Process Chemistry</td>
<td>(3)</td>
</tr>
<tr>
<td>CHEM A450</td>
<td>Environmental Chemistry</td>
<td>(3)</td>
</tr>
<tr>
<td>CHEM A634</td>
<td>Advanced Instrumental Methods</td>
<td>(4)</td>
</tr>
<tr>
<td>CHEM A641</td>
<td>Advanced Biochemistry I</td>
<td>(3)</td>
</tr>
<tr>
<td>CHEM A642</td>
<td>Advanced Biochemistry II</td>
<td>(3)</td>
</tr>
</tbody>
</table>

Environmental Engineering

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AEST A602</td>
<td>Water Quality Management</td>
<td>(3)</td>
</tr>
<tr>
<td>AEST A603</td>
<td>Solid Waste Management</td>
<td>(3)</td>
</tr>
<tr>
<td>AEST A604</td>
<td>Environmental Law, Regulations and Permitting</td>
<td>(3)</td>
</tr>
<tr>
<td>AEST A605</td>
<td>National Environmental Policy Act</td>
<td>(3)</td>
</tr>
<tr>
<td>AEST A606</td>
<td>Clean Water Act</td>
<td>(3)</td>
</tr>
<tr>
<td>AEST A608</td>
<td>Fundamentals of Air Pollution</td>
<td>(3)</td>
</tr>
<tr>
<td>AEST A613</td>
<td>Remediation</td>
<td>(3)</td>
</tr>
<tr>
<td>AEST A694</td>
<td>Topics as approved by advisor</td>
<td>(3)</td>
</tr>
<tr>
<td>CE A441</td>
<td>Introduction to Environmental Engineering</td>
<td>(3)</td>
</tr>
<tr>
<td>CE A600</td>
<td>Fundamentals of Environmental Science and Engineering</td>
<td>(3)</td>
</tr>
<tr>
<td>CE A662</td>
<td>Surface Water Dynamics</td>
<td>(3)</td>
</tr>
<tr>
<td>CE A663</td>
<td>Ground Water Dynamics</td>
<td>(3)</td>
</tr>
<tr>
<td>CE A674</td>
<td>Waves, Tides, and Ocean Processes for Engineers</td>
<td>(3)</td>
</tr>
<tr>
<td>CE A677</td>
<td>Coastal Measurements and Analysis</td>
<td>(3)</td>
</tr>
<tr>
<td>CE A683</td>
<td>Arctic Hydrology and Hydraulic Engineering</td>
<td>(3)</td>
</tr>
<tr>
<td>ENVE F651</td>
<td>Environmental Risk Assessment</td>
<td>(3)</td>
</tr>
<tr>
<td>ENVE F652</td>
<td>Introduction to Toxicology for Engineers and Scientists</td>
<td>(3)</td>
</tr>
<tr>
<td>ESM A450</td>
<td>Economic Analysis and Operations</td>
<td>(3)</td>
</tr>
</tbody>
</table>

ESM A601    | Engineers and Organizations                      | (3)     |
| ESM A605    | Engineering Economy                              | (3)     |
| PM A601     | Project Management Fundamentals                   | (3)     |

Geology

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL A455</td>
<td>Permafrost</td>
<td>(3)</td>
</tr>
<tr>
<td>GEOL A457</td>
<td>Soil Genesis and Classification</td>
<td>(4)</td>
</tr>
<tr>
<td>GEOL A460</td>
<td>Environmental Geochemistry</td>
<td>(3)</td>
</tr>
<tr>
<td>GEOL A475</td>
<td>Environmental Geophysics</td>
<td>(3)</td>
</tr>
<tr>
<td>GEOL A690</td>
<td>Graduate Topics in Geology</td>
<td>(1-4)</td>
</tr>
</tbody>
</table>

Thesis

AEST A699 | AEST Thesis (1-6)

Alternate courses may be used to meet the course requirement(s) on approval by the student's graduate committee.

*UAF courses will be considered as resident credit. It is the student's responsibility to check the UAF Catalog for current course content and availability.

Graduation Requirements (MS-AEST Degree)

In order to receive an MS-AEST degree, students must:

1. Satisfy all University Requirements for the Master's Degrees listed at the beginning of this chapter;
2. Advance to candidacy prior to the beginning of the semester in which the student intends to graduate. Advancement to candidacy for the MS-AEST degree will require approval of a thesis research proposal by the graduate committee;
3. Complete 24 credits of coursework approved in advance by the student's graduate committee, and 6 credits of thesis work approved through the advancement to candidacy process. Thesis credits are accumulated under the course number AEST A699. Once a student has successfully advanced to candidacy for the MS-AEST degree, that student may not opt to complete their degree under the nonthesis option; and
4. Satisfactorily complete an oral comprehensive examination (thesis defense) during the final semester prior to graduation.

All thesis research must meet the following requirements:

• The work must contribute to the body of knowledge in the candidate'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 candidate's graduate field of study.
• The thesis, as judged by the graduate 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 will be encouraged.
• The work must demonstrate command of knowledge and skills associated with the candidate's graduate program of study.
• The work must require a level of effort consistent with 6 credit hours (Approximately 45 to 60 hours per credit hour, 270 to 360 hours total).
• The thesis format must meet general UAA requirements for format as determined by the UAA Consortium Library.

The student must defend the thesis in an oral presentation to the student's graduate committee and invited guests. The thesis defense serves as the student's required comprehensive examination. The student may select an outside reviewer approved by the dean or designee of the program to participate in the oral comprehensive examination to assure that the examination, defense, or scholarship evaluation is fair and appropriate. The outside reviewer 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.

Students who fail to pass the comprehensive examination (thesis defense) will work with their graduate advisor to develop an action plan to correct
any deficiencies noted in the comprehensive examination. This action plan may require additional coursework, research and/or independent directed study. After completing the items identified in the corrective action plan, the student will again take the comprehensive examination. Failure to pass a second time will result in dismissal from the program.

**Graduation Requirements (M-AEST Degree)**

In order to receive an M-AEST degree, students must:

1. Satisfy all University Requirements for the Master’s Degrees listed at the beginning of this chapter;
2. Advance to candidacy prior to the beginning of the semester in which the student intends to graduate. Advancement to candidacy for the M-AEST degree does not require a research proposal;
3. Complete 30 credits of coursework approved in advance by the student's graduate committee; and
4. Satisfactorily complete a written comprehensive examination during the final semester prior to graduation.

When a student is within one semester of completing the course requirements, the graduate committee will administer a comprehensive examination to evaluate the candidate's knowledge of advanced environmental science principles. The examination will be developed by a graduate faculty committee and will contain questions consistent with the student's coursework areas of concentration. The student may select an outside reviewer approved by the dean or designee of the program to participate in the examination to assure that the examination is fair and appropriate. The outside reviewer 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.

Students who fail to pass the comprehensive examination will work with their graduate advisor to develop an action plan to correct any deficiencies noted in the comprehensive examination. This action plan may require additional coursework, research and/or independent directed study. After completing the items identified in the corrective action plan, the student will again take the comprehensive examination. Failure to pass a second time will result in dismissal from the program.

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| Andy Soria, Research Assistant Professor, FFJAS3@uaf.edu |

**ARCTIC ENGINEERING**

*Engineering Building (ENGR), Room 201, (907) 786-1900 www.engr.uaa.alaska.edu/programs/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.

**Master of Science, Arctic Engineering**

The Master of Science of Arctic Engineering requires completion of a set of core courses that will prepare an engineer to understand and adapt prior engineering knowledge and skills to problems of cold regions. The program also allows students to study advanced elective courses in a particular area of specialized interest. Research activities carried out by faculty of the UAA School of Engineering provide opportunities for project reports dealing with current Arctic knowledge. A graduate advisory committee of at least three members is appointed to guide each admitted student to degree completion. Two members must be UAA Arctic Engineering faculty members. On successful completion of the program, students will have gained sufficient knowledge to:

1. Recognize natural conditions and engineering challenges that are unique to cold regions;
2. Interpret associated specialized language and units of measure;
3. Locate, interpret, and apply public information about the physical conditions of cold regions physical;
4. Apply fundamental physical principles for solutions to common cold regions engineering problems;
5. Assess need for complex specialized Arctic engineering solutions;
6. Determine physical and thermal properties, evaluate frost heave rates, and estimate heat flow in soils, prevent foundation failure due to seasonally frozen ground or permafrost by appropriate project site exploration and design of constructed features;
7. Determine mathematical and physical properties governing heat and mass transfer in cold climates;
8. Determine temperature profiles in structure walls, roofs, and foundations, predict moisture content and mass flow rates in structures;
9. Acquire, integrate, and interpret data from public archives regarding site conditions associated with planning and design of community utility systems and formulate field measurement programs to determine site conditions for planning and design;
10. Analyze properties of lake, river, and sea ice, predict behavior of ice under natural conditions, and predict ice forces on engineering structures; and
11. Apply the sum of specialized Arctic engineering knowledge and skills gained in the program toward solution of a practical engineering problem and report this to fellow specialists.

**Admission Requirements**

See the beginning of this chapter for Admission Requirements for Master’s Degrees. All students admitted to the Arctic engineering program must have previously earned a baccalaureate degree in an engineering discipline with a cumulative GPA of at least 3.00. Admitted students are also responsible for completion of prerequisites for Arctic engineering program courses, which may not have been included in their undergraduate education.

**Graduation Requirements**

See the beginning of this chapter for University Requirements for Master's Degrees.

**Major Requirements**

1. Candidates must complete the following core courses (9 credits):
   - CE A603  Arctic Engineering*  
   - CE A681  Frozen Ground Engineering  
   - ME A685  Arctic Heat and Mass Transfer  

   *Students who have completed CE A403 Arctic Engineering with a grade of C or better, or students who have passed the ES AC030 Fundamentals of Arctic Engineering or ES AC031 Introduction to Arctic Engineering before being admitted to the program must replace CE A603 with an elective, 3-credit course accepted by the student’s graduate advisory committee.*
2. Candidates must also complete at least three additional courses from the following Arctic engineering program elective courses (9 credits):

- CE A682: Ice Engineering (3)
- CE A683: Arctic Hydrology and Hydraulic Engineering (3)
- CE A684: Arctic Utility Distribution (3)
- CE A688: Snow Engineering (3)
- ME A687: Arctic Materials Engineering (3)

3. Candidates must complete additional graduate electives (9 credits) in mathematical, science or engineering subjects related to or supportive of the student's program of study, as approved by the student's advisory committee to fulfill the minimum 30-credit degree requirement. One technical undergraduate elective course at the 400 level may be applicable with prior permission of the student's advisory committee and provided a grade of B or better is achieved. All coursework applied toward degree requirements must be approved by the student's advisory committee.

4. Each student must complete the following course (3 credits) after advancement to candidacy is approved by their advisory committee. Advancement to candidacy requires prior approval of a project proposal by the student's advisory committee:

- CE A686: Engineering Project (1-6) 3
  a. The Arctic engineering project must solve a practical engineering problem to the extent that original developments by the candidate are evident in the project report.
  b. The project problem and solution must be presented in the context of the current state of the art by means of a thorough review of pertinent literature.
  c. The project must include innovative components directly involving cold regions engineering.
  d. The project must have sufficient scope to clearly demonstrate the candidate's advanced technical expertise in cold regions engineering.
  e. The project report must demonstrate command of knowledge and skills directly associated with the candidate's graduate program of study.
  f. The written project report, in the judgment of the candidate's advisory committee, must be publishable in the proceedings of a cold regions engineering specialty conference.
  g. The work must require a level of effort consistent with three semester hours of credit (approximately 45 to 60 hours per credit hour or 135 to 180 hours total effort).

5. A total of 30 credits is required for the degree.

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CIVIL ENGINEERING
Engineering Building (ENGR), Room 201, (907) 786-1900
www.engr.uaa.alaska.edu/programs/cce/ms

Students in the UAA Civil Engineering graduate program have two degree options from which to choose. The Master of Science in Civil Engineering (MSCE) degree 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) degree is designed for students who wish to further emphasize engineering practice and prefer to substitute additional classroom education for graduate research experience.

Master of Science, Civil Engineering
Program Objectives and Expected Outcomes

The objectives of the UAA MSCE program are to provide graduates with:

1. Advanced technical knowledge within one or more of the recognized sub-disciplines of civil engineering,
2. Ability to conceive and conduct an advanced research program, and
3. Ability to effectively communicate research results.

In keeping with these objectives, the expected student learning outcomes of the UAA MSCE program include:

1. An ability to use advanced methods of analysis,
2. An ability to understand advanced civil engineering theory,
3. An ability to conduct advanced civil engineering research,
4. An ability to apply advanced engineering theory to the design of civil engineering systems,
5. An ability to work effectively within the management framework of organizations responsible for the practice of engineering.

Admission Requirements

See the beginning of this chapter for Graduate School Admission Requirements and deadlines. All students must hold a baccalaureate degree in an engineering discipline.

Advancement to Candidacy

Advancement to candidacy requires approval of a program of study and a thesis proposal following no more than 9 credit hours of coursework applicable to the degree requirements.

Graduation Requirements

In order to receive the Master of Science in Civil Engineering, students must complete 30 credits of course and thesis work approved in advance by the student's graduate committee, of which 6 credits will be CE A699 Thesis. Students must complete at least one course in each of the core competency areas of analysis, theory, design and project management with a grade of B or better. No more than one 400-level course may be included with prior approval of the student's graduate committee.

Analysis

- MATH A422: Partial Differential Equations (3)
- MATH A423: Advanced Engineering Mathematics (3)
- MATH A426: Numerical Methods (3)
- STAT A402: Scientific Sampling (3)
- STAT A601: Statistical Methods (3)

Theory

- AEST A601: Aquatic Process Chemistry (3)
- AEST A608: Fundamentals of Air Pollution (3)
- CE A600: Fundamentals of Environmental Science and Engineering (3)
- CE A603: Arctic Engineering (3)
- CE A610: Engineering Seismology (3)
- CE A631: Structural Finite Elements (3)
- CE A633: Structural Dynamics (3)
- CE A662: Surface Water Dynamics (3)
- CE A663: Ground Water Dynamics (3)
- CE A674: Waves, Tides, and Ocean Processes for Engineers (3)
- CE A676: Coastal Engineering (3)
- CE A677: Coastal Measurements and Analysis (3)
- CE A682: Ice Engineering (3)
- CE A683: Arctic Hydrology and Hydraulic Engineering (3)
- ME A664: Corrosion Processes and Engineering (3)

Design

- AEST A602: Water Quality Management (3)
- AEST A603: Solid Waste Management (3)
- AEST A613: Remediation (3)
- CE A605: Chemical and Physical Water and Wastewater Treatment Processes (3)
In keeping with these objectives, the expected student learning outcomes of the UAA MSCE program include:

1. An ability to use advanced methods of analysis,
2. An ability to understand advanced civil engineering theory,
3. An ability to conduct advanced civil engineering research,
4. An ability to apply advanced engineering theory to design of civil engineering systems, and
5. An ability to work effectively within the management framework of organizations responsible for the practice of engineering.

**Admission Requirements**

See the beginning of this chapter for Graduation Admission Requirements and deadlines. All students must hold a baccalaureate degree in an engineering discipline.

**Program Requirements**

Complete 30 credits of coursework approved by the student's graduate committee, of which 3 credits will be CE A686 Civil Engineering Project.

**Graduation Requirements**

In order to receive the Master of Civil Engineering degree, students must complete 30 credits of coursework approved in advance by the student's graduate committee, of which 3 credits will be CE A686 Civil Engineering Project. Students must complete at least one course in each of the core competency areas of analysis, theory, design and project management, as listed above, with a grade of B or better. No more than one 400-level course may be included with prior approval of the student's graduate committee.

**Civil Engineering Project Requirement**

Within the last 9 credits applicable to the degree, each student must complete CE A686. The Civil Engineering project must solve a practical engineering problem to the extent that original developments by the candidate are evident in the project report.

1. 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.
2. The project must include innovative components directly involving modern practice of civil engineering.
3. The project must have sufficient scope to clearly demonstrate the candidate's advanced technical expertise in civil engineering.
4. The project report must demonstrate command of knowledge and skills directly associated with the candidate's graduate program of study.
5. The written project report, in the judgment of the candidate's graduate committee, must be publishable in the proceedings of a civil engineering specialty conference.
6. The work must require a level of effort consistent with three semester hours of credit (approximately 45 to 60 hours per credit hour or 135 to 180 hours total effort).
7. The project proposal, submitted with the student's application to candidacy, must present evidence that the above requirements will be satisfied and will generally consist of an introduction with an explicit problem statement, a literature review, and one or more sections describing the information, research, and analytical methods to be applied.
8. The project is to be orally presented to the student's graduate committee and invited guests.

**Elective Requirement**

Each student must complete additional elective courses as approved in advance by their graduate committee to meet the requirement for 30 total credit hours.

**Master of Civil Engineering Program Objectives and Expected Outcomes**

The objectives of the UAA MCE program are to provide graduates with:

1. Advanced technical knowledge within one or more of the recognized sub-disciplines of civil engineering,
2. Ability to conduct advanced engineering analysis and design, and
3. Ability to effectively communicate technical results.

In keeping with these objectives, the expected student learning outcomes of the UAA MSCE program include:

1. An ability to use advanced methods of analysis,
2. An ability to understand advanced civil engineering theory,
3. An ability to conduct advanced civil engineering research,
4. An ability to apply advanced engineering theory to design of civil engineering systems, and
EARTHQUAKE ENGINEERING

Graduate Certificate, Earthquake Engineering

The UAA School of Engineering offers a sequence of courses leading to a Graduate Certificate in Earthquake Engineering. This certificate program is intended to provide specialized education to enhance the theoretical knowledge and practical skills of civil engineers to deal with earthquake-resistant structural design. Upon completion of the certificate program, students will have specialized knowledge and skills applicable to various aspects of earthquake engineering issues.

Student Outcomes

Upon the completion of this certificate, students will be able to:

1. Evaluate seismograms and perform site response analysis.
2. Analyze earthquake characteristics and associated effects on structures, including linear and nonlinear responses.
3. Apply the basic principles for seismic design and construction of structures in accordance with the provisions of International Building Codes.
4. Understand the concepts of dynamic equations of motion and perform analysis for dynamic systems in civil engineering applications.
5. Evaluate dynamic soil properties; analyze ground response and soil-structure interaction effects, and other geotechnical engineering problems.
6. Evaluate the magnitude and distribution of seismic and other probable loads for strength, stress and load-resistant factor design.

Admission Requirements and Related Graduate Certificate Policies

See the beginning of this chapter for Graduate Certificates University Requirements. Admission to the Earthquake Engineering Graduate Certificate program requires that a student must have earned a Bachelor of Science in an engineering discipline from an ABET, Inc.,-accredited institution in the United States or a foreign equivalent.

Graduation Requirements

See the beginning of this chapter for Graduate Certificates University Requirements.

Program Requirements

Complete the following requirements (15 credits):

- CE A610 Engineering Seismology 3
- CE A611 Geotechnical Earthquake Engineering 3
- CE A634 Structural Earthquake Engineering 3
- CE A636 Multi-Story Building Structural Design (3) 3
- CE A637 Earthquake Resistant Structural Design (3)
- CE A639 Loads on Structures 3

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ENGINEERING MANAGEMENT AND SCIENCE MANAGEMENT

University Lake Annex (ULA), (907) 786-1999
www.uaa.alaska.edu/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. It includes human relations, financial, economic, quantitative, technical, and legal subjects useful in solving problems of management.

Master of Science, Engineering Management

Master of Science, Science Management

Admission Requirements

See the Admissions Requirements for Master’s Degrees at the beginning of this chapter.

Students who are working toward the Master of Science in Engineering Management must hold a Bachelor of Science or Master of Science in an engineering discipline. Students enrolling in the Master of Science in Science Management must hold a Bachelor of Science or Master of Science in a scientific field. Students are expected to be proficient in the use of computers for word processing, spreadsheet analysis, and scientific calculations. A candidate should have had on-the-job experience in engineering or science.

Graduation Requirements

Students must earn a 3.00 GPA in graduate courses that are part of the program. No course included in the credits of a student’s program may be counted toward another degree. A student may not repeat a course that is part of their program if they have received a C or be credited in courses listed on their official Graduate Studies Plans.

Program Requirements

Substitutions for one or more of the courses listed below may be permitted if similar courses are included in the student’s previous academic background. No more than 9 semester credits of appropriate graduate-level coursework completed at other institutions with a grade of A or B may be transferred and applied toward the total 30 credits of required and elective courses. Both substitutions and transfer of credit must be approved by the department.

1. Complete the following requirements:
   - Core Curriculum (21 credits minimum)
     - ESM A601 Engineers in Organizations (3)
     - ESM A605 Engineering Economy (3)
     - ESM A608 Legal Environment for Engineering Management (3)
     - ESM A610 Cost Estimating (3)
     - ESM A620 Statistics for ESM or equivalent (3)
     - ESM A621 Operations Research (3)
     - PM A601 Project Management Fundamentals (PM fee) (3)
     - Elective Curriculum (6 credits minimum)
       - Any ESM/PM/Engineering/Science/Business Administration or other graduate courses approved by the student’s ESM advisor.
   - ESM elective courses are:
     - ESM A613 Management of Technical People (3)
     - ESM/BA A617 Technology Management (3)
     - ESM A619 Computer Simulation of Systems (3)
     - ESM A698 Individual Research (3)

2. To register for ESM A684 or ESM A699 students must have a 3.00 GPA or better in courses listed on their official Graduate Studies Plans:
Graduate Programs, School of Engineering

Requirements.

1. Earned at least a bachelor’s degree in engineering, science, or an equivalent area from an ABET, Inc.-accredited institution in an engineering discipline.
2. Completed an undergraduate statistics course with a B or better.
3. A minimum of 30 credits is required for the degree.

Admission to the Port and Coastal Engineering Graduate Certificate program requires that a student must have earned a Bachelor of Science in an engineering discipline from an ABET, Inc.-accredited institution in the United States or a foreign equivalent.

Graduation Requirements

See the beginning of this chapter for Graduate Certificates University Requirements.

Program Requirements

Complete the following three courses and one of two alternative fourth courses, as noted (12 credits).

- 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) 3
- GEO A433 Hydrographic Surveying (3)

A student who earns the Port and Coastal Engineering Graduate Certificate may apply up to 9 credits from the certificate program toward other graduate degrees at UAA.

FACULTY

LuAnn Piccard, Assistant Professor, AFLP@uaa.alaska.edu
Steve Wang, Assistant Professor, AFHSWI@uaa.alaska.edu

PORT AND COASTAL ENGINEERING

The UAA School of Engineering offers a cohesive sequence of courses in the theory and practice of port and coastal engineering. The series is intended to provide specialized education to enhance the theoretical knowledge and practical skills of graduate engineers to deal with engineering problems of the coastal zone. Upon completion of the certificate program, students will have specialized knowledge and skills applicable in all the coastal zones and oceans of the world.

Student Outcomes

Abilities to:

1. Characterize oceans, seas and estuaries in terms of physical dimensions, sediments, water chemistry, major wind patterns and currents, and wave climate;
2. Plan and design port and harbor features suited to demands of vessels and cargo transfer operations and to local oceanographic and nearshore conditions;
3. Define nearshore coastal processes in terms of wind, wave and current climates and their interaction with sediments and local features of the shoreline;
4. Quantify natural physical processes or human activities responsible for coastal erosion, and design shore protection works suited to the local environmental setting; and
5. Accomplish oceanographic and engineering data collection, including water level measurements and hydrographic surveys, analyze data, and interpret analytical results to define nearshore bathymetry, waves, tides and coastal processes.

Graduate Certificate, Port and Coastal Engineering

Admission Requirements and Related Graduate Certificate Policies

See the beginning of this chapter for Graduate Certificate University Requirements.

Admission to the graduate program in project management is offered to applicants who provide sufficient evidence that they meet the requirements for study at an advanced level. Applicants must meet the minimum admissions requirements of the University of Alaska Anchorage. In addition, an entering master’s student will normally have:

1. Earned at least a bachelor’s degree in engineering, science, or equivalent areas (as agreed to by the department chairman), from an accredited university with a minimum of a B average in the last two years of undergraduate work.
2. Completed an undergraduate statistics course with a B or better.

FACULTY

Orson Smith, Professor, AFOPS@uaa.alaska.edu
Thomas Ravens, Associate Professor, AFTMR@uaa.alaska.edu

PROJECT MANAGEMENT

University Center (UC), Room 155, (907) 786-1924
www.uaa.alaska.edu/pm

Project management has become essential in virtually all areas of business and industry, including engineering, construction, oil and gas, mining, communications, health care, information technology, utilities, education, military, government, transportation, retail and other sectors. While acknowledging and encouraging the application of project management skills and approaches in all these areas, the Master of Science in Project Management will concentrate on technology-driven projects.

The program is organized around the nine knowledge areas defined in the Project Management Body of Knowledge (PMBOK® Guide), a globally recognized standard for managing projects in today’s marketplace. The PMBOK® Guide is approved as an American National Standard (ANS) by the American National Standards Institute (ANSI). Students completing the program will be fully trained to plan and execute engineering and technology projects and to meet user requirements.

Master of Science, Project Management

Admission Requirements

See the Admissions Requirements for Master’s Degrees at the beginning of this chapter.

Admission to the graduate program in project management is offered to applicants who provide sufficient evidence that they meet the requirements for study at an advanced level. Applicants must meet the minimum admissions requirements of the University of Alaska Anchorage. In addition, an entering master’s student will normally have:

1. Earned at least a bachelor’s degree in engineering, science, or equivalent areas (as agreed to by the department chairman), from an accredited university with a minimum of a B average in the last two years of undergraduate work.
2. Completed an undergraduate statistics course with a B or better.
3. Become proficient in the use of computers for word processing and spreadsheet analysis.
4. Completed a minimum of two years of appropriate project management experience in a science or engineering related field.
5. Obtained three letters of recommendation from professors, former or current employers or supervisors who are familiar with the applicant’s work experience.
6. Provided a statement of professional career objectives related to the study of project management.

**Graduation Requirements**

The University Requirements for Master’s Degrees must be met along with the program requirements that follow.

**Program Requirements**

1. Complete the following requirements (33 credits):

   - PM A601 Project Management Fundamentals 3
   - PM A610 Project Scope Management 3
   - PM A612 Project Time Management 3
   - PM A614 Project Cost Management 3
   - PM A616 Project Quality Management 3
   - PM A620 Project Human Resource Management 3
   - PM A622 Project Communications Management 3
   - PM A624 Project Risk Management 3
   - PM A626 Project Procurement Management 3
   - PM A685 Project Management Case Study and Research 6

   *It is strongly recommended that PM A601 Project Management Fundamentals be taken in the student’s first semester.*

   *As a prerequisite for PM A685 registration, students must have a cumulative 3.00 GPA or better in courses listed on their official Graduate Studies Plans.*

2. A total of 33 credits is required for the degree.

**Questions:**

School of Engineering
Project Management (PM) Department
(907) 786-1924
aypm@uaa.alaska.edu

Mailing Address:
University of Alaska Anchorage
3211 Providence Drive
Anchorage, AK 99508-4614
(907) 786-1924
(907) 786-1935 fax

**FACULTY**

LuAnn Piccard, Assistant Professor, AFLP@uaa.alaska.edu
Jang Ra, Professor/Chair, AFJWR@uaa.alaska.edu
ACCT A051  Recordkeeping for Small Business  1 CR
Contact Hours: 1 + 0
Offered only at Matanuska-Susitna College.
Special Note: Does not satisfy any degree requirements even as an elective.

ACCT A101  Principles of Financial Accounting I  3 CR
Contact Hours: 3 + 0
Registration Restrictions: MATH A055 with minimum grade of C or approved UAA mathematics placement test score.
Special Note: ACCT A101 and ACCT A102 will satisfy requirement for ACCT A201. AAS accounting majors must take ACCT A101 and ACCT A102.

ACCT A102  Principles of Financial Accounting II  3 CR
Contact Hours: 3 + 0
Prerequisites: ACCT A101 with minimum grade of C.
Special Note: ACCT A101 and ACCT A102 will satisfy requirement for ACCT A201. AAS accounting majors must take ACCT A101 and ACCT A102.

ACCT A120  Bookkeeping for Business I  3 CR
Contact Hours: 3 + 0
Special Note: May be offered as either classroom or open-entry, individualized course.

ACCT A201  Principles of Financial Accounting  3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A105 with minimum grade of C or Accuplacer-Col1/Col2 Math with score of 50% or MATH A107 or MATH A108 or MATH A109 or MATH A172 or MATH A200 or MATH A201 or MATH A272.
Registration Restrictions: MATH A105 with minimum grade of C or approved UAA mathematics placement test score.
Special Note: ACCT A101 and ACCT A102 will satisfy requirement for ACCT A201. AAS accounting majors must take ACCT A101 and ACCT A102.

ACCT A202  Principles of Managerial Accounting  3 CR
Contact Hours: 3 + 0
Prerequisites: CIS A110 and [ACCT A101 with minimum grade of C and ACCT A102 with minimum grade of C] or ACCT A201 with minimum grade of C.

ACCT A210  Income Tax Preparation  3 CR
Contact Hours: 3 + 0
Prerequisites: [ACCT A101 and ACCT A102] or ACCT A201 and CIS A110.
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.

ACCT A216  Accounting Information Systems I  3 CR
Contact Hours: 3 + 0
Prerequisites: [ACCT A101 with minimum grade of C and ACCT A102 with minimum grade of C] or ACCT A201 with minimum grade of C.

ACCT A222  Introduction to Computerized Accounting  3 CR
Contact Hours: 3 + 0
Prerequisites: [ACCT A101 and ACCT A102] or ACCT A201 and CIS A110.
Special Fees.
Introduction to processing accounting information using commercial accounting software. Illustrates conversion from manual to computerized accounting system; includes maintenance of chart of accounts and all master files; processing sales, receivables, and cash receipts, purchases, payables, and cash payments; preparation of financial statements and other reports. Includes only minimal coverage of the payroll function.

ACCT A225  Payroll Accounting  3 CR
Contact Hours: 3 + 0
Prerequisites: [ACCT A101 and ACCT A102] or ACCT A201 and CIS A110.
Special Fees.
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.

ACCT A230  Workpaper Preparation and Presentation  3 CR
Contact Hours: 3 + 0
Prerequisites: [ACCT A101 with minimum grade of C and ACCT A102 with minimum grade of C] and ACCT A222 with minimum grade of C and CIS A110 with minimum grade of C.

ACCT A295  Entry-Level Accounting Internship  3 CR
Contact Hours: 0 + 9
Prerequisites: [ACCT A101 with minimum grade of C and ACCT A102 with minimum grade of C] and ENGL A111 and [COMM A111 or COMM A235 or COMM A257 or COMM A241].
Registration Restrictions: Permission of College of Business & Public Policy Accounting Faculty Internship Coordinator; Cumulative GPA of 2.75 or higher; must be an AAS Accounting major.
Grade Mode: Pass/No Pass.
Special Fees.
Special Note: May be repeated for credit, but only 3 credits will apply to degree requirements.

ACCT A301  Intermediate Accounting I  3 CR
Contact Hours: 3 + 0
Prerequisites: ACCT A202 with minimum grade of C and ACCT A216 with minimum grade of C.
Registration Restrictions: College of Business & Public Policy majors must be admitted to upper-division standing.

ACCT A303  Intermediate Accounting II  3 CR
Contact Hours: 3 + 0
Prerequisites: ACCT A202 with minimum grade of C and ACCT A216 with minimum grade of C.
Registration Restrictions: College of Business & Public Policy majors must be admitted to upper-division standing.

ACCT A310  Auditing Process I  3 CR
Contact Hours: 3 + 0
Prerequisites: ACCT A210 with minimum grade of C and ACCT A222 with minimum grade of C.
Registration Restrictions: College of Business & Public Policy majors must be admitted to upper-division standing.

ACCT A311  Auditing Process II  3 CR
Contact Hours: 3 + 0
Prerequisites: ACCT A210 with minimum grade of C and ACCT A222 with minimum grade of C.
Registration Restrictions: College of Business & Public Policy majors must be admitted to upper-division standing.

ACCT A320  Financial Accounting Theory  3 CR
Contact Hours: 3 + 0
Prerequisites: [ACCT A101 with minimum grade of C and ACCT A102 with minimum grade of C] and ENGL A111 and [COMM A111 or COMM A235 or COMM A257 or COMM A241].
Registration Restrictions: Permission of College of Business & Public Policy Accounting Faculty Internship Coordinator; Cumulative GPA of 2.75 or higher; must be an AAS Accounting major.
Grade Mode: Pass/No Pass.
Special Fees.
Special Note: May be repeated for credit, but only 3 credits will apply to degree requirements.

ACCT A321  Advanced Financial Accounting Theory  3 CR
Contact Hours: 3 + 0
Prerequisites: ACCT A210 with minimum grade of C and ACCT A222 with minimum grade of C.
Registration Restrictions: College of Business & Public Policy majors must be admitted to upper-division standing.

ACCT A495  Special Topics  3 CR
Contact Hours: 0 + 9
Prerequisites: [ACCT A101 with minimum grade of C and ACCT A102 with minimum grade of C] and ENGL A111 and [COMM A111 or COMM A235 or COMM A257 or COMM A241].
Registration Restrictions: Permission of College of Business & Public Policy Accounting Faculty Internship Coordinator; Cumulative GPA of 2.75 or higher; must be an AAS Accounting major.
Grade Mode: Pass/No Pass.
Special Fees.
Special Note: May be repeated for credit, but only 3 credits will apply to degree requirements.

ACCT A900  Independent Study  3 CR
Contact Hours: 3 + 0
Prerequisites: ACCT A202 with minimum grade of C and ACCT A216 with minimum grade of C.
Registration Restrictions: College of Business & Public Policy majors must be admitted to upper-division standing.
ACCT A302 Intermediate Accounting II 3 CR
Contact Hours: 3 + 0
Prerequisites: ACCT A301 with minimum grade of C.
Registration Restrictions: College of Business & Public Policy majors must be admitted to upper-division standing.

A continuation of the study of intermediate accounting including the principles governing financial reporting of investments, liabilities, stockholders' equity, revenues and cash flows.

ACCT A310 Income Tax 3 CR
Contact Hours: 3 + 0
Prerequisites: ACCT A202 with minimum grade of C and ACCT A216 with minimum grade of C.
Registration Restrictions: College of Business & Public Policy majors must be admitted to upper-division standing.

A study of the federal income tax law as it applies to individuals, sole proprietors, and property transactions. Emphasis is on research, theory, application, and tax planning.

ACCT A316 Accounting Information Systems II 3 CR
Contact Hours: 3 + 0
Prerequisites: ACCT A202 with minimum grade of C and ACCT A216 with minimum grade of C.
Registration Restrictions: College of Business & Public Policy majors must be admitted to upper-division standing.

Studies the Accounting Information System (AIS) as an integral component of an enterprise information system. Emphasizes data modeling and database design of accounting systems using the Resources-Events-Agents (REA) model as the springboard toward the design of AIS components in a relational database.

ACCT A342 Managerial Cost Accounting 3 CR
Contact Hours: 3 + 0
Prerequisites: ACCT A202 with minimum grade of C.
Registration Restrictions: College of Business & Public Policy majors must be admitted to upper-division standing.

Accounting as a planning and control device is studied by applying the concepts of cost flow, job order and process costing, flexible budgeting, standard cost analysis and relevant costing models.

ACCT A401 Advanced Accounting 3 CR
Contact Hours: 3 + 0
Prerequisites: ACCT A302 with minimum grade of C.
Registration Restrictions: College of Business & Public Policy majors must be admitted to upper-division standing.

The study of accounting for expanded business entities. Topics include: corporate purchase consolidations; partnership formation and dissolution; and foreign currency transactions, translations, and hedges.

ACCT A410 Advanced Income Tax 3 CR
Contact Hours: 3 + 0
Prerequisites: ACCT A302 with minimum grade of C and ACCT A310 with minimum grade of C.
Registration Restrictions: College of Business & Public Policy majors must be admitted to upper-division standing.

Special Fees.

The study of the federal income tax law as it applies to partnerships and corporations. Emphasis is on research, theory, application, and tax planning.

ACCT A420 Fraud Examination 3 CR
Contact Hours: 3 + 0
Prerequisites: ACCT A301.
Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

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 analysis techniques.

ACCT A430 Governmental and Non-Profit Accounting 3 CR
Contact Hours: 3 + 0
Prerequisites: ACCT A301.
Registration Restrictions: College of Business & Public Policy majors must be admitted to upper-division standing.

Special Note: Offered Fall Semesters.

Accounting and financial reporting for governmental and non-profit entities, including municipalities; states, the federal government, schools, hospitals, universities, and health and welfare organizations. The fund structure provides a foundation for understanding these entities.
Course Descriptions

ADT A140     Automotive Engine Repair     3 CR
Contact Hours: 2 + 2
Prerequisites: ADT A102.
Special Fees.
Introduces skills essential to diagnose, repair, overhaul, and recondition automotive internal combustion engines. Includes cylinder head, valve train, and engine block service.

ADT A150     Brake Systems                 4 CR
Contact Hours: 2 + 4
Prerequisites: ADT A121.
Special Fees.
Theory, diagnosis, and repair of automotive brake systems.

ADT A151     Medium/Heavy Duty Engine Repair 3 CR
Contact Hours: 3 + 0
Corequisite: ADT A153.
Introduces theory of design, operation, diagnosis, disassembly, repair, and service procedures of engines used on medium and heavy equipment.

ADT A152     Heavy Duty Suspension and Steering 4 CR
Contact Hours: 2 + 4
Special Fees.
Special Note: Students are expected to provide the basic hand tools needed to participate in lab activities. See faculty advisor for tool list.
Introduces the design, operation, diagnosis, disassembly, repair, and service procedures to the suspension and steering systems on medium and heavy duty equipment.

ADT A153     Medium/Heavy Engine Lab         3 CR
Contact Hours: 0 + 9
Corequisite: ADT A151.
Special Fees.
Special Note: Students are expected to provide the basic hand tools needed to participate in lab activities. See faculty advisor for tool list.
Applies principles of design, operation, diagnosis, disassembly, hands-on repair and service procedures on medium/heavy duty engines.

ADT A155     Heavy Duty Brake Systems       4 CR
Contact Hours: 2 + 4
Special Fees.
Special Note: Students are expected to provide the basic hand tools needed to participate in lab activities. See faculty advisor for tool list.
Introduces theory, operation, diagnosis, repair, and service procedure of brake systems on medium and heavy duty equipment.

ADT A156     Heavy Duty Maintenance Inspection 6 CR
Contact Hours: 2 + 8
Prerequisites: ASSET Numerical Skills with score of 43 and ASSET Reading Skills with score of 43 and ASSET Writing Skills with score of 47.
Registration Restrictions: Student must be eligible to enroll in ENGL A111 and MATH A055.
Special Fees.
Special Note: Students are expected to provide the basic hand tools needed to participate in lab activities. See faculty advisor for tool list.
Introduces regulations and maintenance procedures on medium and heavy duty equipment. Includes hands on maintenance, applications of maintenance scheduling, safety procedures and Department of Transportation compliance, verification, and documentation.

ADT A160     Manual Drive Trains and Axes   4 CR
Contact Hours: 2 + 4
Prerequisites: ADT A102.
Special Fees.
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.

ADT A162     Suspension and Alignment       4 CR
Contact Hours: 2 + 4
Prerequisites: ADT A121.
Special Fees.
Modern automotive suspension, alignment, and steering theory, inspection, service, and adjustments including four wheel alignment.

ADT A195     Automotive Practicum I         1-6 CR
Contact Hours: 0 + 5-30
Registration Restrictions: At least 12 credits of advisor approved ADT program technical courses and a valid Alaska driver's license.
Special Note: Although students may enroll in a maximum of 16 credits of Practicum I, only 6 credits apply to the Certificate in Automotive Technology, Non-Transcribed Departmental Certificate of Completion in Automotive Electrical; Automotive Brakes; Suspension and Alignment; and Automotive Power Trains; and the AAS degree in Automotive Technology.
Provides supervised workplace experience in selected industry settings. Integrates knowledge and practice to achieve basic-level skill competencies.

ADT A202     Auto Fuel and Emissions Systems 4 CR
Contact Hours: 3 + 2
Special Fees.
Presented 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 CR
Contact Hours: 2 + 2
Prerequisites: ADT A122.
Special Fees.
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.

ADT A225     Auto Heating and A/C            3 CR
Contact Hours: 2 + 2
Prerequisites: ADT A131.
Special Fees.
Theory, diagnosis and repair of automotive heating and air conditioning systems.

ADT A227     Auto Electrical III             3 CR
Contact Hours: 2 + 2
Prerequisites: ADT A131.
Special Fees.
Special Note: Specialty tools required.
Theory, diagnosis and repair of automotive electrical and electronic systems, to include accessories.

ADT A260     Electronic and Automatic Transmissions 3 CR
Contact Hours: 2 + 2
Prerequisites: ADT A131.
Special Fees.
Applies theory, diagnosis, and repair of modern automatic transmissions, including application devices, friction materials, seals, gaskets, electronic controls, adaptive strategies, and valve bodies.

ADT A266     Heavy Duty Power Systems Lab    4 CR
Contact Hours: 0 + 12
Prerequisites: ADT A156.
Special Fees.
Special Note: Students are expected to provide the basic hand tools needed to participate in lab activities. See faculty advisor for tool list.
Covers design, operation, repair, service procedures and testing of hydraulics, pneumatics, drive train, buckets, blades, undercarriages, and diesel engines used in medium and heavy duty applications.

ADT A267     Heavy Duty Fuel Systems         4 CR
Contact Hours: 2 + 4
Prerequisites: ADT A156.
Special Fees.
Special Note: Students are expected to provide the basic hand tools needed to participate in lab activities. See faculty advisor for tool list.
Covers design, operation, diagnosis, repair, and service procedures of fuel systems on engines used in the medium and heavy duty diesel industry.

ADT A268     Hydraulics and Pneumatics       4 CR
Contact Hours: 2 + 4
Prerequisites: ADT A156.
Special Fees.
Special Note: Students are expected to provide the basic hand tools needed to participate in lab activities. See faculty advisor for tool list.
Presents design, operation, diagnosis, disassembly, repair, and service procedures of hydraulic and pneumatic systems on mid to heavy duty equipment.
AEST A606  Clean Water Act  3 CR  
Contact Hours: 3 + 0  
Prerequisites: Bachelor of Science degree in a science or engineering discipline.  
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.  

AEST A607  Environmental Permitting Project  3 CR  
Contact Hours: 3 + 0  
Prerequisites: AEST A604 with minimum grade of B and AEST A605 with minimum grade of B.  
Registration Restrictions: Admission to Applied Environmental Science and Technology graduate program.  
Explores the complex relationship between environmental regulatory and permitting requirements and their application to engineering and science projects.  

AEST A608  Fundamentals of Air Pollution  3 CR  
Contact Hours: 3 + 0  
Prerequisites: AEST A604 with minimum grade of B and AEST A605 with minimum grade of B.  
Registration Restrictions: Registrants must be enrolled in the AEST, CE, or BIOL graduate programs, or gain instructor approval.  
Special Fees.  

AEST A613  Remediation  3 CR  
Contact Hours: 3 + 0  
Prerequisites: AEST A604 with minimum grade of B and AEST A605 with minimum grade of B.  
Registration Restrictions: Registrants must be enrolled in the AEST, CE, or BIOL graduate programs, or gain instructor approval.  
Special Fees.  
Fundamentals and applications of technologies for the remediation of contaminated sites. Site characterization techniques and fundamental microbial, chemical, and physical concepts are presented to provide a basis for the design and operation of specific on-site and in-situ technologies.  

AEST A698  Individual Research  1-6 CR  
Contact Hours: 1-6 + 0  
Prerequisites: AEST A604 with minimum grade of B and AEST A605 with minimum grade of B.  
Registration Restrictions: Registrants must be enrolled in the AEST, CE, or BIOL graduate programs, or gain instructor approval.  
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.  

AEST A699  AEST Thesis  1-6 CR  
Contact Hours: 1-6 + 0  
Registration Restrictions: Registrants must be enrolled in the AEST graduate program.  
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.  

AET - Architectural & Engineering Technology  
Offered through the Community & Technical College  
University Center (UC), Room 130, 786-6465  
www.uaa.alaska.edu/ctc/programs/cdt/aet/index.cfm  

AET A100  Fundamentals of Drafting  3 CR  
Contact Hours: 1 + 2  
Offered only at Matanuska-Susitna College.  
Special Fees.  
Special Note: For non-majors only.  
Basic course in college drafting, designed to provide students with the fundamental skills and knowledge necessary to communicate using language of industry.
Course Descriptions

AET A101  Fundamentals of CADD for Building Construction  4 CR
Contact Hours: 2 + 4
Registration Restrictions: Proof of eligibility for placement into MATH A105 and ENGL A111.
Crosslisted with: CM A101.
Special Fees.
Introduces basic CADD (computer aided drafting and design) skills necessary in civil, architectural, structural, mechanical, and electrical drafting within the construction industry. Defines the working relationship between design and construction professionals and drafters/technicians.

AET A102  Methods of Building Construction  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Proof of eligibility for placement into MATH A105 and ENGL A111.
Crosslisted with: CM A102.
Special Fees.
Introduces basic knowledge of building materials, technical specifications, techniques, and systems. Outlines structural systems, construction processes, and assemblies. Includes a field project involving student team research of current Alaskan building type.

AET A111  Civil Drafting  3 CR
Contact Hours: 2 + 3
Prerequisites: AET A102 and AET A181.
Special Fees.
Introduces technical skills needed by drafters and technicians to work with civil engineers and surveyors. Includes office practices, staff relationships, and civil drawing production. Develops computer-aided drafting skills for mapping used in site development.

AET A121  Architectural Drafting  3 CR
Contact Hours: 2 + 3
Prerequisites: AET A102 and AET A181.
Special Fees.
Introduces technical skills needed by architectural drafters and technicians to work with architects. Includes office practices, staff relationships, and architectural drawing production. Develops computer-aided drafting skills in architectural drawing symbols, conventions, dimensioning systems, reference systems, sheet organization, code requirements, and research methods for detailing light commercial buildings.

AET A123  Codes and Standards  3 CR
Contact Hours: 3 + 0
Prerequisites: AET A101 and AET A102.
Crosslisted with: CM A123.
Special Fees.
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.

AET A131  Structural Drafting  3 CR
Contact Hours: 2 + 3
Prerequisites: AET A102 and AET A181.
Special Fees.
Introduces technical skills needed by structural drafters and technicians to work with structural engineers. Includes office practices, staff relationships, and structural drawing production. Develops computer-aided drafting skills in symbols, conventions, dimensioning systems, sheet organizations, code analysis and research methods for steel, wood, and reinforced concrete buildings.

AET A142  Mechanical and Electrical Technology  4 CR
Contact Hours: 3 + 2
Prerequisites: AET A101 and AET A102.
Crosslisted with: CM A142.
Special Fees.
Introduces the basic mechanical and electrical systems required in all buildings for the safety, health, comfort, and convenience of occupants. Emphasizes design criteria, code requirements, and interpretation of construction drawings.

AET A143  Mechanical and Electrical Drafting  3 CR
Contact Hours: 2 + 3
Prerequisites: AET A102 and AET A181.
Special Fees.
Introduces technical analysis, theory, code requirements, CADD techniques, and construction drafting methodology to produce construction drawings for mechanical and electrical building systems. Includes drafting conventions, drawing symbols, terminology, and research methods for residential and commercial building mechanical and electrical systems and equipment.

AET A171  Building Your Own Home  3 CR
Contact Hours: 1 + 1
Registration Restrictions: Basic high school English and math skills recommended.
Special Fees.
Special Note: Does not meet AET certificate or degree requirements.
Introduces practical techniques and methods for planning, designing, constructing and remodeling owner-built single-family houses.

AET A181  Intermediate CADD for Building Construction  4 CR
Contact Hours: 2 + 4
Prerequisites: AET A101 or CM A101.
Special Fees.
Develops intermediate level CADD (computer-aided design and drafting) skills for architectural, civil, structural, mechanical and electrical drawings used in building construction. Includes 3-D space coordinate systems, surface modeling, and solid modeling.

AET A213  Civil Technology  4 CR
Contact Hours: 2 + 4
Prerequisites: AET A101 and AET A102.
Crosslisted with: CM A213.
Special Fees.
Outlines elements of civil design, including soils and soil mechanics, foundations, roads, utilities using local, state, and federal regulations. Students will also be introduced to elements of construction surveying.

AET A231  Structural Technology  4 CR
Contact Hours: 2 + 4
Prerequisites: AET A101 and AET A102.
Crosslisted with: CM A231.
Special Fees.
Examines structural theory and the physical principles that underlie structural behavior. Includes the use of materials in a manner to maintain structural stability against the natural forces of gravity, wind, snow, and earthquakes. Covers connection detailing and code requirements for wood, steel, and reinforced concrete.

AET A282  Advanced CADD Techniques  4 CR
Contact Hours: 2 + 4
Prerequisites: AET A181.
Special Fees.
Continues skill development in CADD (computer-aided design and drafting) at an advanced level for the production of architectural, civil, structural, mechanical, and electrical drawings used in construction. Includes 3-D space, shading, rendering, and animation techniques.

AET A283  CADD Software Customization  3 CR
Contact Hours: 2 + 3
Prerequisites: AET A181.
Special Fees.
Prepares the skills and knowledge necessary to modify and customize the CADD user interface, create customized CADD features for diverse domains, and manage CADD standards and projects in professional environments.

AET A286  Design Project  4 CR
Contact Hours: 2 + 4
Prerequisites: AET A181 and [AET A111 or AET A121 or AET A131 or AET A143].
Special Fees.
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.

AET A290  Architectural and Engineering Technology Selected Topics  1-6 CR
Contact Hours: 0-6 + 0-12
Registration Restrictions: Department Permission required.
Grade Mode: Pass/No Pass.
Special Note: May be repeated for credit under different topic.
Provides theoretical and/or experiential learning in selected areas of Architectural and Engineering Technology. Provides technical information on current industry trends.

AET A295  Architectural and Engineering Technology Internship  1-3 CR
Contact Hours: 0 + 5-15
Registration Restrictions: Sophomore standing and faculty permission.
Grade Mode: Pass/No Pass.
Special Fees.
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.
AIRS - Aerospace Science

Offered through the Community and Technical College, Aviation Complex (AVNC), 2811 Merrill Field Drive, Room 116, 786-7266 www.uaa.alaska.edu/ctc/programs/afrotc

AIRS A101 Foundations of the US Air Force I  1 CR
Contact Hours: 1 + 0
Prerequisites: AIRS A101 and AIRS A102.
Describes the organizational structure of the Air Force major commands and operational wings. Covers facilities and services available at Air Force installations. Introduces Air Force writing formats.

AIRS A102 Foundations of US Air Force II  1 CR
Contact Hours: 1 + 0
Prerequisites: AIRS A101 and AIRS A102.
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.

AIRS A201 Evolution of Air and Space Power I  2 CR
Contact Hours: 2 + 0
Prerequisites: AIRS A101 and AIRS A102.
Builds upon previous (AIRS A201) course work and examines the evolution of air and space combat technology, doctrine, and practice from the early 1960s to the present.

AIRS A301 US Air Force Leadership and Management I  3 CR
Contact Hours: 3 + 0
Prerequisites: AIRS A201.
Special Note: This is a mandatory course for students seeking an Air Force officer’s commission.
Analyses fundamental concepts of leadership and management to include Total Quality Management principles, supervision skills, and mentoring techniques.

AIRS A302 US Air Force Leadership and Management II  3 CR
Contact Hours: 3 + 0
Prerequisites: AIRS A301.
Special Note: This is a mandatory course for students seeking an Air Force officer’s commission.
Examines concepts of military professionalism and officerhood. Analyzes the application of military ethics to various combat and non-combat scenarios. Covers officer evaluation, promotion, and assignment systems.

AIRS A401 National Security Affairs I  3 CR
Contact Hours: 3 + 0
Prerequisites: AIRS A301.
Special Note: This is a mandatory course for students seeking an Air Force officer’s commission.
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.

AIRS A402 National Security Affairs II/Prep for Active Duty  3 CR
Contact Hours: 3 + 0
Prerequisites: AIRS A401.
Special Note: This is a mandatory course for students seeking an Air Force officer’s commission.
Outlines US national security goals, commitments, and issues in the former Soviet Union, Middle East, and Latin America. Analyzes non-traditional military operations and covers various personnel, legal, and leadership topics.
AKNS - Alaska Native Studies

Offered through the College of Arts and Sciences
Social Sciences Building (SSB), Room 378, 786-6135
www.uaa.alaska.edu/native

AKNS A101A  Elementary Central Yup'ik Language I  4 CR
Contact Hours: 4 + 0
Course Attributes: UAA GER Humanities Requirement.
Special Fees.
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.

AKNS A101B  Elementary Tlingit Language I  4 CR
Contact Hours: 4 + 0
Course Attributes: UAA GER Humanities Requirement.
Special Fees.
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.

AKNS A101C  Elementary Alaska Native Language I  4 CR
Contact Hours: 4 + 0
Course Attributes: UAA GER Humanities Requirement.
Special Fees.
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.

AKNS A102A  Elementary Central Yup'ik Language II  4 CR
Contact Hours: 4 + 0
Prerequisites: AKNS A101A.
May be stacked with: AKNS A109A.
Course Attributes: UAA GER Humanities Requirement.
Special Fees.
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.

AKNS A102B  Elementary Tlingit Language II  4 CR
Contact Hours: 4 + 0
Prerequisites: AKNS A101B.
May be stacked with: AKNS A109B.
Course Attributes: UAA GER Humanities Requirement.
Special Fees.
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.

AKNS A102C  Elementary Alaska Native Language II  4 CR
Contact Hours: 4 + 0
Prerequisites: AKNS A101C.
Registration Restrictions: Same language as taken in AKNS A101C
May be stacked with: AKNS A109C.
Course Attributes: UAA GER Humanities Requirement.
Special Fees.
Special Note: May be repeated on time with a different language.
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.

AKNS A109A  Central Yup'ik Orthography  4 CR
Contact Hours: 4 + 0
Registration Restrictions: Fluency in Central Yup'ik and instructor approval required.
May be stacked with: AKNS A102A.
Special Fees.
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.

AKNS A109B  Tlingit Orthography  4 CR
Contact Hours: 4 + 0
Registration Restrictions: Fluency in Tlingit and instructor approval required.
May be stacked with: AKNS A102B.
Special Fees.
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.

AKNS A109C  Alaska Native Language Orthography  4 CR
Contact Hours: 4 + 0
Registration Restrictions: Fluency in Alaska Native language and instructor approval required. Must be same language as AKNS A101C.
May be stacked with: AKNS A102C.
Special Fees.
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.

AKNS A146  Introduction to Alaska Native Dance  1-2 CR
Contact Hours: .5+1 or 1+2
Crosslisted with: DNCE A146.
Special Fees.
Special Note: May be repeated for up to 8 credits.
Beginning course in Alaska Native dance techniques involving movement, sounds/vocal, music, and storytelling. Historical, cultural, and aesthetic context of dances stressed throughout class.

AKNS A201  Alaska Native Perspectives  3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Humanities Requirement.
Special Fees.
Prerequisites: AKNS A201 or MUS A111 recommended.
Crosslisted with: ENGL A111.
Course Attributes: UAA GER Humanities Requirement.
Special Fees.
May be repeated for credit with different subtitles.
A topic of contemporary or continuing interest in Alaska Native Studies, treated at an introductory level. Prominent leaders in the Native community are brought into direct classroom contact with students to discuss important issues in rural Alaska and the larger Native community.

AKNS A215  Music of Alaska Natives and Indigenous Peoples of Northern Regions  3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A111.
Crosslisted with: MUS A215.
Course Attributes: UAA GER Fine Arts Requirement.
Special Fees.
Special Note: AKNS A215 and MUS A111 recommended.
Crosslisted with: DNCE A146.
Course Attributes: UAA GER Humanities Requirement.
Special Fees.
May be repeated for credit with different subtitles.
A topic of contemporary or continuing interest in Alaska Native Studies, treated at an introductory level. Prominent leaders in the Native community are brought into direct classroom contact with students to discuss important issues in rural Alaska and the larger Native community.

AKNS A290  Selected Topics in Alaska Native Studies  1-3 CR
Contact Hours: 1-3 + 0
Special Fees.
Special Note: Subtitle varies. May be repeated for credit with a different subtitle.
A topic of contemporary or continuing interest in Alaska Native Studies, treated at an introductory level. Prominent leaders in the Native community are brought into direct classroom contact with students to discuss important issues in rural Alaska and the larger Native community.

AKNS A346  Alaska Native Politics  3 CR
Contact Hours: 3 + 0
Class Standing Restriction: Must be Junior.
Registration Restrictions: Upper-division standing.
Crosslisted with: PS A346.
Course Attributes: UAA GER Humanities Requirement.
Special Fees.
Special Note: May be used to fulfill the Alaska studies requirement for teacher certification.
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.

AKNS A411  Tribes, Nations, and Peoples  3 CR
Contact Hours: 3 + 0
Prerequisites: AKNS A201 or PS A102.
Crosslisted with: PS A411.
Course Attributes: UAA GER Humanities Requirement.
Special Fees.
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.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Contact Hours</th>
<th>Prerequisites</th>
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</thead>
<tbody>
<tr>
<td>AMT A170</td>
<td>Aircraft Ground Operations and Safety</td>
<td>1 CR</td>
<td>Registration Restrictions: Formal acceptance into the AMT certificate or degree program.</td>
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<tr>
<td>AMT A171</td>
<td>Basic Aerodynamics</td>
<td>3 CR</td>
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<tr>
<td>AMT A172</td>
<td>Aircraft Publications, Regulations, and Records</td>
<td>3 CR</td>
<td>Registration Restrictions: Formal acceptance into the AMT certificate or degree program.</td>
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<tr>
<td>AMT A174</td>
<td>Fundamentals of Aircraft Electronics</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0</td>
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<tr>
<td>AMT A175</td>
<td>Drawing and Precision Measurement</td>
<td>2 CR</td>
<td>Contact Hours: 2 + 0</td>
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<tr>
<td>AMT A176</td>
<td>Aircraft Materials and Processes I</td>
<td>2 CR</td>
<td>Contact Hours: 2 + 2</td>
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<td>Course Code</td>
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<tr>
<td>AMT A185L</td>
<td>Aircraft Sheetmetal Structures Lab</td>
<td>2 CR</td>
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<td>Contact Hours: 0 + 5</td>
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<td>Prerequisites: AMT A170 and AMT A176.</td>
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<td>Corequisite: AMT A185.</td>
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<td>Special Fees.</td>
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<td>Examines the inspection, fabrication, and repair of aircraft sheetmetal structures including the processes of bending, cutting, forming, drilling, and riveting aluminum sheetmetal parts.</td>
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<td>AMT A186</td>
<td>Aircraft Non-Destructive Inspection Methods</td>
<td>3 CR</td>
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<td></td>
<td>Contact Hours: 2 + 2</td>
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<td>Prerequisites: AMT A170.</td>
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<td>Special Fees.</td>
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<td>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.</td>
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<td>AMT A187</td>
<td>Aircraft Reciprocating Engine Overhaul</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: AMT A175 and AMT A177.</td>
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<td>Corequisite: AMT A187L.</td>
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<td>Introduces the overhaul practices for aircraft internal combustion engines. Includes disassembly, cleaning, non-destructive testing, measurement, lubrication, and assembly of engines.</td>
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<tr>
<td>AMT A187L</td>
<td>Aircraft Reciprocating Engine Overhaul Lab</td>
<td>2 CR</td>
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<td></td>
<td>Contact Hours: 0 + 5</td>
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<td>Prerequisites: AMT A170 and AMT A175.</td>
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<td>Corequisite: AMT A187.</td>
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<td>Special Fees.</td>
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<td></td>
<td>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.</td>
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<tr>
<td>AMT A272</td>
<td>Aircraft Electrical Hardware and Systems</td>
<td>3 CR</td>
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<td>Contact Hours: 2 + 2</td>
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<td>Prerequisites: AMT A174 and AMT A174L.</td>
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<td>Special Fees.</td>
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<td>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.</td>
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<td>AMT A273</td>
<td>Aircraft Fluid Power Systems</td>
<td>2 CR</td>
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<td>Contact Hours: 2 + 0</td>
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<td>Prerequisites: AMT A176.</td>
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<td>Corequisite: AMT A273L.</td>
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<td>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.</td>
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<tr>
<td>AMT A273L</td>
<td>Aircraft Fluid Power Systems Lab</td>
<td>2 CR</td>
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<td>Contact Hours: 0 + 5</td>
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<td>Prerequisites: AMT A176.</td>
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<td>Corequisite: AMT A273.</td>
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<td>Special Fees.</td>
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<td>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. Analyzes of system operation, inspection, and troubleshooting are included for hydraulic, pneumatic, and landing gear systems.</td>
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<td>AMT A274</td>
<td>Aircraft Electronic Systems</td>
<td>5 CR</td>
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<td></td>
<td>Contact Hours: 5 + 0</td>
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<td>Prerequisites: AMT A174.</td>
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<td>Corequisite: AMT A274L.</td>
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<td>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.</td>
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<td>AMT A274L</td>
<td>Aircraft Electronic Systems Lab</td>
<td>1 CR</td>
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<td>Contact Hours: 0 + 3</td>
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<td>Prerequisites: AMT A174L.</td>
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<td>Corequisite: AMT A274.</td>
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<td>Special Fees.</td>
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<td></td>
<td>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.</td>
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<td>AMT A279</td>
<td>Aircraft Turbine Engine Repair and Overhaul</td>
<td>3 CR</td>
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<td></td>
<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: AMT A175 and AMT A178.</td>
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<td>Corequisite: AMT A279L.</td>
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<tr>
<td>AMT A282</td>
<td>Aircraft Propeller Systems</td>
<td>1 CR</td>
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<td></td>
<td>Contact Hours: 1 + 1</td>
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<td></td>
<td>Prerequisites: AMT A177 and AMT A178.</td>
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<td>Special Fees.</td>
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<td></td>
<td>Examines the installation, operation, inspection, performance testing, and troubleshooting of aircraft propeller systems.</td>
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<td>AMT A283</td>
<td>Aircraft Auxiliary Systems</td>
<td>3 CR</td>
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<td></td>
<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: AMT A274 and AMT A274L.</td>
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<td>Corequisite: AMT A283L.</td>
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<td>AMT A283L</td>
<td>Aircraft Auxiliary Systems Lab</td>
<td>1 CR</td>
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<td></td>
<td>Contact Hours: 0 + 3</td>
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<td>Prerequisites: AMT A274 and AMT A274L.</td>
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<td>Corequisite: AMT A283.</td>
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<td>AMT A284</td>
<td>Aircraft Electrical Machinery</td>
<td>2 CR</td>
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<td>Contact Hours: 2 + 0</td>
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<td>Prerequisites: AMT A272.</td>
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<td>Corequisite: AMT A284L.</td>
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<tr>
<td>AMT A284L</td>
<td>Aircraft Electrical Machinery Lab</td>
<td>2 CR</td>
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<td>Contact Hours: 0 + 5</td>
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<td>Prerequisites: AMT A272.</td>
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<td>Corequisite: AMT A284.</td>
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<td>AMT A285</td>
<td>Aircraft Bonded Structures</td>
<td>4 CR</td>
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<td>Contact Hours: 4 + 0</td>
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<td>Corequisite: AMT A285L.</td>
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<tr>
<td>AMT A285L</td>
<td>Aircraft Bonded Structures Lab</td>
<td>1 CR</td>
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<td>Contact Hours: 0 + 3</td>
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<td>Prerequisites: AMT A176.</td>
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<td></td>
<td>Corequisite: AMT A285.</td>
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<td>Special Fees.</td>
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<td>Provides practice in the fabrication, inspection, and repair of bonded structures including plastics, fabric covering, honeycomb structures, advanced composite structures, and painting.</td>
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</table>
ANMT A286 Aircraft Materials and Processes II 2 CR
Contact Hours: 1 + 2
Prerequisites: AMT A176. Special Fees.
Examines the theory of and techniques used in the repair of aircraft steel structures, and certain aluminum, magnesium, and titanium components.

ANMT A287 Reciprocating Engine Installation and Operation 3 CR
Contact Hours: 3 + 0
Prerequisites: AMT A181 and AMT A187. Corequisite: AMT A287L.
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.

ANMT A287L Reciprocating Engine Installation and Operation Lab 2 CR
Contact Hours: 0 + 5
Prerequisites: AMT A181L and AMT A187L. Corequisite: AMT A287L.
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.

ANMT A289 Turbine Engine Installation and Operation 3 CR
Contact Hours: 3 + 0
Prerequisites: AMT A181 and AMT A279. Corequisite: AMT A289L.
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.

ANMT A289L Turbine Engine Installation and Operation Lab 2 CR
Contact Hours: 0 + 5
Prerequisites: AMT A181L and AMT A279L. Corequisite: AMT A289L.
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.

ANMT A364 Aircraft Avionics Systems 3 CR
Contact Hours: 3 + 0
Prerequisites: AMT A274.
Examines the fundamentals of design, installation, operation, testing, and maintenance of airborne communication, navigation, instrument, and auto flight systems.

ANMT A369 Airframe Assembly and Inspections 3 CR
Contact Hours: 3 + 0
Prerequisites: AMT A185 and AMT A272. Corequisite: AMT A369L.
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.

ANMT A369L Airframe Assembly and Inspections Lab 2 CR
Contact Hours: 0 + 5
Prerequisites: AMT A185L and AMT A272. Corequisite: AMT A369L.
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.

ANTH - Anthropology

Offered through the College of Arts and Sciences
Beatrice McDonald Hall (BMH), Room 212, 786-6840
http://anthro.uaa.alaska.edu

ANTH A101 Introduction to Anthropology 3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Social Sciences Requirement. Special Note: Recommended for majors and non-majors.
Introduction to fundamentals of the four subfields of anthropology: archaeology, cultural anthropology, biological anthropology, and anthropological linguistics. The course introduces basic ideas, methods and findings of anthropology.

ANTH A200 Natives of Alaska 3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Social Sciences Requirement.
Introduction to cultures and history of Alaska Natives. Includes environmental settings, linguistic subdivisions, traditional sociocultural organization and subsistence patterns, contact with non-Native groups, and contemporary issues, including education, politics, and law.

ANTH A202 Cultural Anthropology 3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Social Sciences Requirement.
Introduction to the methods, theories, and fundamental concepts in the study of cultural systems. Includes social relationships, economic organization, political systems, symbols and beliefs, and issues related to gender, power, world systems and colonialism, and the social construction of human lives.

ANTH A205 Biological Anthropology 3 CR
Contact Hours: 3 + 0
Special Note: Offered Fall and Spring Semesters.
Introduction to human behavior, genetics, classification and evolution with comparisons to other primates. Examines distribution, morphological and physiological adaptations of human populations.

ANTH A210 Introduction to Anthropological Linguistics 3 CR
Contact Hours: 3 + 0
Special Note: Offered as Demand Warrants.
Introduction to concepts in anthropological linguistics. This course examines approaches to representing structures of the language of the world and such topics as folk taxonomies, typologies, kinship, communicative interaction, and language change and variation, all in relation to cultures and societies.

ANTH A211 Fundamentals of Archaeology 3 CR
Contact Hours: 3 + 0
Special Note: Offered Fall Semesters.
Introduction to basic concepts, theories, and methods of archaeology with overview of historical development and major findings. Prepares students for summer field schools and more specialized courses.

ANTH A250 The Rise of Civilization 3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Social Sciences Requirement.
Survey of the emergence of civilization in human cultural development. A foundation course covering biological emergence of modern humans, appearance of complex symbolic culture, domestication, urbanization, trade, ritual and ideology, and state formation. A comparative framework is used covering primary areas of civilization--Sumeria, Egypt, China, Indus River, Mesoamerica, South America--and secondary areas, including Southeast Asia, Japan, Africa, and North America.

ANTH A270 Cross-Cultural Perspectives on Women 3 CR
Contact Hours: 3 + 0
Special Note: Offered as Demand Warrants.
Surveys women cross-culturally exploring the nature of the relationship between gender and sex roles. Factors determining the status of women are sought in subsistence, mobility and access to power. Follows the female from subhuman primate, to the roles they’ve played as gatherers and goddesses, to movements such as the Chinese revolution and Western feminism.

ANTH A290 Special Topics in Anthropology 1-3 CR
Contact Hours: 1-3 + 0
Special Note: May be repeated once for credit with a change in subtitle. Special topics course of general interest in anthropology.

ANTH A312 North American Archaeology 3 CR
Contact Hours: 3 + 0
Registration Restrictions: ANTH A211 recommended. Special Note: Offered as Demand Warrants.
Tracing human developments in the New World North of Mexico up to European contact.
Course Descriptions

ANTH A324 Psychological Anthropology 3 CR
Contact Hours: 3 + 0
Prerequisites: ANTH A101 or ANTH A202.
History, major theories, methods, debates and findings in the intersection of the disciplines of anthropology and psychology regarding the investigation of human psychology in diverse cultural settings. Topics to be covered include: early approaches to the field of culture and personality; exploration of the effects of culture on human emotion, motivation, cognition, notions of the self, culture and mental health/mental disorder, gender, altered states of consciousness, dreams, and culture change.

ANTH A325 Cook Inlet Anthropology 3 CR
Contact Hours: 3 + 0
Special Note: Offered Alternate Fall Semesters.
Study of the peoples and cultures of the Native, Russian and American periods of the Cook Inlet region. Includes original archaeological studies and ethnohistoric documents.

ANTH A333 Peoples and Cultures of Southeast Asia 3 CR
Contact Hours: 3 + 0
Registration Restrictions: ANTH A202 recommended.
Special Note: Offered as Demand Warrants.
Cultural variation and unifying traditions of Southeast Asian peoples, including their prehistory, early cultural influences, effects of European contact, major cultural traditions and selected current issues.

ANTH A335 Native North Americans 3 CR
Contact Hours: 3 + 0
Registration Restrictions: ANTH A202 recommended.
Special Note: Offered as Demand Warrants.
Traditional cultures of Native North Americans, effects of contact with Europeans and contemporary adaptations.

ANTH A336 Peoples and Cultures of South America 3 CR
Contact Hours: 3 + 0
Registration Restrictions: ANTH A202, A211 recommended.
Special Note: Offered as Demand Warrants.
Cultural traditions of South American peoples, including origins, prehistory, languages, biological and cultural affiliations, effects of European contact, historical transformations, contemporary adaptations, and current issues.

ANTH A338 Peoples and Cultures of Scandinavia 3 CR
Contact Hours: 3 + 0
Special Note: Offered as Demand Warrants.
Cultural history and variations of Scandinavian peoples including their origins, prehistory, biological affiliations, major migrations and selected current issues.

ANTH A334 Culture and Ecology 3 CR
Contact Hours: 3 + 0
Prerequisites: ANTH A202 and ENVI A201.
Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses and junior standing.
Course Attributes: UAA GER Integrative Capstone.
Anthropological approaches to the relationships between cultural and ecological systems. Culture as an adaptive system and the role of various cultural subsystems in different adaptations. Application of ecological concepts to human societies; impacts of environmental change on human societies, and impacts of human societies on environments; ethnecology and traditional ecological knowledge of indigenous communities; values of nature among Western and non-Western societies; and political ecology in relation to the juxtaposition of indigenous peoples within contemporary nation-states.

ANTH A360 Anthropology of Art 3 CR
Contact Hours: 3 + 0
Prerequisites: ANTH A101 or ANTH A202.
History, major theories, debates, and findings in the intersection of the disciplines of anthropology and art regarding the investigation of visual representations and aesthetics across cultures, and the impacts of globalization and tourism on indigenous art. Study of the cultural goals, production, care, and duration of pictorial representation from multiple perspectives.

ANTH A361 Language and Culture 3 CR
Contact Hours: 3 + 0
Study of the relationship between language and culture with coverage of such topics as language variation, meaning in culture, taxonomies, and phonemic principles.

ANTH A365 Races: Modern Human Diversity 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Upper-division standing.
Special Note: Offered as Demand Warrants.
Survey of modern human biological variation in an evolutionary perspective. Comparison of the differences (and similarities) within and between modern human populations and the distribution of those differences.

ANTH A371 Selected Topics in Anthropology 1-3 CR
Contact Hours: 1-3 + 0
Special Note: May be repeated for credit.
Topic varies.

ANTH A375 Introduction to Cultural Resource Management 3 CR
Contact Hours: 3 + 0
Prerequisites: ANTH A211.
Practical aspects of cultural resource management, from evaluating cultural resources and the appropriate laws to ethical conduct, mapping, and resume writing.

ANTH A400 Anthropology of Religion 3 CR
Contact Hours: 3 + 0
Registration Restrictions: ANTH A202 recommended.
Special Note: Offered as Demand Warrants.
Descriptive and comparative study of religious phenomena in traditional societies including myth, ritual, magic, witchcraft, and shamanism.

ANTH A410 History of Anthropology 3 CR
Contact Hours: 3 + 0
Registration Restrictions: 12 credits of Anthropology Development of the science of anthropology, stressing the leaders in the field and the theories developed.

ANTH A413 Peopling of the Americas 3 CR
Contact Hours: 3 + 0
Prerequisites: ANTH A312.
Registration Restrictions: ANTH A211 strongly recommended.
Special Note: Offered as Demand Warrants.
Critical analysis of the literature concerning the origins of the first Americans, the timing of the earliest migrations across the Bering Land Bridge, and the adaptations developed by early peoples in the Americas from 12,000 to 8,000 years ago. Included is a detailed analysis of relevant archaeological sites as well as linguistic and biological data pertaining to Native American origins.

ANTH A415 Applied Anthropology 3 CR
Contact Hours: 3 + 0
Prerequisites: ANTH A101 or ANTH A202.
May be stacked with: ANTH A615.
Special Note: Offered Alternate Fall Semesters.
The methods, theory, and history of the application of cultural anthropology to sociocultural issues and problems with an emphasis on the circumpolar north.

ANTH A416 Arctic Archaeology 3 CR
Contact Hours: 3 + 0
Prerequisites: ANTH A211.
Special Note: Offered Alternate Fall Semesters.
Origins and development of the prehistoric cultures of northern North America and adjacent northeast Asia.

ANTH A425 Archaeology of Identity 3 CR
Contact Hours: 3 + 0
Prerequisites: ANTH A211.
Examination of gender, age, social status, and ethnicity using archaeological data.

ANTH A427 Ethnohistory of Alaska Natives 3 CR
Contact Hours: 3 + 0
Registration Restrictions: ANTH A200 and HIST A341 strongly recommended.
May be stacked with: ANTH A627.
Special Note: Offered Alternate Spring Semesters.
Examines major changes in Alaskan Native societies from contact through 1940 including initial contacts, disease, trade, warfare, education, missionization, economic development, and political mobilization. Integrates different sources of information including oral traditions, historical narratives, government documents, and archeological evidence.

ANTH A429 Contemporary Alaska Native Society 1940 - Present 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Junior standing
May be stacked with: ANTH A629.
Special Note: ANTH A280 recommended
Examines continuity and change in Alaska Native society from 1940 to present covering militarization, Alaska statehood, Alaska Native Land Claims, subsistence, tribal movements, cultural revitalization, and impacts of state and federal policies; regional, economic, political, and cultural changes addressed, and key events and players discussed.
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Contact Hours</th>
<th>Prerequisites</th>
<th>Registration Restrictions</th>
<th>Special Notes</th>
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<tr>
<td>ANTH A430</td>
<td>Research Methods in Cultural Anthropology</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Prerequisites: ANTH A20.</td>
<td>May be stacked with: ANTH A630.</td>
<td>Modes of scientific data gathering, analysis, and interpretation related to sociocultural systems. Includes the logic of scientific inquiry, research design, data recording, data manipulation, field work strategies, ethnographic and report writing, ethics in social science research, and grant proposal preparation.</td>
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<tr>
<td>ANTH A431</td>
<td>Field Methods in Archaeology</td>
<td>1-8 CR</td>
<td>0 + 3-24</td>
<td>Registration Restrictions: Faculty permission and ANTH A211 recommended.</td>
<td>May be stacked with: ANTH A631.</td>
<td>Special Note: Offered as Demand Warrants.</td>
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<tr>
<td>ANTH A432</td>
<td>Hunting and Gathering Societies</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Prerequisites: ANTH A101 or ANTH A202.</td>
<td>Special Note: Offered as Demand Warrants.</td>
<td>Cross-cultural analysis of hunting and gathering societies, including their prehistory, subsistence, demography, economic and political organization, social structure, and ideology, with special attention given to contemporary issues such as gender roles and aboriginal land rights.</td>
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<td>ANTH A434</td>
<td>Peoples and Cultures of Northeast Asia</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Prerequisites: ANTH A211.</td>
<td>Special Note: Offered as Demand Warrants.</td>
<td>Examines cultural traditions of the indigenous peoples of Northeast Asia (Siberia, the Russian Far East, Mongolia, Manchuria, Korea, Japan), including their origins, prehistory, languages, biological affinities, historical transformations, contemporary cultures, and current problems.</td>
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<tr>
<td>ANTH A435</td>
<td>Northwest Coast Cultures</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Prerequisites: ANTH A20.</td>
<td>Special Note: Offered as Demand Warrants.</td>
<td>An intensive appraisal of peoples of the Northwest coast, emphasizing various interpretations of cultural history, cultural variation and cultural contact.</td>
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<tr>
<td>ANTH A436</td>
<td>Aleut Adaptations</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Prerequisites: ANTH A2.</td>
<td>Special Note: Offered as Demand Warrants.</td>
<td>Intensive study of traditional and post-contact Aleut culture. Includes origins, prehistory, biological and cultural adaptations. Also considers contemporary Aleut social, economic and political status.</td>
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<tr>
<td>ANTH A437</td>
<td>Eskimo Adaptations</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Prerequisites: ANTH A20.</td>
<td>Special Note: Offered as Demand Warrants.</td>
<td>Eskimo peoples of the circumpolar north devoted primarily to Alaskan groups including Inupiaq, Alutiiq, and Yup’ik (including Siberian Yup’ik). Includes environment, language, social organization, subsistence patterns, contact with non-Native peoples, art and architecture, and contemporary issues.</td>
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<tr>
<td>ANTH A438</td>
<td>Tlingit and Haida Adaptations</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Prerequisites: ANTH A200 or ANTH A435 recommended.</td>
<td>Special Note: Offered as Demand Warrants.</td>
<td>Examines the adaptations of the Tlingit and Haida Indians to the northeastern Pacific Coast of North America. The course is divided into precontact, traditional, and ethnohistoric periods covering the time from earliest occupation of the region up to 1900. System comparison and contrast of the ecological, social, ceremonial, and cultural characteristics of each society as well as responses to Euroamerican contact.</td>
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<tr>
<td>ANTH A439</td>
<td>Athapaskan Adaptations</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Prerequisites: ANTH A200.</td>
<td>Prerequisites: ANTH A200.</td>
<td>Special Note: Offered as Demand Warrants.</td>
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<tr>
<td>ANTH A455</td>
<td>Medical Anthropology</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Prerequisites: ANTH A202 or ANTH A205.</td>
<td>May be stacked with: ANTH A655.</td>
<td>Special Note: Offered Alternate Fall Semesters.</td>
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<tr>
<td>ANTH A457</td>
<td>Food and Nutrition:</td>
<td>3 CR</td>
<td>3 + 0</td>
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ANTH A483 Archaeology of Animals 4 CR
Contact Hours: 3 + 2
Prerequisites: ANTH A211.
May be stacked with: ANTH A683.
Special Fees.
Special Note: ANTH A480 recommended
Methods and techniques for, and theoretical approaches to, the description, analysis, and interpretation of animal bone assemblages from archaeological sites. Includes identification and quantification of animal remains, paleoenvironmental and dietary reconstruction, seasonality of site occupation, hunting and herding strategies, and the role of animals in the economy and ideology of human societies.

ANTH A484 Lithic Technology 3 CR
Contact Hours: 3 + 0
Prerequisites: ANTH A211.
Special Fees.
Analysis of stone tool assemblages from archaeological sites, focusing on tool manufacture, use, and discard processes. Includes tool replication as part of learning the manufacturing process.

ANTH A485 Human Osteology 4 CR
Contact Hours: 3 + 2
Prerequisites: ANTH A205.
May be stacked with: ANTH A685.
Special Fees.
Methods of human skeletal identification, description, and analysis. Includes identification of age and sex attributes. Lecture and laboratory format.

ANTH A486 Applied Human Osteology 3 CR
Contact Hours: 3 + 0
Prerequisites: ANTH A485.
May be stacked with: ANTH A686.
Special Note: STAT A252 or STAT A253 or STAT A307 recommended
Methods and techniques of the applications of human osteology, including paleopathology, bioarchaeology, and forensic anthropology. Includes identification and analysis of age, sex, and population attributes from human skeletal remains.

ANTH A490 Selected Topics in Anthropology 1-3 CR
Contact Hours: 1-3 + 0
Special Note: May be repeated for credit with change of subtitle.
Topics in anthropology presented by members of the professional community.

ANTH A495 Practicum in Anthropology 1-3 CR
Contact Hours: 1-3 + 0
Registration Restrictions: 15 credit hours in Anthropology, permission of instructor of record, approval of agency mentor.
Special Note: May be repeated once for credit.
Application of practical anthropological skills learned under the supervision of a professional anthropologist.

ANTH A499 Senior Thesis in Anthropology 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Senior standing in the undergraduate Anthropology major and acceptance into Honors in Anthropology by faculty permission.
Special Note: May be repeated once for credit as a part of a two-semester sequence, with permission of thesis advisor.
Independent library, laboratory, or field research in anthropology resulting in a substantial, thesis-quality paper.

ANTH A602 Proseminar in Cultural Anthropology 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
Special Fees.
Special Note: Offered as Demand Warrants.
Examines major concepts, findings, and theories in cultural anthropology. Topics covered include kinship, social structure, political organization, symbols and ceremonies, cultural change, and cultural integration. Core offering for graduate program.

ANTH A605 Proseminar in Biological Anthropology 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
Special Fees.
Special Note: Offered as Demand Warrants.
Methods and techniques of 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.

ANTH A611 Proseminar in Archaeology 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
Special Fees.
Special Note: Offered as Demand Warrants.
A survey of the practice and techniques of modern archaeological data collection and analysis designed for graduate students, professionals, and other serious students. Case studies, class discussions based on readings, and student presentations emphasized with a focus upon the archaeology of prestate/nonstate societies.

ANTH A615 Advanced Applied Anthropology 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
May be stacked with: ANTH A415.
Special Fees.
Special Note: Lectures concurrent with ANTH A415. In addition to meeting all requirements for ANTH A415, graduate students will be required to make mixed-media class presentations based on literature research or interviews with local practicing anthropologists. Offered Alternate Fall Semesters.
The methods, theory, and history of the application of cultural anthropology to sociocultural issues and problems with an emphasis on the circumpolar north.

ANTH A627 Ethnobiology of Alaska Natives 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
May be stacked with: ANTH A427.
Special Fees.
Special Note: In addition to meeting all requirements for ANTH A427, graduate students will be required to prepare a research paper from primary sources (oral, written, or both) and give a presentation of findings to the class.
Examines major changes in Alaskan Native societies from contact through 1940 including initial contacts, disease, trade, warfare, education, missionization, economic development and political mobilization. Integrates different sources of information including oral traditions, historical narratives, government documents, and archaeological evidence.

ANTH A629 Contemporary Alaska Native Society 1940 - Present 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
May be stacked with: ANTH A429.
Special Fees.
Examines continuity and change in Alaska Native society from 1940 to present covering militarization, Alaska statehood, Alaska Native Claims, subsistence, tribal movements, cultural revitalization, and impacts of state and federal policies; regional, economic, political, and cultural changes addressed, and key events and players are discussed. Examines subject matter in light of contemporary anthropological theory and findings.

ANTH A630 Advanced Research Methods in Cultural Anthropology 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
May be stacked with: ANTH A430.
Special Fees.
Special Note: Lectures concurrent with ANTH A430. In addition to meeting all requirements for ANTH A430, graduate students will be required to complete a research grant proposal and engage in computer-assisted qualitative data analysis. Offered as Demand Warrants.
Modes of scientific data gathering, analysis, and interpretation related to sociocultural systems. Includes the logic of scientific inquiry, research design, data recording, computer assisted qualitative data analysis, field work strategies, ethnographic and report writing, ethics in social science research and grant proposal preparation.

ANTH A631 Field Methods in Archaeology 1-8 CR
Contact Hours: 0 + 3-24
Registration Restrictions: Written permission of the instructor.
May be stacked with: ANTH A431.
Special Fees.
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. Offered as Demand Warrants.
Advanced methods of archaeological field research, including site survey, site excavation, data recovery and recording, laboratory processing, and preliminary analysis of archaeological materials.
ANTH A645  Advanced Evolution of Humans and Disease  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
May be stacked with: ANTH A445.
Special Fees.
Special Note: In addition to meeting all requirements for ANTH A445, graduate students will be assigned more extensive reading and will be required to pursue a major semester-long research project, to deliver a presentation of their research findings to the class, and to report their results in written form. Not available for credit to students who have completed ANTH A445. Offered as Demand Warrants.

Methods, techniques, and theoretical approaches to human skeletal identification, description, and analysis. Encompasses principles of growth, development, and remodeling as well as identification of age, sex, and racial attributes, and interpretation of pathological changes in human bone. Includes methods and theory of statistical interpretation of skeletal data.

ANTH A655  Advanced Medical Anthropology  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
May be stacked with: ANTH A455.
Special Fees.
Special Note: In addition to meeting all requirements for ANTH A455, graduate students will be required to research the literature on a current topic in medical anthropology or to conduct independent research in medical anthropology, and to submit an extensive, detailed paper summarizing their findings in a rigorous analytical framework. Additional class readings may also be assigned. Not available for credit to students who have completed ANTH A455. Offered Alternate Fall Semesters.

Study of 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.

ANTH A657  Nutritional Anthropology  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
May be stacked with: ANTH A457.
Special Fees.
Special Note: In addition to meeting all requirements for ANTH A457, graduate students will be required to research the literature on a current topic in nutritional anthropology or to conduct independent research in nutritional anthropology, and to submit an extensive, detailed paper summarizing their findings in a rigorous analytical framework. Additional class readings may also be assigned. Not available for credit to students who have completed ANTH A457. Offered Alternate Spring Semesters.

Study of the relationship of human culture to food and nutrition. Includes the history of human diet and its relationship to biological and cultural evolution, contemporary human nutrition in cross-cultural perspective, dietary adequacy and nutritional pathology, food-getting and food-preparation technology, and relationship between food and population.

ANTH A675  Cultural Resource Management  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
Special Fees.
Special Note: Offered as Demand Warrants.

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, proposal writing, field research strategies, resource evaluation, report preparation, and business and personnel practices.

ANTH A676  Ethical Issues in Archaeology  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing
May be stacked with: ANTH A476.
Special Fees.

Examination of the ethical issues that confront archaeologists and the responsibilities they have to the public, the discipline, their colleagues, and members of the cultures with whom they are working. Students will encounter ethical dilemmas likely to appear on the job.

ANTH A680  Advanced Analytical Techniques in Archaeology  3 CR
Contact Hours: 0 + 9
Registration Restrictions: Written permission of the instructor and graduate standing.
May be stacked with: ANTH A480.
Special Fees.
Special Note: Class meets concurrently with ANTH A480. In addition to meeting all requirements for ANTH A480, graduate students will be assigned more extensive reading and will be required to pursue a major semester-long research project, to deliver a presentation of their research finds to the entire class, and to report their results in written form. Offered as Demand Warrants.

Advanced methods and techniques of description, classification, and analysis of archaeological data. Laboratory work with archaeological specimens and data is emphasized.

ANTH A681  Advanced Museum Studies in Anthropology  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
May be stacked with: ANTH A481.
Special Fees.
Special Note: In addition to doing the work assigned to undergraduates, graduate students will be expected to undertake an extensive collection research or exhibition preparation project which will constitute a significant portion of their grade. Offered as Demand Warrants.

History and practice of anthropology in museums. Anthropological and metaphysical dimensions of museums and material culture; the history of ethnographic collecting and research (particularly in North America); critical theory and practice of exhibitions and cultural representation; repatriation and indigenous museums in historical context.

ANTH A683  Zooarchaeology  4 CR
Contact Hours: 3 + 2
Registration Restrictions: Graduate standing.
May be stacked with: ANTH A483.
Special Fees.
Special Note: ANTH A680 recommended.

Methods and techniques for, and theoretical approaches to, the description, analysis, and interpretation of animal bone assemblages from archaeological sites. Includes identification and quantification of animal remains, paleoenvironmental and dietary reconstruction, seasonality of site occupation, hunting and herding strategies, and the role of animals in the economy and ideology of human societies. Independent research in zooarchaeology involving preparation of comparative osteological materials and/or analysis of an assemblage of archaeological faunal materials.

ANTH A685  Advanced Human Osteology  4 CR
Contact Hours: 3 + 2
Registration Restrictions: Graduate standing.
May be stacked with: ANTH A485.
Special Fees.

Methods, techniques, and theoretical approaches to human skeletal identification, description, and analysis. Encompasses principles of growth, development, and remodeling as well as identification of age, sex, and racial attributes, and interpretation of pathological changes in human bone. Lecture and laboratory format.

ANTH A686  Advanced Applied Human Osteology  3 CR
Contact Hours: 3 + 0
Prerequisites: ANTH A485 or ANTH A685.
Registration Restrictions: Graduate standing.
May be stacked with: ANTH A486.
Special Fees.

Methods, techniques, and theory of the applications of human osteology, including paleopathology, bioarchaeology, and forensic anthropology. Includes identification and analysis of age, sex, and population attributes from human skeletal remains, and the methods and theory of statistical interpretation of human skeletal data.

ANTH A690  Special Topics in Anthropology  1-3 CR
Contact Hours: 1-3 + 0
Registration Restrictions: Graduate standing.
Special Note: May be repeated with change of subtitle.

Special topics in anthropology at the graduate level.

ANTH A692  Graduate Seminar in Anthropology  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing in Anthropology.
Special Fees.

Examination of advanced concepts, theory, and/or methodology in one of the four subfields of anthropology.
Course Descriptions

ANTH A695  Anthropology Practicum  3 CR
Contact Hours: 0 + 9
Registration Restrictions: ANTH A615 for Applied Cultural M.A. in Anthropology track; ANTH A675 for Cultural Resource Management M.A. in Anthropology track. Prerequisites may be taken concurrently with course.
Special Fees.
Special Note: Offered Fall and Spring Semesters. Anthropology practicum in the public or private sector. Emphasis on the application of anthropological skills under the supervision of an approved field instructor.

ANTH A699  Thesis Research  1-6 CR
Contact Hours: 0 + 3-18
Registration Restrictions: Candidacy status and permission of thesis chair. Grade Mode: Pass/No Pass.
Special Fees.
Special Note: Students may enroll for variable credit, but a total of 6 credits are required for graduation. Offered Fall and Spring Semesters. Independent research conducted under the supervision of a student's graduate committee.

ART - Art

Offered through the College of Arts and Sciences
Fine Arts Building (ARTS), Room 302A, 786-1783
http://art.uaa.alaska.edu

ART A100  Two-Dimensional Activities  1-3 CR
(Topics in Drawing, Design, or Painting)
Contact Hours: 0 + 2-6
Special Fees.
Special Note: Does not satisfy BA or BFA degree requirements. May be repeated 3 times for credit in different topic areas.
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.

ART A101  Three Dimensional Activities  1-3 CR
(3-D Materials and Techniques)
Contact Hours: 0 + 2-6
Special Fees.
Special Note: Does not satisfy BA or BFA degree requirements. May be repeated 3 times for credit in different topic areas.
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.

ART A102  Fiber and Basketry Activities  1-3 CR
(Topics in Fibers, Basketry, Weaving or Papermaking)
Contact Hours: 0 + 2-6
Special Fees.
Special Note: Does not satisfy BA or BFA degree requirements. May be repeated 3 times for credit in different topic areas.
Art studio topics in fibers, basketry, weaving, or papermaking may be offered to introduce possible areas for future concentrated study. Recommended for students seeking initial exposure to studio arts.

ART A103  Replicative Arts  1-3 CR
(Topics in Printmaking, Photography, & Digital Arts)
Contact Hours: 0 + 2-6
Special Fees.
Special Note: Does not satisfy BA or BFA degree requirements. May be repeated 3 times for credit in different topic areas.
Registration Restrictions: May be stacked with: ART A205, A305, and A405.
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.

ART A104  Multi-Media Activities  1-3 CR
Contact Hours: 0 + 2-6
Special Fees.
Special Note: Does not satisfy BA or BFA degree requirements. May be repeated 3 times for credit in different topic areas.
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.

ART A105  Beginning Drawing  3 CR
Contact Hours: 0 + 6
May be stacked with: ART A205, A305, and A405.
Special Fees.
Introduction to elements of drawing based on development of skill using wet and dry media such as pencil, charcoal, conte, ink, and brush. Class and homework assignments in drawing and composition of objects, still lifes, perspective effects, and the human figure.

ART A111  Two-Dimensional Design  3 CR
Contact Hours: 0 + 6
Special Fees.
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 CR
Contact Hours: 0 + 6
Special Fees.
Study of fundamentals of color and two-dimensional visual perception. Projects will emphasize evaluation and mixing of color.

ART A113  Three-Dimensional Design  3 CR
Contact Hours: 0 + 6
Special Fees.

ART A160  Art Appreciation  3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Fine Arts Requirement.
Special Fees.
Development of an appreciation of all the visual arts. Emphasis is on the theories, practice, materials and techniques of the visual arts.

ART A180A  Beginning Stained Glass  3 CR
Contact Hours: 3 + 0
Prerequisites: ART A180A.
Special Fees.
Special Note: Does not satisfy BA in Art or BFA degree requirements.
Introduces techniques including pattern designing, cutting, and lead came.

ART A180B  Intermediate Stained Glass  1 CR
Contact Hours: 1 + 0
Prerequisites: ART A180A.
Special Fees.
Special Note: Does not satisfy BA in Art or BFA degree requirements.
Continuation of ART A180A emphasizing advanced use of lead came and copper foil.

ART A201  Beginning Handbuilt Ceramics  3 CR
Contact Hours: 0 + 6
May be stacked with: ART A301 and A401.
Special Fees.
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.

ART A202  Beginning Wheelthrown Ceramics  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A201.
May be stacked with: ART A302 and A402.
Special Fees.
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.

ART A203  Introduction to Art Education  3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A111.
Registration Restrictions: Sophomore status.
Special Fees.
May 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.
ART A204  History and Philosophy of Art Education  3 CR
Contact Hours: 3 + 0
Prerequisites: ART A203.
Registration Restrictions: Sophomore status.
Special Fees.
Overview of the history and philosophical foundations of art education in the United States and implications in Alaska. Examines the theories and practices of teaching art in the public schools, cultural centers, and museums.

ART A205  Intermediate Drawing  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A105.
May be stacked with: ART A105, A305, and A405.
Special Fees.
Expands visual awareness, technical ability and creative/conceptual input. Complex technical and intuitive/creative approaches to drawing will be investigated. Class and homework assignments in drawing objects, still life, perspective effects, and human forms.

ART A209  Beginning Metallsmithing and Jewelry  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A105.
May be stacked with: ART A309 and A409.
Special Fees.
Introduction to the basic techniques, tools, and materials, and application of design principles. Includes historical considerations.

ART A211  Beginning Sculpture  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A105 and ART A113.
May be stacked with: ART A311 and A411.
Special Fees.
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.

ART A212  Beginning Watercolor  3 CR
Contact Hours: 0 + 6
May be stacked with: ART A312 and A412.
Special Fees.
Exploration of aquarelle techniques. Emphasizes composition as affected by color, value, stylistic considerations, and individual expression; exhibition procedures are included.

ART A213  Beginning Painting  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A105.
May be stacked with: ART A313, A413, and A414.
Special Fees.
Special Note: May be repeated once for credit with substantive changes in media or emphasis.
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.

ART A215  Beginning Printmaking  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A105 and ART A113.
May be stacked with: ART A314, A315, and A415.
Special Fees.
Introduces basic skills and concepts of printmaking process. Focuses on creativity and craftsmanship including traditional and contemporary printmaking methods and skills.

ART A220  Digital Imaging for Photography  3 CR
Contact Hours: 0 + 6
Registration Restrictions: Demonstrated computer competency or ART A103
Selected Topic: Creative Digital Darkroom.
Special Note: May be taken concurrently with ART A225.
Post-processing and editing in the digital darkroom for artistic expression and commercial creation of digital photographs.

ART A224  Beginning Photography  3 CR
Contact Hours: 0 + 6
Special Fees.
Basic principles including camera functions for artistic expression through the processing and printing of black and white film.

ART A225  Beginning Photography - Digital  3 CR
Contact Hours: 0 + 6
Prerequisites: (ART A220 or concurrent enrollment).
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.

ART A228  Art as a Profession  3 CR
Contact Hours: 3 + 0
Prerequisites: ART A105 and ART A111 and ART A112 and [ART A205 or ART A257] and ART A261 and ART A262.
Registration Restrictions: At least one Art Studio or Digital Art Program concentration course must be taken in addition to prerequisite list.
Develops awareness of professional presentations and career paths in art disciplines. Students will create a preliminary presentation and working portfolio.

ART A252  Beginning Graphic Design and Illustration  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A105 and ART A111 and ART A115 and ART A205 and ART A261 and ART A262.
Special Fees.
Special Note: May be repeated for credit.
Idea development and problem solving skills for the commercial market. Introduction to client identity, printing, and production process. Survey of industry history.

ART A257  Digital Art and Design I  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A105 and ART A111.
Registration Restrictions: Instructor permission.
Special Fees.
Special Note: May be repeated once for credit with substantive change in media or emphasis with instructor approval.
Introduces basic 2-D digital tools and techniques for creative expression, including vector and raster graphics.

ART A261  History of Western Art I  3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A111.
Course Attributes: UAA GER Fine Arts Requirement UAA GER Humanities Requirement.
Special Fees.
Origins and development of painting, sculpture, and architecture. Covers the history of art from prehistory through the Medieval Period of the Western World.

ART A262  History of Western Art II  3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A111.
Course Attributes: UAA GER Fine Arts Requirement UAA GER Humanities Requirement.
Special Fees.
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.

ART A271  Beginning Surface Design  3 CR
Contact Hours: 0 + 6
May be stacked with: ART A371 and A471.
Introduction to resist-dyeing processes using directly applied resists (wax, rice paste) in designing and patterning the art fabric surface.

ART A272  Beginning Fiber Structures  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A105.
May be stacked with: ART A372 and A472.
Special Fees.
Introduces hand-woven textiles and structural forms adapting traditional methodology to the production of contemporary art.

ART A273  Beginning Woven Forms  3 CR
Contact Hours: 0 + 6
May be stacked with: ART A373 and A473.
Introduction to European floor loom. Various on-loom techniques are utilized in the production of the art fabric.

ART A295  Internship Digital Art  1-3 CR
Contact Hours: 0 + 2-6
Registration Restrictions: Admitted to program and completed eight program core courses, and three program concentration courses.
Special Note: Offered only at Kenai Peninsula College. May be repeated for a total of six credits.
Internship position. Placement is dependent upon interest, expertise, prerequisites, and appropriateness to the position.
## Course Descriptions

### ART A295V  Internship Visual Art  1-3 CR
- **Contact Hours:** 0 + 3-9
- **Registration Restrictions:** Must have completed four program core courses, at least one upper-division studio course, and must be enrolled in six credits including internship (waived during summer session), and have a 3.0 GPA.
- **Grade Mode:** Pass/No Pass.
- **Special Note:** May be repeated once for a total of six credits. Offered only at Kenai Peninsula College.
- **Internship position. Placement dependent upon interest, expertise, prerequisites and appropriateness to position.**

### ART A301  Intermediate Handbuilt Ceramics  3 CR
- **Contact Hours:** 0 + 6
- **Prerequisites:** ART A105 and ART A113 and ART A201.
- **Registration Restrictions:** Instructor permission.
- **May be stacked with:** ART A201 and A401.
- **Special Fees.**
- **Special Note:** May be repeated once for credit with substantive change in media or emphasis.
- **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.**

### ART A302  Intermediate Wheelthrown Ceramics  3 CR
- **Contact Hours:** 0 + 6
- **Prerequisites:** ART A105 and ART A113 and ART A201 and ART A202.
- **Registration Restrictions:** Instructor permission.
- **May be stacked with:** ART A202 and A402.
- **Special Fees.**
- **Special Note:** May be repeated once for credit with substantive change in media or emphasis.
- **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.**

### ART A303  Curriculum Planning and Interpretation in Art  3 CR
- **Contact Hours:** 3 + 0
- **Prerequisites:** ART A203.
- **Registration Restrictions:** Junior status.
- **Introduce K-12 curriculum planning, teaching art criticism and aesthetics.**
- **Describe, analyze, interpret and evaluate the major characteristics of art forms, meanings and themes.**

### ART A304  Art Experience: Social, Cultural, and Educational  3 CR
- **Contact Hours:** 3 + 0
- **Prerequisites:** ART A203.
- **Registration Restrictions:** Junior status.
- **Special Note:**
- **Examines shared human experiences involved in making and responding to visual images and artifacts from different cultural perspectives. Discusses how the understanding, appreciation and interaction of particular images and objects evolve and affect the fundamental processes of perception in different cultural settings.**

### ART A305  Advanced Drawing  3 CR
- **Contact Hours:** 0 + 6
- **Prerequisites:** ART A205.
- **Registration Restrictions:** Instructor permission.
- **May be stacked with:** ART A105, A205, and A405.
- **Special Fees.**
- **Special Note:** May be repeated once for credit with substantive change in media or emphasis.
- **Refinement of advanced drawing and conceptual skills by examining contemporary techniques and materials.**

### ART A307  Life Drawing and Composition I  3 CR
- **Contact Hours:** 0 + 6
- **Prerequisites:** ART A205.
- **Registration Restrictions:** Instructor permission.
- **May be stacked with:** ART A407.
- **Special Fees.**
- **Special Note:** May be repeated once for credit with substantive change in media or emphasis.
- **Drawing from live models to explore possibilities in design, composition and media. Emphasis on form and space using wet and dry media including charcoal, graphite, pen, and brush.**

### ART A309  Intermediate Metalsmithing and Jewelry  3 CR
- **Contact Hours:** 0 + 6
- **Prerequisites:** ART A209.
- **Registration Restrictions:** Instructor permission.
- **May be stacked with:** ART A209 and A409.
- **Special Fees.**
- **Special Note:** May be repeated once for credit with substantive change in media or emphasis.
- **Continued investigation of techniques, tools, and materials used in metalsmithing and jewelry.**

### ART A311  Intermediate Sculpture  3 CR
- **Contact Hours:** 0 + 6
- **Prerequisites:** ART A211.
- **Registration Restrictions:** Instructor permission.
- **May be stacked with:** ART A211 and A411.
- **Special Fees.**
- **Special Note:** May be repeated once for credit with substantive change in media or emphasis.
- **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.**

### ART A312  Intermediate Watercolor Painting  3 CR
- **Contact Hours:** 0 + 6
- **Prerequisites:** ART A212.
- **Registration Restrictions:** Instructor permission.
- **May be stacked with:** ART A212 and A412.
- **Special Fees.**
- **Special Note:** May be repeated once for credit with substantive change in media or emphasis.
- **Intensified development of expressive skills including watercolor painting techniques and refines material uses with the emphasis on individual approaches to traditional and non-traditional pictorial and conceptual problems.**

### ART A313  Intermediate Painting  3 CR
- **Contact Hours:** 0 + 6
- **Prerequisites:** ART A213.
- **Registration Restrictions:** Instructor permission.
- **May be stacked with:** ART A213, A413, and A414.
- **Special Fees.**
- **Special Note:** May be repeated once for credit with substantive change in media or emphasis.
- **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.**

### ART A314  Printmaking--Litho/Serigraphy  3 CR
- **Contact Hours:** 0 + 6
- **Prerequisites:** ART A215.
- **Registration Restrictions:** Instructor permission.
- **May be stacked with:** Art A215, A315, and A415.
- **Special Fees.**
- **Exploration of lithographic and serigraphic printmaking processes. Continued development of printing techniques and individual creative concepts in image making.**

### ART A315  Intermediate Printmaking  3 CR
- **Contact Hours:** 0 + 6
- **Prerequisites:** ART A215.
- **Registration Restrictions:** Instructor permission. For the study of lithography or serigraphy, ART A314 is required as a prerequisite.
- **May be stacked with:** ART A215, A314, and A415.
- **Special Fees.**
- **Special Note:** May be repeated 3 times for credit with change of printmaking process.
- **Explores the major processes (lithography, serigraphy, intaglio, and relief processes) linked to contemporary and digital developments.**

### ART A323  Color Photography  3 CR
- **Contact Hours:** 0 + 6
- **Prerequisites:** ART A224.
- **Registration Restrictions:** Instructor permission.
- **Special Fees.**
- **Special Note:** May be repeated once for credit with substantive change in medium or emphasis.
- **Investigates techniques and conceptual approaches to color photography. Encourages exploration of diverse approaches to color processes in photography.**
ART A324  Intermediate Photography  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A224.
Registration Restrictions: Instructor permission.
Special Fees.
Investigates intermediate level techniques and conceptual approaches to photography. Encourages exploration of diverse attitudes and approaches in black and white photography for artistic expression, shooting, processing, and printing of black and white film.

ART A325  Digital Media for Photography  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A323 and [ART A225 or ART A324].
Registration Restrictions: If ART A324 is used as a prerequisite, it must have integrated darkroom/digital content.
Special Note: Offered only at Kenai Peninsula College.
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.

ART A331  Experimental Photography  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A324.
Registration Restrictions: Instructor permission.
Special Fees.
Special Note: May be repeated once for credit with substantive change in medium or emphasis.
Investigates experimental techniques and conceptual approaches to photography. Encourages exploration of diverse artistic expression.

ART A352  Intermediate Graphic Design  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A252.
May be stacked with: ART A452.
Special Fees.
Special Note: May be repeated for credit.
Applied problems in intermediate graphic design.

ART A353  Illustration I  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A257.
Registration Restrictions: Instructor permission.
May be stacked with: ART A453.
Special Fees.
Special Note: May be repeated once for credit.

ART A357  Digital Art and Design II  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A257.
Registration Restrictions: Instructor permission.
Special Fees.
Special Note: May be repeated once for credit with substantive change in emphasis with faculty approval.
Exploration of 2-D digital tools and techniques for creative expression, emphasizing production of hard copy.

ART A360A  History of Non-Western Art I  3 CR
Contact Hours: 3 + 0
Prerequisites: [ART A261 or ART A262] and ENGL A111.
Course Attributes: UAA GER Fine Arts Requirement UAA GER Humanities Requirement.
Special Fees.
Emphasis on a comparative approach to non-western civilizations including Indian art, Tibetan and Southeastern art, Chinese art, and Japanese art.

ART A360B  History of Non-Western Art II  3 CR
Contact Hours: 3 + 0
Prerequisites: [ART A261 or ART A262] and ENGL A111.
Course Attributes: UAA GER Fine Arts Requirement UAA GER Humanities Requirement.
Special Fees.
Emphasis on a comparative approach to non-western civilizations including Islamic art, African art, art of Pacific cultures, and art of the Americas.

ART A361  History of Graphic Design  3 CR
Contact Hours: 3 + 0
Prerequisites: ART A262.
Registration Restrictions: Instructor permission.
Special Fees.
History of graphic design emphasizing its beginnings to the present day including traditional and technological developments.

ART A362  History of Modern Art  3 CR
Contact Hours: 3 + 0
Prerequisites: ART A262.
Registration Restrictions: Instructor permission.
Special Fees.
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.

ART A363  History of Contemporary Art  3 CR
Contact Hours: 3 + 0
Prerequisites: ART A262.
Registration Restrictions: Instructor permission.
Special Fees.
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.

ART A364  Italian Renaissance Art  3 CR
Contact Hours: 3 + 0
Prerequisites: ART A262.
Registration Restrictions: Instructor permission.
Special Fees.
Renaissance art from early Florentine beginnings to the High Renaissance of Venice and Mannerist developments.

ART A366  Asian Art  3 CR
Contact Hours: 3 + 0
Prerequisites: ART A261 or ART A262.
Registration Restrictions: Instructor permission.
Special Fees.
Visual arts of Asiatic culture; prehistoric to the present.

ART A367  History of Photography  3 CR
Contact Hours: 3 + 0
Prerequisites: ART A262.
Special Fees.
Investigates the history of photography; its origins, chronology, culture context, and the significant contributions of individual photographers.

ART A371  Intermediate Surface Design  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A271.
Registration Restrictions: Instructor permission.
May be stacked with: ART A271 and A471.
Special Note: May be repeated once for credit with substantive change in media or emphasis.
Continued examination of Resist dyeing as a culture-rooted art and its place in the contemporary fiber movement. Bound resists (Shibori, fold dyeing, Plangi and Tritik) are utilized as the basis for individual expression and design purposes.

ART A372  Intermediate Fiber Structures  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A272.
Registration Restrictions: Instructor permission.
May be stacked with: ART A272 and A472.
Special Fees.
Special Note: May be repeated once for credit with substantive changes in media or emphasis.
Explores hand-constructed textiles, traditional percussion textiles and structural forms including paper and felt making as interpreted in a contemporary context.

ART A373  Intermediate Woven Forms  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A273.
Registration Restrictions: Instructor permission.
May be stacked with: ART A273 and A473.
Special Fees.
Special Note: May be repeated once for credit with substantive change in media or emphasis.
Continued exploration of floor loom techniques and their use with off-loom processes for the production of contemporary art.

ART A376  CAD for the Arts  3 CR
Contact Hours: 2 + 2
Prerequisites: ART A357 or THR A141.
Crosslisted with: THR A376.
Special Fees.
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.
ART A390  Selected Topics in Studio Art  3 CR  
Contact Hours: 0 + 6  
Registration Restrictions: Instructor permission and 6 credits of upper-division coursework in same studio discipline.  
May be stacked with: ART A490.  
Special Fees.  
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.  
Selected topics in studio art allowing for concentrated study in a specific area.

ART A392  Selected Topics in Art Education  1-3 CR  
Contact Hours: 1-3 + 0  
Registration Restrictions: Instructor permission. Prerequisites will vary depending upon topic.  
Special Fees.  
Special Note: May be repeated for credit in different topics for a maximum of 12 credits.  
Topics in selected areas of art education.

ART A401  Advanced Handbuilt Ceramics  3 CR  
Contact Hours: 0 + 6  
Prerequisites: ART A111 and ART A211 and ART A301.  
Registration Restrictions: Instructor permission.  
May be stacked with: ART A201 and A301.  
Special Fees.  
Special Note: May be repeated once for credit.  
Covers functional ceramics, vessel forms and sculptural ceramics. Focus is on the ceramic process as a vehicle for personal creative expression.

ART A402  Advanced Wheelthrown Ceramics  3 CR  
Contact Hours: 0 + 6  
Prerequisites: ART A111 and ART A211 and ART A302.  
Registration Restrictions: Instructor permission.  
May be stacked with: ART A202 and A302.  
Special Fees.  
Special Note: May be repeated once for credit.  
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.

ART A403  Arts and Technology  3 CR  
Contact Hours: 3 + 0  
Prerequisites: ART A203.  
Registration Restrictions: Junior status.  
Special Fees.  
Surveys the growing use of technology in art classrooms and museums.  
Examines applications for information management in collections and digital imaging, and the use of technology in the service of art education, museum education, and university web-based courses.

ART A404  Diversity and Visual Culture  3 CR  
Contact Hours: 3 + 0  
Prerequisites: ART A203.  
Registration Restrictions: Junior status.  
Special Fees.  
Overview of the issues of diversity arising in art contexts, cultural institutions including museums, community arts organizations, and universities as well as visual culture, educational texts and history. Develop a theoretical foundation based on educational and cultural models of diversity addressing race, gender, class and pedagogical methodologies.

ART A405  Experimental Drawing  3 CR  
Contact Hours: 0 + 6  
Prerequisites: ART A305.  
Registration Restrictions: Instructor permission.  
May be stacked with: ART A105, A205, and A305.  
Special Fees.  
Special Note: May be repeated once for credit.  
Integrates the development of ideas and personal iconography through experimentation with contemporary techniques and materials in drawing.

ART A407  Life Drawing and Composition II  3 CR  
Contact Hours: 0 + 6  
Prerequisites: ART A307.  
Registration Restrictions: Instructor permission.  
May be stacked with: ART A307.  
Special Fees.  
Special Note: May be repeated once for credit.  
Drawing from live models to explore advanced possibilities in design, composition and media. Emphasis on form and space using wet and dry media: charcoal, graphite, pen, brush, etc. Special emphasis on conceptual drawing concerns.

ART A409  Advanced Metalsmithing and Jewelry  3 CR  
Contact Hours: 0 + 6  
Prerequisites: ART A309.  
Registration Restrictions: Instructor permission.  
May be stacked with: ART A209 and A309.  
Special Fees.  
Special Note: May be repeated once for credit.  
Further investigation of advanced techniques, tools, and materials and more advanced design principles. Special emphasis on holloware and forging and understanding of these traditional techniques in a historical context.

ART A411  Advanced Sculpture  3 CR  
Contact Hours: 0 + 6  
Prerequisites: ART A311.  
Registration Restrictions: Instructor permission.  
May be stacked with: ART A211 and A311.  
Special Fees.  
Special Note: May be repeated once for credit.  
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.

ART A412  Advanced Watercolor Painting  3 CR  
Contact Hours: 0 + 6  
Prerequisites: ART A312.  
Registration Restrictions: Instructor permission.  
May be stacked with: ART A212 and A312.  
Special Fees.  
Special Note: May be repeated once for credit.  
Continued investigation of more advanced watercolor techniques and approaches regarding conceptual/pictorial constructions. Encourages experimentation, research and technical approaches.

ART A413  Advanced Painting  3 CR  
Contact Hours: 0 + 6  
Prerequisites: ART A313.  
Registration Restrictions: Instructor permission.  
May be stacked with: ART A213, A313, and A414.  
Special Fees.  
Special Note: May be repeated once for credit.  
Development of advanced painting techniques. Focus on complex concepts and pictorial constructions including research and experimentation in various media.

ART A414  Senior Painting Projects  3 CR  
Contact Hours: 0 + 6  
Prerequisites: ART A413.  
Registration Restrictions: Instructor permission.  
May be stacked with: ART A213, A313, and A413.  
Special Fees.  
Special Note: May be repeated once for credit.  
Expansion of individual ideas and concepts through continued experimentation and research in painting techniques and methodologies. Focus on developing a cohesive body of work.

ART A415  Advanced Printmaking  3 CR  
Contact Hours: 0 + 6  
Prerequisites: ART A314 and ART A315.  
Registration Restrictions: Instructor permission.  
May be stacked with: ART A215, A314, and A315.  
Special Fees.  
Special Note: May be repeated three times for credit with change of printmaking process.  
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.

ART A424  Advanced Photography  3 CR  
Contact Hours: 0 + 6  
Prerequisites: ART A324.  
Registration Restrictions: Instructor permission.  
Special Fees.  
Special Note: May be repeated once for credit.  
Investigates advanced level techniques and conceptual approaches to traditional and digital photography. Encourages exploration of diverse approaches in photography.
ART A452  Advanced Graphic Design  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A352.
May be stacked with: ART A352.
Special Fees.
Special Note: May be repeated for credit.
Applied problems in advanced graphic design.

ART A453  Illustration II  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A353.
Registration Restrictions: Instructor permission.
May be stacked with: ART A353.
Special Fees.
Special Note: May be repeated once for credit.
Applied problems in advanced illustration.

ART A456  3-D Digital Animation  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A357.
Registration Restrictions: Instructor permission.
Special Fees.
Studio course in computer animation: geometric modeling, motion specification, lighting, texture mapping, rendering, compositing, using production techniques and systems for computer-synthesized animation.

ART A471  Advanced Surface Design  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A371.
Registration Restrictions: Instructor permission.
May be stacked with: ART A271 and A371.
Special Note: May be repeated once for credit.
Development and refinement of individual problems in resist-dyeing using fluid, bound and print/transfer techniques.

ART A472  Advanced Fiber Structures  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A372.
Registration Restrictions: Instructor permission.
May be stacked with: ART A272 and ART A372.
Special Fees.
Special Note: May be repeated once for credit.
Refinement of fiber processes with an emphasis on structural forms, materials, approaches, scale relationships and installations.

ART A473  Advanced Woven Forms  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A373.
Registration Restrictions: Instructor permission.
May be stacked with: ART A273 and A373.
Special Fees.
Special Note: May be repeated once for credit with substantive change in media or emphasis.
Further development of advanced loom weaving techniques and refinement of personal imagery and problems related to contemporary approaches to fiber art.

ART A490  Selected Topics in Studio Art  3 CR
Contact Hours: 0 + 6
Registration Restrictions: Instructor permission and 6 credits of upper division coursework in same studio discipline.
May be stacked with: ART A390.
Special Fees.
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.
Selected topics in studio art allowing for advanced concentrated study in a specific area.

ART A491  Senior Seminar  3 CR
Contact Hours: 3 + 0
Prerequisites: ART A262 and PHIL A401.
Registration Restrictions: Instructor permission, Senior status, and completion of GER Tier 1 (basic college-level skills) courses.
Course Attributes: UAA GER Integrative Capstone.
Special Fees.
Special Note: Offered fall semester only.
Lectures, discussions, workshops and projects integrating the knowledge of professional and technical practices for the artist. Develops effective communication skills to be a practicing artist. Demonstrates the necessary art historical, aesthetic, and critical tools to resolve and assess creative problem solving approaches.

ART A492  Art History Seminar  3 CR
Contact Hours: 3 + 0
Prerequisites: ART A261 or ART A262 or ART A360.
Registration Restrictions: Instructor permission.
Special Fees.
Special Note: May be repeated 3 times for credit in different topics for a maximum of 12 credits.
Seminar in art history.

ART A495  Practicum  1-3 CR
Contact Hours: 0 + 2-6
Registration Restrictions: Instructor permission and a minimum of 3 credits of 400-level coursework in selected content area and approval of area coordinator.
Grade Mode: Pass/No Pass.
Special Note: A total of 6 credits may be applied to an art degree.
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.

ART A498  Individual Research  1-3 CR
Contact Hours: 0 + 2-6
Registration Restrictions: Instructor permission and minimum of 6 credits upper division studio coursework in selected studio area and approval of area coordinator.
Special Fees.
Special Note: A total of 6 credits may be applied toward an Art degree.
Individual art research focusing on professional development, conceptual growth and awareness, critical thinking, and advanced technical proficiency in any of the major disciplines.

ART A499  Thesis  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A491.
Registration Restrictions: Declared major in BFA in Art and approval of BFA Committee.
Grade Mode: Pass/No Pass.
Student will produce and exhibit a body of work based on an approved thesis proposal. Exhibition of work will be in designated group show.

ASL - American Sign Language

Offered through the College of Arts and Sciences Administration/Humanities Building (ADM), Suite 287, 786-4030 www.uaa.alaska.edu/languages

ASL A101  Elementary American Sign Language I  3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Humanities Requirement.
Special Fees.
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.

ASL A102  Elementary American Sign Language II  3 CR
Contact Hours: 3 + 0
Prerequisites: ASL A101.
Course Attributes: UAA GER Humanities Requirement.
Special Fees.
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.

ASL A201  Intermediate American Sign Language I  3 CR
Contact Hours: 3 + 0
Prerequisites: ASL A102.
Course Attributes: UAA GER Humanities Requirement.
Special Fees.
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.

ASL A202  Intermediate American Sign Language II  3 CR
Contact Hours: 3 + 0
Prerequisites: ASL A201.
Course Attributes: UAA GER Humanities Requirement.
Special Fees.
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.
**ASTR - Astronomy**

*Offered through the College of Arts and Sciences*

ConocoPhillips Integrated Sciences Building (CPSB), Room 101, 786-1238
http://salt.uaa.alaska.edu

**ASTR A103**  
**Solar System Astronomy**  3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: High school algebra and trigonometry or equivalent.  
Corequisite: ASTR A103L.  
Course Attributes: UAA GER Natural Sciences Requirement.  
Special Fees.  
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.

**ASTR A103L**  
**Solar System Astronomy Laboratory**  1 CR  
Contact Hours: 0 + 3  
Registration Restrictions: High school algebra and trigonometry or equivalent.  
Corequisite: ASTR A103.  
Course Attributes: UAA GER Natural Sciences Lab Only.  
Special Fees.  
Introductory astronomy laboratory with experiments in basic observational methods and data analysis applicable to the study of the solar system.

**ASTR A104**  
**Stars, Galaxies and Cosmology**  3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: High school algebra and trigonometry or equivalent.  
Corequisite: ASTR A104L.  
Course Attributes: UAA GER Natural Sciences Requirement.  
Special Fees.  
Introduction to solar, stellar, galactic, extragalactic astronomy. Stars, clusters, galaxies, stellar evolution, the universe as a whole, and cosmology.

**ASTR A104L**  
**Stars, Galaxies and Cosmology Laboratory**  1 CR  
Contact Hours: 0 + 3  
Registration Restrictions: High school algebra and trigonometry or equivalent.  
Corequisite: ASTR A104.  
Course Attributes: UAA GER Natural Sciences Lab Only.  
Special Fees.  
Introductory astronomy laboratory with experiments in basic observational methods and data analysis applicable to the study of the Sun, stellar, galactic, and extragalactic astronomy.

**ASTR A365**  
**Astrobiology**  3 CR  
Contact Hours: 3 + 0  
Prerequisites: BIOL A115 and [PHYS A123 or PHYS A211].  
Registration Restrictions: Junior standing; completion of all GER Tier 1 (basic college-level skills) courses.  
Corequisites: BIOL A365.  
Course Attributes: UAA GER Integrative Capstone.  
Special Fees.  
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.

**AT - Aviation Technology**

*Offered through the Community & Technical College*

Aviation Complex (AVNC), 2811 Merrill Field Drive, 786-7200  
www.uaa.alaska.edu/ctc/programs/aviation

**ATA A103**  
**Airframe and Powerplant Mechanic**  3 CR  
Contact Hours: 2 + 2  
Registration Restrictions: Approved FAA Airman Certificate and/or Rating Application FAA Form 8610-2.  
Provides advanced work in aviation maintenance records; expands on principles of airframe materials, systems and procedures; and explores powerplant operations and troubleshooting.

**ATA A105**  
**Aviation Maintenance:**  3 CR  
Contact Hours: 2 + 2  
Registration Restrictions: Approved FAA Airman Certificate and/or Rating Application FAA Form 8610-2.  
Provides advanced work in aviation maintenance records; expands on principles of airframe materials, systems and procedures; and explores powerplant operations and troubleshooting.

**ATA A281**  
**Airframe and Powerplant Mechanic**  3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: Upper Division Standing  
Evaluates historical development and analyzes selected contemporary issues, problems, and trends facing the air transportation industry. Includes regulators and associations, the makeup of commercial and general aviation air transportation, and international aviation.

**ATA - Aviation Administration/Management**

*Offered through the Community & Technical College*

Aviation Complex (AVNC), 2811 Merrill Field Drive, 786-7200  
www.uaa.alaska.edu/ctc/programs/aviation

**ATA A102**  
**Introduction to Aviation Technology**  3 CR  
Contact Hours: 3 + 0  
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 A132**  
**History of Aviation**  3 CR  
Contact Hours: 3 + 0  
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 CR  
Contact Hours: 3 + 0  
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 CR  
Contact Hours: 3 + 0  
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 CR  
Contact Hours: 3 + 0  
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 agencies, and future concepts in aviation safety.

**ATA A290**  
**Selected Topics in Aviation Technology**  1-6 CR  
Contact Hours: 0-6 + 0-12  
Registration Restrictions: Department permission required.  
Provides 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 identification, summarization, and application of current technical information by theoretical and/or experiential learning.

**ATA A295**  
**Aviation Internship I**  1-3 CR  
Contact Hours: 0 + 5-15  
Registration Restrictions: Grade of C or better in 12 credits of Aviation Technology-related classes. Department permission required. Proof of accident insurance required.  
Grade Mode: Pass/No Pass.  
Special Note: Open entry/Open exit. Students must apply to the Aviation Technology Division to coordinate placement prior to course enrollment.  
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.
**ATA A331 Human Factors in Aviation** 3 CR
Contact Hours: 3 + 0
Registration Restrictions: AAS in aviation field or aviation-related experience.
Covers the following aspects of human factors: human error, fatigue, 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.

**ATA A335 Airport Operations** 3 CR
Contact Hours: 3 + 0
Prerequisites: ATA A102 and ATA A134.
Registration Restrictions: Junior standing
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, economic impacts, financial analyses and budgeting systems, security, liability, maintenance, professional qualification, and public relations.

**ATA A336 Air Service Operations** 3 CR
Contact Hours: 3 + 0
Prerequisites: ATA A102 and ATA A134.
Registration Restrictions: Junior standing
Assesses functions of air service operations. Analyzes organization, financing, revenues and expenses, construction, expansion, safety, and relations with local agencies, including airport management.

**ATA A337 Airline Operations** 3 CR
Contact Hours: 3 + 0
Prerequisites: ATA A102 and ATA A134.
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.

**ATA A415 Company Resource Management** 3 CR
Contact Hours: 3 + 0
Prerequisites: ATA A331.
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.

**ATA A425 Civil Aviation Security** 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Aviation-related work experience or training, Instructor approval.
Analyzes applicable civil aviation transportation security regulations and policy; assesses security risks and formulates potential intervention, prevention, or enhancement plans using current and evolving technology.

**ATA A431 Aircraft Accident Investigation** 3 CR
Contact Hours: 3 + 0
Prerequisites: ATA A233 and ATA A331.
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.

**ATA A490 Advanced Topics in Aviation Technology** 1-6 CR
Contact Hours: 0-6 + 0-12
Registration Restrictions: Department permission required.
Special Note: A maximum of 6 credits may be applied toward the BSAT degree. May be repeated for credit under different topic.
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: (1) analysis, (2) evaluation, and (3) synthesis.

**ATA A492 Air Transportation System Seminar** 3 CR
Contact Hours: 3 + 0
Prerequisites: BA A488.
Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses. Junior standing and Division approval required.
Course Attributes: UAA GER Integrative Capstone
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.

**ATA A495 Aviation Internship II** 1-3 CR
Contact Hours: 0 + 5-15
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.
Grade Mode: Pass/No Pass.
Special Note: Open entry/Open exit. Students must apply to the Aviation Technology Division to coordinate placement prior to course enrollment.
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.

**ATC - Air Traffic Control**
Offered through the Community & Technical College Aviation Complex (AVNC), 2811 Merrill Field Drive, 786-7200 www.uaa.alaska.edu/ctc/programs/aviation

**ATC A143 ATC Regulations** 3 CR
Contact Hours: 3 + 0
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 CR
Contact Hours: 3 + 0
Special Fees.
Special Note: One hour in Flight Training Device required.
Introduces navigation tools and references, and their utilization.

**ATC A147 Pilot/Controller Techniques** 3 CR
Contact Hours: 3 + 0
Prerequisites: ATC A143.
Examines methods of airport operations, as well as aeronautical lighting and other airport visual aids, such as airport markings and signs. Includes discussion of varying techniques used by pilots and controllers in all airspace classifications, as well as the various levels of air traffic control ranging from uncontrolled airports to highly complex international airports and the services available to pilots.

**ATC A240 Operations in Flight Service Station** 3 CR
Contact Hours: 3 + 0
Prerequisites: ATC A143 and ATP A235.
Examines fundamentals of weather observation, use of FAA publications in flight planning, phraseologies, and radio frequencies used in air-ground communications. Presents decoding of civil Notice to Airmen (NOTAMS) and operating positions in Flight Service Stations.

**ATC A241 Control Tower Operations** 3 CR
Contact Hours: 3 + 0
Prerequisites: ATC A143 and ATC A147.
Explains operating techniques of ATC airport facilities in visual and instrumental conditions. Includes operations of airport lighting systems, proper phraseology, separation requirements, control techniques and emergency actions.

**ATC A241L Control Tower Operations Lab** 1 CR
Contact Hours: 0 + 2
Prerequisites: (ATC A241 or concurrent enrollment).
Grade Mode: Pass/No Pass.
Special Fees.
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.

**ATC A242 ATC Terminal Radar Procedures** 3 CR
Contact Hours: 3 + 0
Prerequisites: ATC A143 and ATC A144 and ATP A235.
Explores RADAR theory fundamentals and systems operation in air traffic control. Examines procedures of instrument traffic control in the terminal radar environment.

**ATC A242L ATC Terminal Radar Procedures Lab** 1 CR
Contact Hours: 0 + 2
Prerequisites: (ATC A242 or concurrent enrollment).
Grade Mode: Pass/No Pass.
Special Fees.
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.
**Course Descriptions**

**ATC A243**  Enroute Procedures  3 CR
Contact Hours: 3 + 0
Prerequisites: ATC A242.
Explores procedures of instrument traffic control in RADAR and non-RADAR environments. Emphasizes longitudinal, vertical, and lateral separation of air traffic.

**ATC A243L**  Enroute Procedures Lab  1 CR
Contact Hours: 0 + 2
Prerequisites: (ATC A243 or concurrent enrollment).
Grade Mode: Pass/No Pass.
Special Fees.
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.

**ATC A325**  Tools for Weather Briefing  3 CR
Contact Hours: 3 + 0
Prerequisites: ATP A235.
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.

**ATC A340**  Terminal Instrument Procedures  3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A272.
Examines the criteria used to formulate, review, approve, and publish procedures for instrument approach and departure of aircraft to and from civil and military airports.

**ATP - Aviation - Professional Piloting**

*Offered through the Community & Technical College*

**Aviation Complex (AVNC)**, 2811 Merrill Field Drive, 786-7200

www.uaa.alaska.edu/ctc/programs/aviation

**ATP A100**  Private Pilot Ground School  3 CR
Contact Hours: 3 + 0
Special Fees.
Special Note: Two hours in Flight Training Device required.
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.

**ATP A101**  Pre-Professional Flying  2 CR
Contact Hours: 1 + 2
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.
Special Fees.
Special Note: Open-entry/Open-exit. Three hours in Flight Training Device required.
Provides flight training to review basic private pilot maneuvers and to introduce the advanced flight maneuvers required of a commercial pilot.

**ATP A104**  Flying Alaska Bush  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Private Pilot Certificate or higher rating.
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.

**ATP A116**  Instrument Ground School  3 CR
Contact Hours: 3 + 0
Registration Restrictions: FAA Private Pilot Certificate or equivalent.
Special Fees.
Special Note: Two hours in a Flight Training Device (FTD) is required.
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.

**ATP A126**  Instrument Flying  2 CR
Contact Hours: 1 + 2
Prerequisites: ATP A101 and (ATP A116 or concurrent enrollment).
Registration Restrictions: Meet course prerequisites or Private Pilot Certificate. Departmental approval required.
Special Fees.
Special Note: Open-entry/Open-exit. Twelve hours in Flight Training Devices required.
Fulfills FAA flight training requirements for an instrument airplane rating under FAR Part 141.

**ATP A200**  Commercial Ground School  3 CR
Contact Hours: 3 + 0
Registration Restrictions: FAA Instrument Rating or equivalent.
Provides preparation for the Federal Aviation Administration (FAA) Commercial Pilot Knowledge Test. Includes advanced studies of Private Pilot and Instrument Pilot topics, high performance and complex aircraft, commercial flight maneuvers, and commercial Federal Aviation Regulations (FARs).

**ATP A218**  Commercial Flying I  1.5 CR
Contact Hours: 1 + 1
Prerequisites: ATP A126 and (ATP A200 or concurrent enrollment).
Registration Restrictions: Private Pilot Certificate. Department approval required.
Special Fees.
Special Note: Open-entry/Open-exit.
Provides flight training to review basic private pilot maneuvers and to introduce the advanced flight maneuvers required of a commercial pilot.

**ATP A219**  Commercial Flying II  1.5 CR
Contact Hours: 1 + 1
Special Note: Open-entry/Open-exit.
Prerequisites: ATP A218.
Registration Restrictions: Department approval required.
Special Fees.
Special Note: Open-entry/Open-exit.
Provides flight training to build proficiency and experience in cross-country flying and night operations. Includes introduction to complex airplanes.

**ATP A220**  Commercial Flying III  2 CR
Contact Hours: 1 + 2
Prerequisites: ATP A219.
Registration Restrictions: Department approval required. Concurrent enrollment in ATP A305 is required for BSAT Majors.
Special Fees.
Special Note: Open-entry/Open-exit.
Develops proficiency required to pass the FAA Commercial Pilot Practical Flight Test.

**ATP A231**  Search, Survival, and Rescue  3 CR
Contact Hours: 3 + 0
Special Fees.
Prerequisites: ATA A233.
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.

**ATP A232**  Advanced Aviation Navigation  3 CR
Contact Hours: 3 + 0
Prerequisites: ATP A100.
Examines earth's surface and mapping methods, Low, High, and International en route navigation charts and approach plates; examines advanced technology navigation and flight display systems, and the theory and operation of GPS navigation equipment; looks at future trends in aeronautical navigation.

**ATP A235**  Elements of Weather  3 CR
Contact Hours: 3 + 0
Special Fees.
Prerequisites: ATP A100.
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 A300**  CFI Ground School  3 CR
Contact Hours: 3 + 0
Registration Restrictions: FAA Commercial Pilot Certificate with Instrument Rating or equivalent.
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).
BA A131  Personal Finance  3 CR
Contact Hours: 3 + 0
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  Introduction to Business  3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Social Sciences Requirement.
Introduces students to the fundamentals of business. Explores strategies that allow companies to compete in today's interactive, global marketplace. Covers each of the functional areas of business: management, marketing, finance, and accounting. Students gain some valuable critical-thinking, problem-solving, team-building, and communication skills required in modern business environments.

BA A155  Personal Investments  3 CR
Contact Hours: 3 + 0
An in-depth course on investment of personal income with emphasis on investments, including stocks, bonds, mutual funds, banking, annuities, insurance, real estate, estate planning, and taxes.

BA A166  Small Business Management  3 CR
Contact Hours: 3 + 0
Business planning as key to successful small business management. Examines practical aspects of management for starting and operating a small businesses. Assists students in furthering their understanding of personal finance, business planning, marketing, production, and business finance.

BA A231  Fundamentals of Supervision  3 CR
Contact Hours: 3 + 0
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 CR
Contact Hours: 3 + 0
Provides flight instruction for Professional Piloting students seeking additional ratings on their pilot certificates, e.g. Float, Multi-engine, or Type Rating.

ATP A332  Transport Aircraft Systems  3 CR
Contact Hours: 3 + 0
Prerequisites: ATP A200.
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.

ATP A401  ATP Flying  2 CR
Contact Hours: 1 + 2
Prerequisites: (ATP A400 or concurrent enrollment).
Registration Restrictions: Must hold a Commercial Pilot Certificate and comply with FAR Part 61.159.
Provides flight instruction for Professional Piloting students seeking additional ratings on their Flight Instructor Certificate, e.g., Instrument and/or Multi-engine.

ATP A405  Additional CF'I Rating  2 CR
Contact Hours: 1 + 2
Prerequisites: (ATP A220 and (ATP A300 or concurrent enrollment)).
Registration Restrictions: Must hold a Commercial Pilot Certificate and comply with FAR Part 61.149.
Provides flight instruction for Professional Piloting students seeking additional ratings on their Flight Instructor Certificate, e.g., Instrument and/or Multi-engine.

ATP A432  Turbine Airplane Transition  3 CR
Contact Hours: 3 + 0
Prerequisites: ATP A332. Special Fees.
Special Note: Course will include Cessna Caravan Level B Simulator time and material covered is specific to the Cessna Caravan (CE-208) airplane.
Provides flight instruction for professional Piloting students seeking additional ratings on their Flight Instructor Certificate, e.g., Instrument and/or Multi-engine.

ATP A305  Additional Aircraft Rating  2 CR
Contact Hours: 1 + 2
Prerequisites: (ATP A220 or concurrent enrollment).
Special Fees.
Special Note: Open-entry/Open-exit. One hour in Flight Training Device required.
Provides flight instruction for Professional Piloting students seeking additional ratings on their pilot certificates, e.g., Float, Multi-engine, or Type Rating.

BA A160  Management Practices  3 CR
Contact Hours: 3 + 0
Provides flight instruction for Professional Piloting students seeking additional ratings on their Flight Instructor Certificate, e.g., Instrument and/or Multi-engine.

ATP A301  CFI Flying  2 CR
Contact Hours: 1 + 2
Special Fees.
Special Note: Open-entry/Open-exit. One hour in Flight Training Device required.
Provides flight instruction for Professional Piloting students seeking additional ratings on their pilot certificates, e.g., Float, Multi-engine, or Type Rating.

BA A273  Introduction to Statistics for Business and Economics  3 CR
Contact Hours: 3 + 0
Prerequisites: CIS A110 and [MATH A107 or MATH A172]. Special Note: Students may apply no more than 3 credits from BA A273 or STAT A252 toward graduation requirements for a baccalaureate degree.
Introduction to statistics and probability with emphasis on the analysis of business and economic data. Includes descriptive statistics for univariate and bivariate data; elementary probability and sampling distributions; estimation of means, proportions, and simple regression coefficients. Students will be introduced to one or more computer packages for statistical data analysis.

BA A246  Business Law I  3 CR
Contact Hours: 3 + 0
Covers the discipline of law. 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.

BA A241  Business Law II  3 CR
Contact Hours: 3 + 0
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.

BA A242  Business Law I  3 CR
Contact Hours: 3 + 0
Prerequisites: BA A241 or JUST A241.
Crosslisted with JUST A241.
Continuation of Business Law I. Covers topics such as sales and leases, negotiables, debtor-creditor relations, agency, business organizations, and property protection.

BA A264  Personal Selling  3 CR
Contact Hours: 3 + 0
Designed for people with or without sales experience. Explores skills all individuals use to sell themselves, products, services, and ideas. Offers opportunities for students to practice selling skills that will help them become better communicators throughout life.

BA A260  Marketing Practices  3 CR
Contact Hours: 3 + 0
Prerequisites: BA A151.
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.

BA A131  Personal Finance  3 CR
Contact Hours: 3 + 0
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 A252 toward graduation requirements for a baccalaureate degree.

BA A273  Introduction to Statistics for Business and Economics  3 CR
Contact Hours: 3 + 0
Prerequisites: CIS A110 and [MATH A107 or MATH A172]. Special Note: Students may apply no more than 3 credits from BA A273 or STAT A252 toward graduation requirements for a baccalaureate degree.
Introduction to statistics and probability with emphasis on the analysis of business and economic data. Includes descriptive statistics for univariate and bivariate data; elementary probability and sampling distributions; estimation of means, proportions, and simple regression coefficients. Students will be introduced to one or more computer packages for statistical data analysis.

BA A273  Introduction to Statistics for Business and Economics  3 CR
Contact Hours: 3 + 0
Prerequisites: CIS A110 and [MATH A107 or MATH A172]. Special Note: Students may apply no more than 3 credits from BA A273 or STAT A252 toward graduation requirements for a baccalaureate degree.
Introduction to statistics and probability with emphasis on the analysis of business and economic data. Includes descriptive statistics for univariate and bivariate data; elementary probability and sampling distributions; estimation of means, proportions, and simple regression coefficients. Students will be introduced to one or more computer packages for statistical data analysis.

BA A273  Introduction to Statistics for Business and Economics  3 CR
Contact Hours: 3 + 0
Prerequisites: CIS A110 and [MATH A107 or MATH A172]. Special Note: Students may apply no more than 3 credits from BA A273 or STAT A252 toward graduation requirements for a baccalaureate degree.
Introduction to statistics and probability with emphasis on the analysis of business and economic data. Includes descriptive statistics for univariate and bivariate data; elementary probability and sampling distributions; estimation of means, proportions, and simple regression coefficients. Students will be introduced to one or more computer packages for statistical data analysis.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
<th>Contact Hours</th>
<th>Prerequisites</th>
<th>Registration Restrictions</th>
<th>Special Notes</th>
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<tbody>
<tr>
<td>BA A295</td>
<td>Internship in Business Administration</td>
<td>3 CR</td>
<td>0 + 3</td>
<td>ENGL A111 and [COMM A111 or COMM A235 or COMM A237 or COMM A241].</td>
<td>Permission of Faculty Internship Coordinator; 2.75 GPA. MATH A105 or A107 recommended.</td>
<td>Special Note: May be repeated for credit, but only 3 credits will apply to meeting business administration degree requirements. Integrates classroom study with planned and supervised work experience in the public and private sectors. Students are exposed to occupational work environment beyond the boundaries of the campus, enhancing self-confidence and career direction.</td>
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<tr>
<td>BA A300</td>
<td>Organizational Theory and Behavior</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>-</td>
<td>College of Business &amp; Public Policy majors must be admitted to upper-division standing. 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.</td>
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<tr>
<td>BA A306</td>
<td>Real Estate Principles</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>BA A131.</td>
<td>College of Business &amp; Public Policy majors must be admitted to upper-division standing. Surveys all aspects of real estate ownership. Topics covered are: rights and interest in land, forms of ownership, real estate sales contract, mortgages and notes, deeds of trust, sources of financing, and real estate appraisal.</td>
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<tr>
<td>BA A315</td>
<td>Property Management and Marketing</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>BA A131 or BA A306 or BA A325.</td>
<td>College of Business &amp; Public Policy majors must be admitted to upper-division standing. Surveys all aspects of property management and marketing. Topics covered are: residential management, shopping center management, office building management, leases, maintenance, landlord-tenant laws, real estate sales, and marketing.</td>
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<tr>
<td>BA A320</td>
<td>Real Estate Finance</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>ACCT A202 and BA A273 and ECON A202.</td>
<td>College of Business &amp; Public Policy majors must be admitted to upper-division standing. Surveys the practice of corporate finance. Topics covered are: interest rates, mortgages, federal housing policies, secondary mortgage markets, leverage and property, taxation, and real estate in a portfolio context.</td>
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<tr>
<td>BA A325</td>
<td>Corporate Finance</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>ACCT A202 and BA A273 and ECON A202.</td>
<td>College of Business &amp; Public Policy majors must be admitted to upper-division standing. 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.</td>
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<tr>
<td>BA A340</td>
<td>Principles of Marketing</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>-</td>
<td>College of Business &amp; Public Policy majors must be admitted to upper-division standing. 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.</td>
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<tr>
<td>BA A361</td>
<td>Human Resource Management</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>BA A300.</td>
<td>College of Business &amp; Public Policy majors must be admitted to upper-division standing. 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.</td>
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<tr>
<td>BA A375</td>
<td>Statistics for Business and Economics</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>BA A273 and MATH A272.</td>
<td>College of Business &amp; Public Policy majors must be admitted to upper-division standing. 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.</td>
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<tr>
<td>BA A377</td>
<td>Operations Management</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>BA A273 and MATH A272.</td>
<td>College of Business &amp; Public Policy majors must be admitted to upper-division standing. 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.</td>
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<tr>
<td>BA A380</td>
<td>Investment Management</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>BA A325.</td>
<td>College of Business &amp; Public Policy majors must be admitted to upper-division standing. Consumer-firm relationship analyzed through the application of concepts drawn from contemporary behavioral science to concrete business cases and practices. Relevant concepts from fields of cultural anthropology, sociology, and psychology applied to problems encountered in marketing to various consumer groups.</td>
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<tr>
<td>BA A381</td>
<td>Consumer Behavior</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>BA A343.</td>
<td>College of Business &amp; Public Policy majors must be admitted to upper-division standing. Consumer-firm relationship analyzed through the application of concepts drawn from contemporary behavioral science to concrete business cases and practices. Relevant concepts from fields of cultural anthropology, sociology, and psychology applied to problems encountered in marketing to various consumer groups.</td>
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<tr>
<td>BA A385</td>
<td>Advanced Corporate Finance</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>BA A325.</td>
<td>College of Business &amp; Public Policy majors must be admitted to upper-division standing. Advanced course in corporate finance presenting analytical techniques and concepts. Includes multifacttor asset pricing models, free cash flow and corporate valuation, capital budgeting risk analysis and real options, capital structure theory, mergers, and corporate bankruptcies.</td>
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<tr>
<td>BA A395</td>
<td>Property Management Internship</td>
<td>3 CR</td>
<td>0 + 9</td>
<td>Permission of faculty internship coordinator</td>
<td>Grade Mode: Pass/No Pass. Special Fees. Integrates classroom knowledge with supervised work experience in the property management and related real estate environment.</td>
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<tr>
<td>BA A420</td>
<td>Marketing Research</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>BA A343 and [BA A375 or ECON A412 or ECON A429].</td>
<td>College of Business &amp; Public Policy majors must be admitted to upper-division standing. Examines the marketing research function and its role in the managerial decision-making process. Course will include an overview of the marketing research process. Includes conducting primary and secondary data collection, analysis of statistical data, and preparing a written and oral research report.</td>
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<tr>
<td>BA A426</td>
<td>Financial Institutions</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>BA A325.</td>
<td>College of Business &amp; Public Policy majors must be admitted to upper-division standing. Study of the functions, structures, delivery systems, efficiencies, risk management, and performance of financial institutions including banks, saving and loan associations, credit unions, investment companies, pension funds, mutual funds, and endowments.</td>
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<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Prerequisites</td>
<td>Registration Restrictions</td>
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<tr>
<td>BA A427</td>
<td>International Finance</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0</td>
<td>Prerequisites: BA A325. Registration Restrictions: College of Business &amp; Public Policy majors must be admitted to upper-division standing. 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.</td>
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<tr>
<td>BA A431</td>
<td>Real Estate Appraisal</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0</td>
<td>Prerequisites: BA A306. Registration Restrictions: College of Business &amp; Public Policy majors must be admitted to upper-division standing. Surveys all aspects of the real estate appraisal. Topics covered are: appraisal process, real estate economics, property inspection, sales comparison approach, cost approach, income approach, reporting appraisal opinion, and the professional appraiser.</td>
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<tr>
<td>BA A432</td>
<td>Real Estate Law</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0</td>
<td>Prerequisites: BA A241 or JUST A241. Registration Restrictions: College of Business &amp; Public Policy majors must be admitted to upper-division standing.</td>
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<tr>
<td>BA A447</td>
<td>International Marketing</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0</td>
<td>Prerequisites: BA A343. Registration Restrictions: College of Business &amp; Public Policy majors must be admitted to upper-division standing. Emphasizes concepts of marketing strategy used to achieve competitive advantage in the global marketplace. Focuses on market planning, organizing, coordinating, and on the controlling functions of international marketing management.</td>
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<tr>
<td>BA A451</td>
<td>Advanced Investment Strategies</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0</td>
<td>Prerequisites: BA A380 with minimum grade of C. Registration Restrictions: College of Business &amp; Public Policy majors must be admitted to upper-division standing. 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.</td>
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<tr>
<td>BA A452</td>
<td>Financial Derivatives</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0</td>
<td>Prerequisites: BA A325. Registration Restrictions: College of Business &amp; Public Policy majors must be admitted to upper-division standing. 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.</td>
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<tr>
<td>BA A453</td>
<td>Bond Market Analysis</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0</td>
<td>Prerequisites: BA A325. Registration Restrictions: College of Business &amp; Public Policy majors must be admitted to upper-division standing. 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 management, bond portfolio management, indexing, and performance evaluation.</td>
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<tr>
<td>BA A460</td>
<td>Marketing Management</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0</td>
<td>Prerequisites: BA A343. Registration Restrictions: College of Business &amp; Public Policy majors must be admitted to upper-division standing. Analysis of product, price, promotion, and distribution decisions from a strategic marketing planning perspective. Emphasizes marketing decision models applied to organizations.</td>
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<tr>
<td>BA A461</td>
<td>Negotiation and Conflict Management</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0</td>
<td>Prerequisites: BA A343. Registration Restrictions: College of Business &amp; Public Policy majors must be admitted to upper-division standing. Provides students with a forum to develop and practice negotiation skills and offers opportunities to make positive changes in negotiation behavior and habits.</td>
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<tr>
<td>BA A462</td>
<td>Strategic Management</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0</td>
<td>Prerequisites: BA A273 with minimum grade of C and BA A300 with minimum grade of C and BA A325 with minimum grade of C and BA A343 with minimum grade of C. Registration Restrictions: College of Business &amp; Public Policy majors must be admitted to upper-division standing. Evaluation of external and internal environment to formulate a strategic plan that contributes to achieving above average returns. Analysis of theory and case studies to prepare students to carry out strategic decisions in the global environment.</td>
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<tr>
<td>BA A463</td>
<td>Promotion Management</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0</td>
<td>Prerequisites: BA A343. Registration Restrictions: College of Business &amp; Public Policy majors must be admitted to upper-division standing. Examines the concepts of advertising and other promotional tools. Focuses on the design, management, and implementation of promotional strategy.</td>
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<tr>
<td>BA A464</td>
<td>Applications in Management</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0</td>
<td>Prerequisites: BA A300. Registration Restrictions: College of Business &amp; Public Policy majors must be admitted to upper-division standing. 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.</td>
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<tr>
<td>BA A487</td>
<td>International Management</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0</td>
<td>Prerequisites: BA A300 with minimum grade of C. Registration Restrictions: College of Business &amp; Public Policy majors must be admitted to upper-division standing. Emphasizes business and management practices across cultures. Evaluates the skills that a global manager needs to succeed in an international context.</td>
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<tr>
<td>BA A488</td>
<td>Environment of Business</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0</td>
<td>Major Restriction: Must be Business Administration major. Registration Restrictions: College of Business &amp; Public Policy majors must be admitted to upper-division standing. Examines the external context in which global businesses operate. Includes an assessment of the ethical, legal, political, and social issues that organizations face in a global environment.</td>
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<tr>
<td>BA A489</td>
<td>Entrepreneurship and New Business Planning</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0</td>
<td>Prerequisites: BA A462. Registration Restrictions: College of Business &amp; Public Policy majors must be admitted to upper-division standing. 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.</td>
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<tr>
<td>BA A490A</td>
<td>Current Topics in Business</td>
<td>1-6 CR</td>
<td>Contact Hours: 1-6 + 0</td>
<td>Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing. May be stacked with: BA A690. Special Note: May be repeated for credit with a change of subtitle up to a maximum of 6 credits. Explores current issues, techniques, and trends affecting business.</td>
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<tr>
<td>BA A491A</td>
<td>Student Managed Portfolio</td>
<td>3 CR</td>
<td>Contact Hours: 1 + 4</td>
<td>Prerequisites: BA A380 and (BA A451 or concurrent enrollment). Student managed investment portfolios provide students with an opportunity to conduct security analysis and make investment decisions in a realistic environment. The investment objective shall be to outperform the equity market on a risk-adjusted basis, as measured by a suitable benchmark.</td>
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<tr>
<td>BA A491B</td>
<td>Institutional Money Management</td>
<td>3 CR</td>
<td>Contact Hours: 1 + 4</td>
<td>Prerequisites: BA A491A. Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing. Faculty permission required. Studies institutional aspects of money management such as Request for Proposal preparation, Securities and Exchange Commission requirements, client reporting, and custodial relationships. In addition, students will provide leadership to students enrolled in BA A491A.</td>
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</table>
Course Descriptions

BA A495 Advanced Internship in Business Administration 3 CR
Contact Hours: 0 + 9
Registration Restrictions: College of Business & Public Policy majors must be admitted to upper-division standing; Permission of the BA Faculty Internship Coordinator; 2.75 GPA overall; 3.0 GPA in major.
Grade Mode: Pass/No Pass.
Special Fees: Student pays costs associated with internship experience.
Special Note: May be repeated more than once for credit, but only 3 credits will apply to meeting business majors’ degree requirements.
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.

BA A601 Business Statistics and Data Analysis 2 CR
Contact Hours: 2 + 0
Registration Restrictions: Graduate Standing.
Special Note: Offered Fall Semesters.
Data identification, collection, and analysis and presentation of results. Basic statistical tools and models for problem analysis and decision making are presented in the manager’s role in the organization. Emphasis is on the appropriate selection, use and interpretation of statistical models.

BA A603 Fundamentals of Finance 3 CR
Contact Hours: 3 + 0
Prerequisites: ACCT A601 and BA A601.
Registration Restrictions: Graduate Standing.
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 towards MBA degree.
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.

BA A604 Marketing Management 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
Special Note: Offered Spring Semesters.
Discusses the role of marketing in the society and economy. The business firm as a marketing system, management of the firm’s marketing effort.

BA A615 Real Estate Investment Analysis 3 CR
Contact Hours: 3 + 0
Prerequisites: BA A603.
Registration Restrictions: Graduate standing
Provides coverage of the analytical techniques for valuing real estate investments at the micro and macro levels. Covers primary and secondary mortgage markets and securitization of residential and commercial real estate mortgages.

BA A617 Technology Management 3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.
Crosslisted with: ESM A617.
Issues and case studies of policy development, strategy, planning and management of technology in the overall corporate environment.

BA A628 Executive Leadership 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Admission to MBA Program or permission of instructor.
Exploration of characteristics and practice of executive leadership, primarily through interaction with guest executives.

BA A629 Negotiation and Conflict Management 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Admission to MBA Program or permission of instructor.
Designed to present students with opportunity to improve their negotiating skills. It is oriented toward providing a forum conducive to practicing these skills and making positive changes in behavior and habits in order to facilitate their success.

BA A631 Business Environment Analysis 3 CR
Contact Hours: 3 + 0
Prerequisites: ECON A602.
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.
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.

BA A632 Organizational Behavior and Human Resource Management 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
A detailed interdisciplinary study of those organizational behavior and human resource factors which contribute centrally to the firm’s success. Current and future developments regarding key concepts such as motivation, leadership, power and authority, organizational processes and culture, selection and placement, performance appraisal, compensation, and human development will be examined.

BA A633 Problem Formulation and Decision Analysis 3 CR
Contact Hours: 3 + 0
Prerequisites: BA A601 and ECON A602.
Registration Restrictions: Graduate standing.
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.

BA A634 Organization Design and Development 3 CR
Contact Hours: 3 + 0
Prerequisites: BA A632.
Registration Restrictions: Graduate standing.
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.

BA A635 Current Marketing Issues Seminar 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
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.

BA A640 Global Marketing 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
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.

BA A641 Advanced Consumer Behavior 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
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.

BA A648 Business Intelligence and Data Mining 3 CR
Contact Hours: 2 + 2
Prerequisites: BA A273 or BA A601.
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.
Covers basic business intelligence and data mining warehousing and querying. Focuses on applying business intelligence and data mining techniques including marketing campaigns, fraud, and terrorism detection. Popular data mining software will be used to illustrate decision trees, classification algorithms, and other data mining techniques. This is a core course for Data Mining Certification.

BA A652 International Comparison of Business Practices 3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.
A study of global business issues and international and cross-cultural management. An evaluation of leadership, management practices, business cultures, and strategy in an international context.
BA A653  Multinational Financial Management  3 CR  
Contact Hours: 3 + 0  
Prerequisites: BA A603.  
Registration Restrictions: Graduate standing.  
Covers foreign exchange determination and forecasting; foreign exchange, translation and transaction risks; hedging and speculation; international portfolio diversification and direct foreign investment; cross-border acquisitions; multinational working capital management, and international taxation.

BA A655  Strategic Management Seminar  3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: Graduate Standing.  
Provides an advanced management seminar covering problems and processes of evaluating stocks. Analyzes performance evaluation using fundamental, technical, and behavioral models. Includes analytical techniques for constructing and evaluating the portfolio's performance.

BA A666  Management Project  3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: Completion of MBA core courses.  
Management research project designed to integrate policy concepts, research methods, and practical problem solving techniques.

BA A685  Advanced Investment Management  3 CR  
Contact Hours: 3 + 0  
Prerequisites: BA A603.  
Registration Restrictions: Graduate standing.  
Provides the opportunity to gain valuable hands-on experience in running a business as a member of a senior management team. Students define strategies and apply strategic concepts and techniques within a practical decision-making framework. The simulation demonstrates how a firm's production, marketing, R&D, HR, and financial operations interact, and how key decisions impact business performance within a competitive market. Students compete simultaneously with fellow classmates and student teams from universities around the world.

BA A690  Advanced Topics in Business  1-6 CR  
Level Restriction: Must be Graduate - UAA level.  
Registration Restrictions: Faculty permission and graduate standing.  
May be stacked with: BA A490A.  
Special Note: May be repeated for credit with a change in subtitle up to a maximum of 6 credits.  
Provides an advanced course in investment management covering problems and processes of evaluating stocks. Analyzes performance evaluation using fundamental, technical, and behavioral models. Includes analytical techniques for constructing and evaluating the portfolio's performance.

BA A691  Student Managed Investment  3 CR  
Contact Hours: 1 + 4  
Prerequisites: (BA A685 or concurrent enrollment).  
Registration Restrictions: Graduate standing.  
Includes students' management of investment portfolios and provides opportunities to conduct security analyses and make investment decisions in a realistic environment. The investment objective shall be to outperform the equity market on a risk-adjusted basis as measured by a suitable benchmark.

BA A692  Investment Seminar (Subtitle Varies)  3 CR  
Contact Hours: 3 + 0  
Prerequisites: BA A603.  
Registration Restrictions: Graduate standing.  
Provides coverage of the products, analytical techniques for valuing investment securities, and quantifying their exposure to changes in economic conditions, as well as portfolio strategies for achieving an investor's objectives.

BA A695  Graduate Internship  3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: Graduate standing; completion of MBA core courses.  
Integrates classroom knowledge with supervised work experience.

BA A698  Individual Research  3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: Graduate standing; completion of MBA core courses.  
Independent primary research project conducted under the supervision of a faculty advisor.

BA A699  Thesis  3/6 CR  
Contact Hours: 3 or 6 + 0  
Registration Restrictions: Graduate standing; completion of MBA core courses.  
Independent research project conducted under supervision of a thesis advisor and committee, culminating in a formal thesis and oral defense.

BIOL - Biological Sciences  
Offered through the College of Arts and Sciences  
ConocoPhillips Integrated Sciences Building (CPSB), Room 101, 786-4770  
www.uaa.alaska.edu/biology  
The WWAMI/Biomedical program may be found at  
http://biomed.uaa.alaska.edu  

BIOL A074  Field Natural History  1-3 CR  
Contact Hours: 0 + 3-9  
Grade Mode: Pass/No Pass.  
Special Note: Field trips in any weather; walking through rough terrain is routine.  
May have overnight field trips. May be repeated for credit with a change in subtitle. Check schedules for specific offerings.  
A short course on field natural history. Covers major plant and animal species of area. Experience gained in location and identification. May include extensive hiking and camping.

BIOL A075  Local Flora  1 CR  
Contact Hours: 0 + 3  
Grade Mode: Pass/No Pass.  
Special Note: May include preparation of pressed plant specimens and field trips.  
Study of wild flowers and plants in the surrounding locale with emphasis on use and identification.

BIOL A100  Human Biology  3 CR  
Contact Hours: 3 + 0  
Special Note: Primarily for non-science majors. Not accepted for GER or biology major baccalaureate credit.  
Survey of biological principles as applied to human anatomy, physiology, and genetics.

BIOL A102  Introductory Biology  3 CR  
Contact Hours: 3 + 0  
Course Attributes: UAA GER Natural Sciences Requirement.  
Special Note: Primarily for non-science majors. Satisfies CAS B.S. degree requirements.  
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.

BIOL A103  Introductory Biology Laboratory  1 CR  
Contact Hours: 0 + 3  
Prerequisites: (BIOL A102 or concurrent enrollment).  
Course Attributes: UAA GER Natural Sciences Lab Only.  
Special Fees.  
Special Note: Primarily for non-science majors. Satisfies CAS B.S. degree requirements.  
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. Laboratory supplement of BIOL A102. Exercises are designed to illustrate principles and concepts developed in BIOL A102.

BIOL A104  Natural History of Alaska  3 CR  
Contact Hours: 3 + 0  
Crosslisted with: GEOL A104.  
Special Note: Acceptable as elective credit only.  
Surveys important biological, physical and geological features of Alaska, and their development over time. Includes study of major landforms, ecosystems, wildlife and people. Local area will be emphasized.

BIOL A111  Human Anatomy and Physiology I  4 CR  
Contact Hours: 3 + 3  
Corequisite: BIOL A111L.  
May be stacked with: BIOL A113.  
Course Attributes: UAA GER Natural Science w/ Lab.  
Special Note: Does not apply for Biology major credit. Satisfies CAS B.S. requirements. One 3-hour lab per week.  
An introduction to human structure and function. The integumentary, skeletal, muscular, nervous and endocrine systems are considered.
BIOL A112 Human Anatomy and Physiology II 4 CR
Contact Hours: 3 + 3
Prerequisites: BIOL A111.
Corequisite: BIOL A112L.
May be stacked with: BIOL A114.
Course Attributes: UAA GER Natural Science w/ Lab.
Special Note: Does not apply for Biology major credit. Satisfies CAS B.S. requirements. One 3-hour lab per week.
A continuation of BIOL A111. The circulatory, lymphatic, immune, respiratory, digestive, urinary and reproductive systems are considered.

BIOL A113 Lectures in Human Anatomy and Physiology I 3 CR
Contact Hours: 3 + 0
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 A113 is the lecture portion of BIOL A111 without the laboratory.

BIOL A114 Lectures in Human Anatomy and Physiology II 3 CR
Contact Hours: 3 + 0
Prerequisites: BIOL A111 or BIOL A113.
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.
A continuation of BIOL A113. BIOL A114 is the lecture portion of BIOL A112 without the laboratory.

BIOL A115 Fundamentals of Biology I 4 CR
Contact Hours: 3 + 3
Prerequisites: (CHEM A105 or concurrent enrollment) and (CHEM A105L or concurrent enrollment).
Registration Restrictions: One year of high school biology, one year of high school chemistry, and working knowledge of the metric system.
Corequisite: BIOL A115L.
Course Attributes: UAA GER Natural Science w/ Lab.
Special Note: One 3-hour lab per week. BIOL A115 and A116 are core courses in biology and are prerequisites to further course in biological sciences.
A survey of molecular biology, genetics, and homeostasis in the context of evolution.

BIOL A116 Fundamentals of Biology II 4 CR
Contact Hours: 3 + 3
Prerequisites: BIOL A115 and CHEM A105 and CHEM A105L and (CHEM A106 or concurrent enrollment) and (CHEM A106L or concurrent enrollment).
Corequisite: BIOL A116L.
Course Attributes: UAA GER Natural Science w/ Lab.
Special Note: One 3-hour lab per week. BIOL A115 and A116 are core courses in biology and are prerequisites to further courses in biological sciences.
Continuation of topics addressed in BIOL A115, with emphasis on biodiversity, ecology, and survey of life, relating structure to function in the context of evolution.

BIOL A124 Biota of Alaska: Selected Topics 1-4 CR
Contact Hours: 1-4 + 0
Special Fees.
Special Note: Community service course.
Explores special features of birds, mammals, insects or plants. Can include life history, habitat, ecology and behavior.

BIOL A126 Birds in Field and Laboratory 2 CR
Contact Hours: 1 + 3
Special Note: Community service course.
Field trips, study projects, lectures and laboratories form a beginning course in bird study. General biology, ecology and behavior of birds. Emphasis on characteristics, observation, and recording information about birds in Alaska and other areas.

BIOL A141 Introduction to Medicine and the Health Professions 4 CR
Contact Hours: 3 + 3
Registration Restrictions: Admission to the Alaska WWAMI biomedical program's Della Keats/UDoC program.
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.

BIOL A178 Fundamentals of Oceanography 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Placement into MATH A105 or higher.
Crosslisted with: GEOL A178.
Course Attributes: UAA GER Natural Sciences Requirement.
Principles of oceanography, with emphasis on the ocean's biological, physical, chemical, and geological processes, and how ocean processes affect the atmosphere.

BIOL A179 Fundamentals of Oceanography Laboratory 1 CR
Contact Hours: 0 + 3
Registration Restrictions: Placement into MATH A105 or higher.
Crosslisted with: GEOL A179.
Course Attributes: UAA GER Natural Sciences Lab Only.
Special Fees.
Laboratory exercises designed to illustrate principles and concepts developed in BIOL A178/GEOL A178.

BIOL A198 Individual Research 1-6 CR
Contact Hours: 0 + 3-18
Registration Restrictions: Faculty permission required.
Special Note: May be repeated once for a maximum of 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.

BIOL A200 Introduction to Complexity 3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A107 or MATH A172.
Crosslisted with: CPLX A201.
Course Attributes: UAA GER Natural Sciences Requirement.
An introduction to the science of complexity, currently used to predict system behavior in the physical, life, and social sciences.

BIOL A240 Introductory Microbiology for Health Sciences 4 CR
Contact Hours: 3 + 3
Registration Restrictions: Concurrent enrollment in BIOL A112 or 8 hours in biology or chemistry.
Corequisite: BIOL A240L.
May be stacked with: BIOL A241.
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.
General introductory microbiology covering bacterial metabolism and genetics, virology, host parasite interactions, host defense mechanisms and epidemiology.

BIOL A241 Lectures in Introductory Microbiology for Health Sciences 3 CR
Contact Hours: 3 + 0
Registration Restrictions: 8 hours in biology or chemistry or concurrent enrollment in BIOL A112.
May be stacked with: BIOL A240.
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 A340 during the previous five years. Not accepted for Biology degree credit.
Lectures in introductory microbiology covering metabolism and genetics, virology, host parasite interactions, host defense mechanisms and epidemiology.

BIOL A242 Fundamentals of Cell Biology 4 CR
Contact Hours: 3 + 3
Prerequisites: BIOL A115 and CHEM A105 and CHEM A105L.
Corequisite: BIOL A242L.
Special Note: Core course for Biology majors. One 3-hour lab per week. Students must attend lab the first week of class or they may be administratively dropped.
Examination of the structure, including ultrastructure, and function of cells. Isolation, composition, and biochemical properties of cell components.

BIOL A252 Principles of Genetics 4 CR
Contact Hours: 3 + 3
Prerequisites: BIOL A115 and CHEM A105 and CHEM A105L.
Corequisite: BIOL A252L.
Special Note: Core course for biology majors. One 3-hour lab per week. Students must attend lab the first week of class or they may be administratively dropped.
Principles of inheritance in prokaryotes and eukaryotes and physicochemical properties of genetic systems.
### Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Contact Hours</th>
<th>Special Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL A271</td>
<td>Principles of Ecology</td>
<td>4 CR</td>
<td>BIOL A252 and STAT A253 or STAT A307</td>
<td>3 + 3</td>
<td>Corequisite: BIOL A271L. Special Note: Core course for biology majors. One 3-hour lab per week. Includes field trips. Students must attend lab the first week of class or they may be dropped.</td>
</tr>
<tr>
<td>BIOL A298</td>
<td>Individual Research</td>
<td>1-6 CR</td>
<td></td>
<td>0 + 3-18</td>
<td>Registration Restrictions: 3 lab credits.</td>
</tr>
<tr>
<td>BIOL A308</td>
<td>Principles of Evolution</td>
<td>3 CR</td>
<td>BIOL A271</td>
<td>3 + 0</td>
<td>Prerequisites: BIOL A308. Special Note: Core course for biology majors. An introduction to the basic principles and mechanisms of the evolution of living systems, with emphasis on 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.</td>
</tr>
<tr>
<td>BIOL A309</td>
<td>Biogeography</td>
<td>3 CR</td>
<td>BIOL A308</td>
<td>3 + 0</td>
<td>Ecological and historical patterns of the distribution of plants and animals on a worldwide basis. Current theories regarding the origin of these distributions are examined.</td>
</tr>
<tr>
<td>BIOL A310</td>
<td>Principles of Physiology</td>
<td>4 CR</td>
<td>BIOL A242</td>
<td>3 + 3</td>
<td>Prerequisites: BIOL A310. Special Note: Satisfies physiology core curriculum requirement for biology majors. This course emphasizes the fundamental principles of cellular and system physiology of animals with emphasis on vertebrate and, in particular, human physiology.</td>
</tr>
<tr>
<td>BIOL A316</td>
<td>Introduction to Plant Physiology</td>
<td>3 CR</td>
<td>BIOL A242</td>
<td>3 + 0</td>
<td>Prerequisites: BIOL A116 and CHEM A106 and CHEM A106L. Special Fees. Special Note: Satisfies physiology core curriculum requirement for biology majors. Physiology of vascular plants, including growth, development, water relations, photosynthesis, material transport, and metabolism.</td>
</tr>
<tr>
<td>BIOL A327</td>
<td>Parasitology</td>
<td>4 CR</td>
<td>BIOL A116 and CHEM A106 and CHEM A106L</td>
<td>3 + 3</td>
<td>Special Fees. Special Note: Saturday field trips. Offered alternate years. Special Note: Satisfies physiology core curriculum requirement for biology majors. The life history and ecology of parasites of medical significance and economic importance, including diagnosis and control. Emphasis on North American parasites.</td>
</tr>
<tr>
<td>BIOL A331</td>
<td>Systematic Botany</td>
<td>4 CR</td>
<td>BIOL A116</td>
<td>3 + 3</td>
<td>Prerequisites: BIOL A116. Special Note: Saturday field trips. Offered alternate years. Special Note: Satisfies physiology core curriculum requirement for biology majors. Identification and classification of vascular plants with an emphasis on circumpolar flora; discussion of taxonomic principles and both classical and experimental methods of taxonomic research.</td>
</tr>
<tr>
<td>BIOL A333</td>
<td>Biology of Non-Vascular Plants</td>
<td>4 CR</td>
<td>BIOL A116</td>
<td>3 + 3</td>
<td>Prerequisites: BIOL A333. Special Fees. Special Note: Offered alternate fall semesters. Special Note: Satisfies physiology core curriculum requirement for biology majors. Comparative study of structure, development, phyllogenetic trends, and life histories of the major groups of algae, fungi and bryophytes.</td>
</tr>
<tr>
<td>BIOL A334</td>
<td>Biology of Vascular Plants</td>
<td>4 CR</td>
<td>BIOL A333</td>
<td>3 + 3</td>
<td>Prerequisites: BIOL A334L. Special Note: Satisfies physiology core curriculum requirement for biology majors. Study of morphology, anatomy, ecology, and evolution of the major groups of vascular plants and the study of the relationship of humans to vascular plants.</td>
</tr>
</tbody>
</table>
### Course Descriptions

#### BIOL A426  Ornithology  4 CR
Contact Hours: 3 + 3
Prerequisites: BIOL A271.
Corequisite: BIOL A426L.
Special Note: Includes field trips.
Survey of the class Aves (birds), emphasizing systematics, morphology, physiology, ecology, evolution, and behavior.

#### BIOL A427  Invertebrate Zoology  4 CR
Contact Hours: 3 + 3
Prerequisites: BIOL A252.
Corequisite: BIOL A427L.
Special Note: Includes field trips.
Functional anatomy and evolutionary adaptations of invertebrate animals.

#### BIOL A430  Marine Mammal Biology  4 CR
Contact Hours: 3 + 3
Prerequisites: BIOL A271.
Corequisite: BIOL A430L.
May be stacked with: BIOL A630.
Special Note: Students who completed BIOL A430 as part of their undergraduate degree cannot receive credit towards their graduate degree BIOL A630.
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.

#### BIOL A441  Animal Behavior  4 CR
Contact Hours: 3 + 3
Prerequisites: BIOL A271 and [STAT A253 or STAT A307].
Special Fees.
Review of the ecological, evolutionary, physiological, and genetic basis of animal behavior. Research methods in lab.

#### BIOL A445  Plant-Herbivore Ecology  4 CR
Contact Hours: 3 + 3
Prerequisites: BIOL A271.
Corequisite: BIOL A445L.
May be stacked with: BIOL A645.
Examination of the evolution of vascular plants and the coevolution of their herbivores. Exploration of the concepts of nutritional ecology of herbivores and the implications of these concepts to management of animal populations and their habitats. Topics include the evolution of plants and herbivores, the nutrition of herbivores, plant morphology and chemistry relative to herbivores, spatial and temporal dynamics of food resources, body size scaling and nutritional allometrics, forage selection and herbivore management. The course emphasizes arctic and boreal herbivores and their habitats.

#### BIOL A450  Microbial Ecology  3 CR
Contact Hours: 3 + 0
Prerequisites: BIOL A340.
May be stacked with: BIOL A650.
Exploration of the diversity of the microbial world; microbial population and community ecology, the role of microorganisms in the cycling of elements in soils, lakes, and oceans; bacterial consumption and production of trace gases; geomicrobiology; symbioses.

#### BIOL A451  Applied Microbiology  3 CR
Contact Hours: 3 + 0
Prerequisites: BIOL A340.
May be stacked with: BIOL A651.
Biotechnology and the use of microorganisms in the development of pharmaceuticals. Microbially based foods and beverages, bio-insecticides, bioremediation.

#### BIOL A452  Human Genome  3 CR
Contact Hours: 3 + 0
Prerequisites: ANTH A205 or BIOL A252 or PSY A370.
Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses and junior standing.
Course Attributes: UAA GER Integrative Capstone.
Special Note: Normally offered in alternate fall semesters.
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.

#### BIOL A456  Nonlinear Dynamics and Chaos  3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A202 with minimum grade of C and [PHYS A124 with minimum grade of C or PHYS A212 with minimum grade of CJ. Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses and junior standing.
Crosslisted with: CHEM A456 and PHYS A456.
Course Attributes: UAA GER Integrative Capstone.
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.

#### BIOL A461  Molecular Biology  3 CR
Contact Hours: 3 + 0
Prerequisites: BIOL A252.
May be stacked with: BIOL A661.
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.

#### BIOL A461L  Molecular Biology Laboratory  1 CR
Contact Hours: 0 + 3
Prerequisites: BIOL A252 and (BIOL A461 with minimum grade of C or concurrent enrollment).
Special Fees.
A practical implementation of the theory learned in BIOL A461, which includes recombinant DNA techniques, gene expression/detection, and mutagenesis.

#### BIOL A462  Virology  3 CR
Contact Hours: 3 + 0
Prerequisites: BIOL A340.
May be stacked with: BIOL A662.
Special Fees.
An in-depth examination of virus structure, gene expression, and replication, using selected bacterial, plant, and animal viruses; response of host cells to infection; control of virus replication via chemotherapeutic agents; and virus evolution. An understanding of cell biology is required.

#### BIOL A471  Immunochemistry  4 CR
Contact Hours: 3 + 3
Prerequisites: BIOL A340 and CHEM A321.
Crosslisted with: CHEM A471.
Special Fees.
A study of the immune response including the biochemistry of antibodies, cellular and molecular events triggered by antigenic stimulation, regulation, immunopathology, transplantation, cancer and immunochennical techniques.

#### BIOL A477  Tundra and Taiga Ecosystems  3 CR
Contact Hours: 3 + 0
Prerequisites: BIOL A271.
May be stacked with: BIOL A677.
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.

#### BIOL A478  Biological Oceanography  4 CR
Contact Hours: 3 + 3
Prerequisites: BIOL A378.
Special Fees.
Principles of biological oceanography with an emphasis on identification and description of water masses and biological, chemical, and physical processes in the world's oceans. Systematics, water masses, nutrient dynamics, characteristic ecological communities, and benthic pelagic coupling. Use of laboratory methods and analyses will complement field studies.

#### BIOL A479  Physiological Plant Ecology  3 CR
Contact Hours: 3 + 0
Prerequisites: BIOL A271 and BIOL A316.
May be stacked with: BIOL A679.
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.

#### BIOL A487  Comparative Anatomy of Vertebrates  4 CR
Contact Hours: 3 + 3
Prerequisites: BIOL A252.
Corequisite: BIOL A487L.
Special Fees.
Functional anatomy, ecology, and evolution of chordates.
BIOL A488 Developmental Biology 4 CR
Contact Hours: 3 + 3
Prerequisites: BIOL A252.
Special Fees.
A study of the molecular and cellular principles which underlie the development of tissues and organ systems in animals, including classical embryology.

BIOL A489 Population Genetics and Evolutionary Processes 3 CR
Contact Hours: 3 + 0
Prerequisites: BIOL A252 with minimum grade of C or BIOL A308 with minimum grade of C.
Registration Restrictions: Senior standing; fulfillment of GER Tier 1 and 2 requirements.
Course Attributes: UAA GER Integrative Capstone.
A comprehensive 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.

BIOL A490 Selected Lecture Topics in Biology 1-3 CR
Contact Hours: 1-3 + 0
Registration Restrictions: 16 credits in biology. May be stacked with: BIOL A690L.
Special Note: See schedules for specific subtitles to be offered. With changes in subtitles, course may be repeated for credit although prerequisites and corequisites may vary with topic.
Detailed coverage of a selected lecture topic in biology.

BIOL A490L Selected Laboratory Topics in Biology 1-3 CR
Contact Hours: 0 + 3-9
Registration Restrictions: 16 credits in biology. May be stacked with: BIOL A690L.
Special Fees.
Special Note: See schedules for specific subtitles to be offered. With changes in subtitles, course may be repeated for credit although prerequisites and corequisites may vary with topic.
Detailed coverage of a selected laboratory topic in biology.

BIOL A492 Undergraduate Seminar 1 CR
Contact Hours: 1 + 0
Registration Restrictions: Junior or senior standing.
Special Fees.
Special Note: May be repeated once for 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.

BIOL A495 Instructional Practicum: Laboratory 1 CR
Contact Hours: 0 + 3
Class Standing Restriction: Must be Senior.
Registration Restrictions: Minimum of 20 credits in biology.
Special Note: May be repeated once for credit.
Supervised practical experience in one 3-hour biology laboratory section. Planning, presentation of material, achievement testing and correlation with lecture under the direct supervision of department faculty.

BIOL A495A Internship in the Biological Sciences 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Junior standing with a minimum of 12 credits in biology courses and faculty permission.
Special Note: May be taken more than once, but only three 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.
Professional work experience in appropriate areas of the biological sciences. Open to qualified students receiving faculty recommendation, and as placements are available.

BIOL A498 Individual Research 1-6 CR
Contact Hours: 0 + 3-18
Prerequisites: BIOL A252.
Registration Restrictions: Faculty permission required.
Special Fees.
Special Note: May be repeated for a maximum of 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.

BIOL A499 Senior Thesis 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Faculty permission required; Senior status in Biology
Special Note: Required for Departmental Honors in Biology
Independent or collaborative research under faculty supervision. Culminates in a document prepared to publication standards. Presentation in a science forum is encouraged.

BIOL A601 Advanced Experimental Design and Biostatistics 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
Special Note: Graduate students in the Department of Biological Sciences are strongly encouraged to take this course during their first year of study.
Advanced exploration of the concepts of experimental design and biostatistics and their application in the development and assessment of biological research. Students directly apply the course content to the development of their own graduate research proposals as part of the course.

BIOL A603 Ecological Genetics and Quantitative Microevolution Theory 3 CR
Contact Hours: 3 + 0
Prerequisites: BIOL A308 or BIOL A389.
Registration Restrictions: Graduate standing.
An advanced and in-depth examination of the primary forces and processes involved in shaping genetic variation in natural population (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.

BIOL A610 Microscopic Anatomy 3 CR
Contact Hours: 2 + 3
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Admission to graduate program in Biology, and approval of WWAMI Biomedical Program Director and Faculty.
Croslisted with: BIOM A610.
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.

BIOL A611 Gross Anatomy I and Embryology 5 CR
Contact Hours: 3 + 6
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Admission to graduate program in Biology, and approval of WWAMI Biomedical Program Director and Faculty.
Croslisted with: BIOM A611.
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.

BIOL A612 Mechanisms in Cell Physiology 4 CR
Contact Hours: 4 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Admission to a graduate program in Biology, and approval of WWAMI Biomedical Program Director and Faculty.
Croslisted with: BIOM A612.
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.

BIOL A615 Advanced Comparative Animal Physiology 4 CR
Contact Hours: 4 + 0
Registration Restrictions: Graduate Standing.
May be stacked with: BIOL A415.
Special Note: Students who completed BIOL A415 as part of their undergraduate degree cannot receive credit towards their graduate degree from BIOL A615.
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.
BIOL A621  Microbiology and Infectious Disease I  5 CR
Contact Hours: 5 + 0
Level Restriction: Must be Graduate - UAA level.
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 CR
Contact Hours: 2 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Admission to graduate program in Biology, and approval of WWAMI Biomedical Program Director and Faculty.
Crosslisted with: BIOM A623.
Introduces basic immunological concepts and the role of these basic concepts in conditions such as immunodeficiencies, hypersensitivities, autoimmunity, blood transfusion, and transplantation.

BIOL A630  Advanced Marine Mammal Biology  4 CR
Contact Hours: 4 + 0
Registration Restrictions: Graduate Standing. Corequisite: BIOL A630R. May be stacked with: BIOL A430. Special Note: Students who completed BIOL A430 as part of their undergraduate degree cannot receive credit towards their graduate degree from BIOL A630.
Advanced study of 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 aquatic ecosystem. In addition to meeting all requirements for BIOL A430, graduate students will be required to participate in a weekly discussion of primary literature, lead one discussion, and prepare a research proposal that addresses a current topic in marine mammal biology, and to orally present and defend that research proposal to the class.

BIOL A631  Gross Anatomy II  4 CR
(Head, Neck, Ear, Nose, and Throat)
Contact Hours: 3 + 3
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Admission to graduate program in Biology, and approval of WWAMI Biomedical Program Director and Faculty.
Crosslisted with: BIOM A631.
Gross anatomy of the skull, larynx, and pharynx. Also covers: audition and balance; physiology; clinical evaluation; maxillo-facial disorders; diseases of nasal passages; nose- and oropharynx; accessory sinuses; and physical examination.

BIOL A632  Nervous System  5 CR
Contact Hours: 4 + 3
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Admission to graduate program in Biology, and approval of WWAMI Biomedical Program Director and Faculty.
Crosslisted with: BIOM A632.
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.

BIOL A634  Microbiology and Infectious Disease II  3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Admission to graduate program in Biology, and approval of WWAMI Biomedical Program Director and Faculty.
Crosslisted with: BIOM A634.
Continuation of BIOL A621.

BIOL A645  Advanced Plant-Herbivore Ecology  4 CR
Contact Hours: 3 + 3
Prerequisites: BIOL A271 and BIOL A308. Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing. Corequisite: BIOL A445. May be stacked with: BIOL A445. Special Note: In addition to meeting all requirements for BIOL A445, graduate students will be required to research the literature on a current topic in plant-herbivore ecology, 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 A445.
Advanced study of the evolution of vascular plants and the coevolution of their herbivores. Exploration of advanced concepts of nutritional ecology of herbivores and the implications of these concepts to management of animal populations and their habitats. Topics include the evolution of plants and herbivores, the nutrition of herbivores, plant morphology and chemistry relative to herbivores, spatial and temporal dynamics of food resources, body size scaling and nutritional allometrics, forage selection and herbivore management.

BIOL A650  Advanced Microbial Ecology  3 CR
Contact Hours: 3 + 0
Prerequisites: BIOL A340. Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduating standing. May be stacked with: BIOL A450. Special Note: In addition to meeting all requirements for BIOL A450, graduate students will be required to write a detailed research proposal in microbial ecology. Not available for credit to students who have completed BIOL A450.
Advanced exploration of the diversity of the microbial world; microbial population and community ecology, the role of microorganisms in the cycling of elements in soils, lakes, and oceans; bacterial consumption and production of trace gases; microbiology; symbioses.

BIOL A651  Advanced Applied Microbiology  3 CR
Contact Hours: 3 + 0
Prerequisites: BIOL A540. Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing. May be stacked with: BIOL A451. Special Note: In addition to meeting all requirements for BIOL A451, graduate students will be required to research the literature on a current topic in applied microbiology, 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 A451.
Advanced study of biotechnology and the use of microorganisms in the development of pharmaceuticals. Microbiologically based foods and beverages, biosensors, bioremediation.

BIOL A653  Gross Anatomy III: Musculoskeletal System  3 CR
Contact Hours: 2 + 3
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Admission to graduate program in Biology, and approval of WWAMI Biomedical Program Director and Faculty.
Crosslisted with: BIOL A653.
Cross, surface, applied and X-ray anatomy of musculoskeletal system including the spine, but excluding head and neck. Also covers histology of bone, cartilage, tendon-myo tendinous junction and joints; musculoskeletal trauma and healing; pathology and clinical manifestations of other degenerative, inflammatory, metabolic, nutritional and congenital disorders; and physical examinations.

BIOL A661  Advanced Molecular Biology  3 CR
Contact Hours: 3 + 0
Prerequisites: BIOL A252. Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing. May be stacked with: BIOL A461. 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.
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.

BIOL A662  Advanced Virology  3 CR
Contact Hours: 3 + 0
Prerequisites: BIOL A340. Registration Restrictions: Graduate Standing. May be stacked with: BIOL A462. Special Fees. Special Note: Lectures concurrent with BIOL A462. In addition to meeting all requirements for BIOL A462, graduate students will be required to research the literature on a current topic in molecular virology, prepare a research proposal summarizing their findings and describing an avenue of future research, and orally defend the research proposal. Not available for credit to students who have completed BIOL A462.
An in-depth examination of virus structure, gene expression, and replication, using selected bacterial, plant, and animal viruses; response of host cells to infection; control of virus replication via chemotherapeutic agents; and virus evolution. An understanding of cell biology is required.
BIOL A663  Molecular Biology of Cancer  3 CR
Contact Hours: 3 + 0
Prerequisites: BIOL A461.
Registration Restrictions: Graduate standing.
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 both chemicals and viruses in carcinogenesis. The orientation of the course will be toward a study of current literature, by means of research, term papers, discussions, and seminars.

BIOL A677  Advanced Tundra and Taiga Ecosystems  3 CR
Contact Hours: 3 + 0
Prerequisites: BIOL A271. Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.
May be stacked with: BIOL A477. 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.

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.

BIOL A679  Advanced Physiological Plant Ecology  3 CR
Contact Hours: 3 + 0
Prerequisites: BIOL A271 and BIOL A316. Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.
May be stacked with: BIOL A479. 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.

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.

BIOM A613  Introduction to Clinical Medicine I  4 CR
Contact Hours: 4 + 0
Prerequisites: BIOM A612.
Contact Hours: 4 + 0
Registration Restrictions: Admission to the WWAMI Biomedical Program.
Grade Mode: Pass/No Pass.
Biological processes studied in concurrent and subsequent courses.

BIOM A613  Introduction to Clinical Medicine I  4 CR
Contact Hours: 4 + 0
Prerequisites: BIOM A612.
Contact Hours: 4 + 0
Registration Restrictions: Admission to the WWAMI Biomedical Program.
Grade Mode: Pass/No Pass.
Biological processes studied in concurrent and subsequent courses.

BIOL A616  Advanced Lecture Topics in Biology  1-3 CR
Contact Hours: 1-3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.
Grade Mode: Pass/No Pass.
May be stacked with: BIOL A490. Special Note: See schedules for specific subtitles to be offered. With changes in subtitles, course may be repeated for credit although 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.

Advanced coverage of a selected lecture topic in biology.

BIOL A617  Mechanisms in Cell Physiology  3 CR
Contact Hours: 3 + 0
Prerequisites: BIOL A612.
Contact Hours: 3 + 0
Registration Restrictions: Admission to the WWAMI Biomedical Program.
Grade Mode: Pass/No Pass.
Crosselisted with: BIOL A612.
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.

BIOL A649  Directed Research  1-6 CR
Contact Hours: 0 + 3-18
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing. Permission of graduate advisor required.
Grade Mode: Pass/No Pass.
May be repeated for a maximum of 12 credits in combination with BIOL A698; total for both courses not to exceed 12 credits towards M.S. degree.
Planning, preparation, and completion of thesis for the M.S. degree in the biological sciences.

BIOL A677  Advanced Tundra and Taiga Ecosystems  3 CR
Contact Hours: 3 + 0
Prerequisites: BIOL A271 and BIOL A316. Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.
May be stacked with: BIOL A477. 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 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 A477.

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.

BIOL A679  Advanced Physiological Plant Ecology  3 CR
Contact Hours: 3 + 0
Prerequisites: BIOL A271 and BIOL A316. Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.
May be stacked with: BIOL A479. 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.

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.

BIOL A690  Advanced Lecture Topics in Biology  1-3 CR
Contact Hours: 1-3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.
Grade Mode: Pass/No Pass.
May be stacked with: BIOL A490. Special Note: See schedules for specific subtitles to be offered. With changes in subtitles, course may be repeated for credit although 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.

Advanced coverage of a selected lecture topic in biology.

BIOL A690L  Advanced Laboratory Topics in Biology  1-3 CR
Contact Hours: 0 + 3-9
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.
Grade Mode: Pass/No Pass.
May be stacked with: BIOL A490L. Special Fees.
Special Note: See schedules for specific subtitles to be offered. With changes in subtitles, course may be repeated for credit although 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.

Advanced coverage of a selected laboratory topic in biology.

BIOL A692  Graduate Seminar  1 CR
Contact Hours: 1 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.
Grade Mode: Pass/No Pass.
Special Fees.
Special Note: May be repeated for a maximum of 2 credits.
Topical subjects in biology presented by graduate students, biology faculty, and guest speakers.

BIOL A696  Graduate Research Techniques  1 CR
Contact Hours: 1 + 0
Registration Restrictions: Graduate standing.
Training in data collection, analysis, presentation, and synthesis techniques, as appropriate to the field of biological research into which the graduate student has entered.

BIOM - Biomedical Program

Offered through the College of Arts and Sciences Engineering Building (ENGR), Room 331, 786-4789 http://biomed.uaa.alaska.edu

BIOM A610  Microscopic Anatomy  3 CR
Contact Hours: 2 + 3
Prerequisites: BIOM A610. Crosslisted with: BIOL A610.
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.

BIOM A611  Gross Anatomy I and Embryology  5 CR
Contact Hours: 3 + 6
Registration Restrictions: Admission to the WWAMI Biomedical Program.
Grade Mode: Pass/No Pass.
Crosselisted with: BIOL A611.
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.

BIOM A612  Mechanisms in Cell Physiology  4 CR
Contact Hours: 4 + 0
Registration Restrictions: Admission to the WWAMI Biomedical Program.
Grade Mode: Pass/No Pass.
Crosselisted with: BIOL A612.
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.

BIOM A613  Introduction to Clinical Medicine I  4 CR
Contact Hours: 4 + 0
Registration Restrictions: Admission to the WWAMI Biomedical Program.
Grade Mode: Pass/No Pass.
Special Fees.
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.
Course Descriptions

BIOM A614  Biochemistry I  4 CR
Contact Hours: 4 + 0
Registration Restrictions: Admission to the WWAMI Biomedical Program.
Grade Mode: Pass/No Pass.
Covers molecular and cellular chemistry in humans, with emphasis on molecular genetics, proteins and carbohydrates.

BIOM A615  Medical Information for Decision Making (MIDM)  1 CR
Contact Hours: 1 + 0
Registration Restrictions: Admission to the WWAMI Biomedical Program.
Grade Mode: Pass/No Pass.
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.

BIOM A621  Microbiology and Infectious Disease I  5 CR
Contact Hours: 5 + 0
Registration Restrictions: Admission to the WWAMI Biomedical Program.
Grade Mode: Pass/No Pass.
Crosslisted with: BIOL A621.

BIOM A622  Introduction to Clinical Medicine II  4 CR
Contact Hours: 4 + 0
Registration Restrictions: Admission to the WWAMI Biomedical Program.
Grade Mode: Pass/No Pass.
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.

BIOM A623  Introduction to Immunology  2 CR
Contact Hours: 2 + 0
Registration Restrictions: Admission to the WWAMI Biomedical Program.
Grade Mode: Pass/No Pass.
Crosslisted with: BIOL A623.
Introduces basic immunological concepts and the role of these basic concepts in conditions such as immunodeficiencies, hypersensitivities, autoimmune, blood transfusion, and transplantation.

BIOM A624  Biochemistry II  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Admission to the WWAMI Biomedical Program.
Grade Mode: Pass/No Pass.
Continuation of BIOM A614 with emphasis on lipid and nitrogen metabolism.

BIOM A631  Gross Anatomy II  4 CR
(Head, Neck, Ear, Nose, and Throat)
Contact Hours: 3 + 3
Registration Restrictions: Admission to the WWAMI Biomedical Program.
Grade Mode: Pass/No Pass.
Crosslisted with: BIOL A631.
Gross anatomy of the skull, larynx, and pharynx. Also covers: audition and balance; physiology; clinical evaluation; maxillo-facial disorders; diseases of nasal passages; naso- and oropharynx; accessory sinuses; and physical examination.

BIOM A632  Nervous System  5 CR
Contact Hours: 4 + 3
Registration Restrictions: Admission to the WWAMI Biomedical Program.
Grade Mode: Pass/No Pass.
Crosslisted with: BIOL A632.
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.

BIOM A634  Microbiology and Infectious Disease II  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Admission to the WWAMI Biomedical Program.
Grade Mode: Pass/No Pass.
Crosslisted with: BIOL A634.
Continuation of BIOM A621.

BIOM A650  Systems of Human Behavior I  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Admission to the WWAMI Biomedical Program.
Grade Mode: Pass/No Pass.
Crosslisted with: PSY A650.
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.

BIOM A653  Gross Anatomy III: Musculoskeletal System  3 CR
Contact Hours: 2 + 3
Registration Restrictions: Admission to the WWAMI Biomedical Program.
Grade Mode: Pass/No Pass.
Crosslisted with: BIOL A653.
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-myo-tendinous junction and joints; musculoskeletal trauma and healing; pathology and clinical manifestations of other degenerative, inflammatory, metabolic, nutritional and congenital disorders; and physical examinations.

BIOM A690  Selected Topics in Medical Science  1-3 CR
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Admission to WWAMI Biomedical Program; OR graduate level and approval of WWAMI Biomedical Program Directory and Faculty.
Grade Mode: Pass/No Pass.
Special Note: May be repeated with change of subtitle and faculty approval for a maximum of 9 credits.
Theory and practice of selected topics in medical science which are of current relevance to medical students and/or graduate students in biomedicine.

CA - Culinary Arts
Offered through the Community & Technical College
Lucy Cuddy Hall (CUDY), Room 126, 786-4728
www.uaa.alaska.edu/ctc/programs/culinary

CA A101  The Hospitality Industry: Careers, Trends, and Practices  2 CR
Contact Hours: 2 + 0
Explores myriad career titles and opportunities in the hospitality industry and reviews emerging labor trends.

CA A103  Culinary Skill Development  4 CR
Contact Hours: 2 + 8
Prerequisites: CA A104 with minimum grade of C and CA A105 with minimum grade of C and CA A110 with minimum grade of C and DN A101 with minimum grade of C.
Corequisite: CA A111.
Special Fees.
Introduces and applies fundamental cooking theories and techniques. Emphasizes kitchen safety and sanitation, culinary French and industry terminology, and reinforces topics in nutrition, food science, recipe costing, product standards and identification.

CA A104  Sanitation  2 CR
Contact Hours: 2 + 0
Focuses on sanitation principles, concepts, methods, codes and regulations current to the foodservice industry. Offers a national exam for sanitation certification.

CA A105  Principles of Food Science  3 CR
Contact Hours: 2 + 2
Special Fees.
Explores the physical, chemical and mechanical effects on food elements during preparation, cooking, and storage.

CA A107  Cost Control  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Grade of C or better in MATH A054, or placement into MATH A055 or higher.
Special Fees.
Focuses on critical control points in the foodservice cost control cycle. Prepares student to analyze costs and make foodservice operation decisions.

CA A110  Quantity Food Purchasing  2 CR
Contact Hours: 2 + 0
Covers foodservice industry purchasing practices and standards.

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CA A111  Bakery Skill Development  4 CR
Contact Hours: 2 + 8
Prerequisites: CA A102 with minimum grade of C and CA A104 with minimum grade of C and CA A105 with minimum grade of C and CA A107 with minimum grade of C and CA A110 with minimum grade of C.
Corequisite: CA A103.
Special Fees.
Introduces and provides student with a solid theoretical and practical foundation in baking practices.

CA A114  Beverage Management  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Minimum age of 21 years.
Special Fees.
Special Note: Students have the option to become certified through an approved alcohol training curriculum that will allow them to legally serve alcohol in the state of Alaska.
Reviews the history of the beverage industry, including alcohol and non-alcohol beverages. Focuses on the management and operations of the beverage service. Covers legal responsibilities of serving alcohol and awareness of alcohol abuse.

CA A115  Gourmet Cooking, Healthy Style  1 CR
Contact Hours: 0 + 2
Grade Mode: Pass/No Pass.
Special Fees.
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 A201  A la Carte Kitchen  4 CR
Contact Hours: 0 + 10
Prerequisites: CA A103 with minimum grade of C and CA A111 with minimum grade of C.
Special Fees.
Emphasizes cooking techniques and ingredients used in contemporary and classical cuisines.

CA A202  Advanced Bakery  4 CR
Contact Hours: 2 + 8
Prerequisites: CA A103 with minimum grade of C and CA A111 with minimum grade of C.
Special Fees.
Explores advanced bakery, pastry, confectionary and presentation techniques. Emphasizes production processes, service, portion controls, safety and sanitation.

CA A213  Breakfast/Pantry Skill Development  3 CR
Contact Hours: 2 + 6
Prerequisites: CA A103 and CA A104.
Special Fees.
Special Note: Knife kit and chef's uniform are required.
Provides the learning environment for application of skills, techniques, and knowledge necessary for breakfast, brunch, short order, and pantry production. Explores menu concept development and customer service.

CA A223  Advanced Foods: Buffet and Garde Manger  3 CR
Contact Hours: 2 + 8
Prerequisites: CA A201 and CA A202.
Special Fees.
Menu planning, organization and production techniques necessary for buffet-style service. Student will also be exposed to ice carving, tallow and dough sculpting, and preparation and presentation of terrines, pates, appetizers and display pieces essential to buffet service.

CA A224  Hospitality Service  3 CR
Contact Hours: 1 + 6
Prerequisites: CA A201 with minimum grade of C.
Special Fees.
Focuses on practical and theoretical operations in dining room service and management.

CA A225  Hospitality Concept Design  3 CR
Contact Hours: 3 + 0
Prerequisites: CA A103 and CA A111.
Explores menu design and layout of professional foodservice facilities.

CA A230  Foodservice Management  3 CR
Contact Hours: 3 + 0
Special Fees.
Covers supervisory and management responsibilities within foodservice operations.

CA A295A  Foodservice Operations Practicum  1 CR
Contact Hours: 3 + 4
Prerequisites: CA A104 and CA A107 and (CA A220 or concurrent enrollment).
Registration Restrictions: Current immunizations.
Corequisite: CA A220.
Grade Mode: Pass/No Pass.
Special Note: Requires facility orientation.
Provides student with opportunity to interpret field experiences, differentiate between available strategies, recall and apply foodservice operations principles and skills. Interprets institutional protocols, manuals, guides, etc. Applies basic principles, estimate results or outcomes, and discuss work with site supervisor. Facilitates 50 hour field experience.

CA A295B  Foodservice Management Practicum  1 CR
Contact Hours: 3 + 4
Prerequisites: CA A104 and CA A107 and (CA A220 or concurrent enrollment).
Registration Restrictions: Current immunizations.
Corequisite: CA A230.
Grade Mode: Pass/No Pass.
Special Note: Requires facility orientation.
Provides student with opportunity to interpret field experiences, differentiate between available strategies, recall and apply foodservice operations principles and skills. Interprets institutional protocols, manuals, guides, etc. Applies basic principles, estimate results or outcomes, and discuss work with site supervisor. Facilitates 50 hour field experience.

CA A295C  Foodservice Internship  3 CR
Contact Hours: 1 + 15
Prerequisites: CA A201 with minimum grade of C and CA A202 with minimum grade of C and CA A224 with minimum grade of C and CA A230 with minimum grade of C.
Grade Mode: Pass/No Pass.
Provides supervised workplace training in selected foodservice industry settings. Integrates knowledge and skills through work designed to meet student's individual competency needs and career objectives. Requires minimum of 225 hours at worksite plus 15 hours of on campus instruction.

CA A320  Foodservice Operations  3 CR
Contact Hours: 2 + 4
Prerequisites: CA A104 and CA A107 and (CA A220 or concurrent enrollment).
Special Fees.
Provides theoretical and conceptual learning in foodservice operations. Emphasizes managing revenue and expense, determining sales forecasts, managing food and beverage production processes, projecting food and beverage price points, managing labor costs, analyzing income statements, and planning for profit.

CA A490  Current Topics in Food and Hospitality  1-6 CR
Contact Hours: 0-6 + 0-18
Special Fees.
Examines current topics in culinary arts resulting from special demands of the industry or special faculty expertise.

CA A495  Hospitality Internship  6 CR
Contact Hours: 2 + 40
Registration Restrictions: Completion of Business Core and UNLV or NAU Core with cumulative minimum GPA of 2.0. Completion of GER Tier 1 (basic college-level skills) requirements.
Course Attributes: UAA GER Integrative Capstone.
Special Note: Requires professional attire.
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 360 hours at work site plus 40 hours of related seminar instruction and project work.
CE - Civil Engineering

Offered through the School of Engineering
Engineering Building (ENGR), Room 201, 786-1900
www.engr.uaa.alaska.edu

CE A334 Properties of Materials 3 CR
Contact Hours: 2 + 3
Prerequisites: ES A302 with minimum grade of C and (ES A331 with minimum grade of C or concurrent enrollment).
Corequisite: CE A334L.
Special Fees.
Experimental investigation of the properties of civil engineering materials and the basic principles of mechanics. The development of testing procedures, the use of standard testing procedures, and the interpretation of data are also covered. There is a strong emphasis on technical report writing.

CE A344 Water Resources Engineering 3 CR
Contact Hours: 3 + 0
Prerequisites: ES A341 with minimum grade of C and ES A341L with minimum grade of C.
Provides a working knowledge of principles and procedures for planning and design of systems for management of water resources.

CE A402 Transportation Engineering 3 CR
Contact Hours: 3 + 0
Prerequisites: CE A435 with minimum grade of C.
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.

CE A403 Arctic Engineering 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Junior or senior standing in an accredited undergraduate program in engineering.
May be stacked with: CE A603.
Introduces students to a broad spectrum of engineering challenges unique to cold regions. Physical principles and practical data collection methods, analyses, designs, and construction methods are discussed. Students gain a working knowledge of cold regions engineering problems and modern solutions as a basis for more detailed study.

CE A422 Foundation Engineering 3 CR
Contact Hours: 3 + 0
Prerequisites: CE A435 with minimum grade of C.
Concepts, principles, and/or procedures related to slope stability, shallow foundations, pile foundations, drilled shafts, lateral earth pressure, retaining walls, sheet pile walls, braced cuts, soil improvement, and reinforced earth structures.

CE A423 Traffic Engineering 3 CR
Contact Hours: 2 + 2
Prerequisites: CE A402 with minimum grade of C.
May be stacked with: CE A623.
Traffic engineering studies and analyses, traffic flow theory, traffic control systems design, signalization, and capacity analyses.

CE A424 Pavement Design 3 CR
Contact Hours: 2 + 2
Prerequisites: CE A402 with minimum grade of C.
May be stacked with: CE A624.
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.

CE A425 Highway Engineering 3 CR
Contact Hours: 2 + 3
Prerequisites: CE A402 with minimum grade of C.
May be stacked with: CE A625.
Special Fees.
Geometrical and structural design, construction, and maintenance of highway facilities and associated economic, social, and environmental consequences.

CE A431 Structural Analysis 4 CR
Contact Hours: 4 + 0
Prerequisites: CE A334 with minimum grade of C and ES A331 with minimum grade of C.
Special Fees.
Review of statically determinate beams and trusses. Discusses shearing, bending moment and influence of line diagrams for statically determinate and indeterminate structures. Includes the study of deflections, elastic lines, an introduction to matrix and computer analyses.

CE A432 Steel Design 3 CR
Contact Hours: 3 + 0
Prerequisites: CE A431 with minimum grade of C.
Essentials of structural design in steel including building code requirements and standard practice for the design of basic structural elements and connections.

CE A433 Reinforced Concrete Design 3 CR
Contact Hours: 3 + 0
Prerequisites: CE A431 with minimum grade of C.
Essentials of structural design in reinforced concrete including building code requirements and standard practice for the design of basic structural elements.

CE A434 Timber Design 3 CR
Contact Hours: 3 + 0
Prerequisites: CE A431.
Special Note: Offered Alternate Fall Semesters.
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.

CE A435 Soil Mechanics 3 CR
Contact Hours: 2 + 3
Prerequisites: ES A331 with minimum grade of C and CE A334 with minimum grade of C.
Corequisite: CE A435L.
Special Fees.
Concepts, principles, and/or procedures related to soil formation and classification, soil compaction, flow of water in soils, stresses in a soil mass, soil settlement, shear strength of soil, subsoil exploration, and frost action.

CE A438 Design of Civil Engineering Systems 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Faculty permission, based on evidence that the student will complete all BSC.E. graduation requirements within the calendar year.
Course Attributes: UAA GER Integrative Capstone.
Capstone course in which civil engineering students 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.

CE A441 Introduction to Environmental Engineering 3 CR
Contact Hours: 3 + 0
Prerequisites: CHEM A106 with minimum grade of C and CHEM A106L with minimum grade of C and (ES A341 with minimum grade of C or concurrent enrollment) and (ES A341L with minimum grade of C or concurrent enrollment).
Special Fees.
Introduction to the fundamentals of environmental engineering. Includes the theory and application of water and wastewater engineering, water supply concepts, wastewater characteristics, treatment and disposal, solid waste management and air pollution control.

CE A442 Environmental Systems Design 3 CR
Contact Hours: 3 + 0
Prerequisites: CE A441.
Special Note: Offered Spring Semesters.
An advanced course on the design of systems commonly used in environmental engineering practice with an emphasis on water and wastewater treatment and contaminated soils. Design of unit processes and operations will be performed. Selection of system components, design and performance calculations, and complete engineering reports are required.

CE A470 Civil Engineering Internship 1 CR
Contact Hours: 0 + 3
Registration Restrictions: Senior standing or permission of department coordinator.
Special Fees.
Designed to give students the opportunity to investigate the practical workings of engineering organizations. Assignments individually arranged with cooperating organizations and agencies.

CE A600 Fundamentals of Environmental Science and Engineering 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Registrants must be enrolled in the AES or CE graduate programs, or gain instructor approval.
A fundamental course in environmental science and engineering for students who have strong undergraduate training in the sciences or engineering. Provides basic and specialized understanding of essentially all fundamental aspects of the field with a focus upon aquatic and terrestrial environments. Emphasis is placed upon the fundamentals of biological, chemical, and physical science which underlie both natural and cultural environmental effects. Includes the use and application of equilibrium processes, mass and energy balances, processes that occur in natural systems and others.
CE A603 Arctic Engineering 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing with a baccalaureate degree in engineering. No previous credits for CE A403. May be stacked with: CE A403. Special Fees.
Introduces students to a broad spectrum of engineering challenges that are unique to cold regions. Physical principles and practical data collection methods, analyses, designs, and construction methods are discussed. Students gain a working knowledge of cold-region engineering problems and modern solutions as a basis for detailed study.

CE A605 Chemical and Physical Water and Wastewater Treatment Processes 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Registrants must be enrolled in the AEST or CE graduate programs, or gain instructor approval. The theory and design of chemical and physical unit processes utilizing the treatment of water and wastewater. Sedimentation and flotation, ion exchange, adsorption, coagulation, precipitation, filtration, disinfection, reverse osmosis and aeration theories will be studied. Design problems for all unit processes.

CE A606 Biological Treatment Processes 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Registrants must be enrolled in AEST or CE graduate programs, or gain instructor approval. Special Fees.
Study of the theoretical and biological processes including activated sludge, trickling filters, lagoons, sludge digestion and processing, septic tanks, analysis and design, nutrient removal processes, biology of polluted waters, economics, state and federal regulations.

CE A610 Engineering Seismology 3 CR
Contact Hours: 3 + 0
Prerequisites: CE A435 with minimum grade of C.
Registration Restrictions: Graduate level or undergraduate senior standing, or instructor permission.
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.

CE A611 Geotechnical Earthquake Engineering 3 CR
Contact Hours: 3 + 0
Prerequisites: CE A435 with minimum grade of C.
Registration Restrictions: Graduate level or undergraduate senior standing, or instructor permission.
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.

CE A612 Advanced Foundation Design 3 CR
Contact Hours: 3 + 0
Prerequisites: CE A422 with minimum grade of C.
Registration Restrictions: Undergraduate civil engineering senior, graduate standing in engineering, or instructor permission. Special Fees.
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.

CE A623 Traffic Engineering 3 CR
Contact Hours: 2 + 2
Prerequisites: CE A402 with minimum grade of C. May be stacked with: CE A423. Traffic engineering studies and analyses, traffic flow theory, traffic control systems design, signalization, and capacity analyses.

CE A624 Pavement Design 3 CR
Contact Hours: 2 + 2
Prerequisites: CE A402 with minimum grade of C. May be stacked with: CE A424.
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.

CE A625 Highway Engineering 3 CR
Contact Hours: 2 + 3
Prerequisites: CE A402 with minimum grade of C. Major Restriction: Must be Civil Engineering major. May be stacked with: CE A425. Special Fees.
Geometrical and structural design, construction, and maintenance of highway facilities and associated economic, social, and environmental consequences.

CE A631 Structural Finite Elements 3 CR
Contact Hours: 3 + 0
Prerequisites: CE A431.
Introduction to finite element and computer methods in structural analysis. Matrix algebra, the slope-deflection and the direct stiffness methods will be reviewed. Topics include: finite elements and corresponding matrix equations for a truss, for a beam and for frame structures, organization of typical computer programs, two-dimensional stress-strain problems, eigenvalue problems, and practical applications of engineering software.

CE A633 Structural Dynamics 3 CR
Contact Hours: 3 + 0
Prerequisites: CE A431 and MATH A302. Special Fees.
Covers the theory of structural dynamics, including single and multiple degree of freedom systems subjected to earthquake and other excitations. Application to analysis and design of civil engineering structures is emphasized.

CE A634 Structural Earthquake Engineering 3 CR
Contact Hours: 3 + 0
Prerequisites: CE A431 with minimum grade of C and CE A633 with minimum grade of C.
Registration Restrictions: Graduate level or undergraduate senior standing, or instructor approval.
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.

CE A636 Multi-Story Building Structural Design 3 CR
Contact Hours: 3 + 0
Prerequisites: CE A431 with minimum grade of C and CE A432 with minimum grade of C and CE A433 with minimum grade of C and CE A639 with minimum grade of C.
Registration Restrictions: Graduate level or undergraduate senior standing, or instructor approval.
Teaches the design of structural systems for buildings. Topics covered include the selection and analysis of structural systems, building codes and their origins, and an introduction to the development of design drawings and specifications.

CE A637 Earthquake Resistant Structural Design 3 CR
Contact Hours: 3 + 0
Prerequisites: CE A431 with minimum grade of C and CE A432 with minimum grade of C and CE A433 with minimum grade of C.
Registration Restrictions: Graduate level or undergraduate senior standing, or instructor approval.
Covers the special structural detail requirements for earthquake design in steel, concrete, timber, and masonry.

CE A639 Loads on Structures 3 CR
Contact Hours: 3 + 0
Prerequisites: CE A431 with minimum grade of C and CE A435 with minimum grade of C.
Registration Restrictions: Graduate level or undergraduate senior standing, or instructor approval.
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.

CE A662 Surface Water Dynamics 3 CR
Contact Hours: 3 + 0
Prerequisites: ES A341. Principles of open channel flow, ice covered flow, unsteady flow, and stream flow as a sediment and pollution transport agent.

CE A663 Ground Water Dynamics 3 CR
Contact Hours: 3 + 0
Prerequisites: ES A341.
Fundamentals of geohydrology, hydraulics of flow through porous media, well hydraulics, ground water pollution, and ground water resources development.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>CE A674</td>
<td>Waves, Tides, and Ocean Processes for Engineers</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: ES A341.</td>
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<td>Registration Restrictions: Prerequisite and standing, or instructor permission.</td>
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<tr>
<td>CE A675</td>
<td>Design of Ports and Harbors</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: ES A341.</td>
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<td>Registration Restrictions: Prerequisite and standing, or instructor permission.</td>
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<tr>
<td>CE A676</td>
<td>Coastal Engineering</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td></td>
<td>Registration Restrictions: Bachelor’s degree in Civil engineering.</td>
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<tr>
<td>CE A677</td>
<td>Coastal Measurements and Analysis</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<tr>
<td></td>
<td>Registration Restrictions: Upper class or graduate standing in Geomatics, Engineering, or Natural Sciences.</td>
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<tr>
<td>CE A681</td>
<td>Frozen Ground Engineering</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td></td>
<td>Prerequisites: CE A435.</td>
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<tr>
<td></td>
<td>Registration Restrictions: Graduate standing, with a baccalaureate degree in engineering, or upper class standing in an accredited undergraduate program in these categories.</td>
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<tr>
<td>CE A682</td>
<td>Ice Engineering</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: ES A331.</td>
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<td>Registration Restrictions: Graduate standing, with a degree in engineering or physical science, or upper class standing in an accredited undergraduate program in these categories.</td>
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<tr>
<td>CE A683</td>
<td>Arctic Hydrology and Hydraulic Engineering</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: CE A344.</td>
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<td>Registration Restrictions: Graduate standing, with degree in engineering or physical science, or upper class standing in an accredited undergraduate program in these categories.</td>
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<tr>
<td>CE A684</td>
<td>Arctic Utility Distribution</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: CE A344.</td>
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<td>Registration Restrictions: Graduate standing, with a degree in engineering or physical science, or upper class standing in an accredited undergraduate program in these categories.</td>
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<tr>
<td>CE A686</td>
<td>Civil Engineering Project</td>
<td>1-6 CR</td>
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<tr>
<td></td>
<td>Contact Hours: 1-6 + 0</td>
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<td></td>
<td>Registration Restrictions: Admission to candidacy for the master of civil engineering degree.</td>
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<td>Arranged between the advisor, project committee, and the student. The student is required to take an oral exam defending the project.</td>
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<tr>
<td>CE A688</td>
<td>Snow Engineering</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td></td>
<td>Prerequisites: ES A331.</td>
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<td></td>
<td>Registration Restrictions: Graduate standing, with a degree in engineering or physical science, or upper class standing in an accredited undergraduate program in these categories.</td>
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<tr>
<td>CE A691</td>
<td>Frozen Ground Engineering</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td></td>
<td>Prerequisites: CE A435.</td>
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<tr>
<td></td>
<td>Registration Restrictions: Graduate standing, with a baccalaureate degree in engineering, or upper class standing in an accredited undergraduate program in these categories.</td>
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<tr>
<td>CE A698</td>
<td>Individual Research</td>
<td>1-6 CR</td>
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<td>Contact Hours: 1-6 + 0</td>
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<td>Registration Restrictions: Faculty permission.</td>
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<tr>
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<td>A course to be designed between the student and faculty member to allow students the chance to pursue special advanced interests in engineering at the MS level.</td>
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<tr>
<td>CE A699</td>
<td>Thesis</td>
<td>1-6 CR</td>
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<td>Contact Hours: 1-6 + 0</td>
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<td>Registration Restrictions: Graduate committee permission.</td>
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<tr>
<td></td>
<td>Individual study of an advanced engineering problem resulting in a thesis. The student must have been admitted to candidacy for the master of science in civil engineering. The student must take an oral exam defending the thesis.</td>
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</tr>
</tbody>
</table>

**CED - Community Education**

**Offered through Chugiak-Eagle River Campus**

(907) 694-3313  
www.uaa.alaska.edu/ctc/programs/eagleriver/index.cfm

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>CED A110</td>
<td>Employment Development Planning</td>
<td>1 CR</td>
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<tr>
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<td>Contact Hours: 1 + 0</td>
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<td></td>
<td>Grade Mode: Pass/No Pass.</td>
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<td></td>
<td>Offered only at Kenai Peninsula College.</td>
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<td>Designed to encourage and prepare single parents/displaced homemakers to pursue an education and/or employment, by establishing goals and utilizing available resources. Includes communication skills, resume writing, interviewing techniques, self-image and problem solving techniques. Emphasis in goal setting and career planning.</td>
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<tr>
<td>CED A115</td>
<td>Elderhostel: The Alaskan Adventure</td>
<td>1 CR</td>
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<tr>
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<td>Contact Hours: 1 + 0</td>
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<td>Grade Mode: Pass/No Pass.</td>
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<td></td>
<td>Overview of components of the Alaskan adventure, history, natural history, anthropology, literature, geology. Emphasis on Kachemak Bay.</td>
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<tr>
<td>CED A119</td>
<td>Community Awareness Workshop on Domestic Violence and Sexual Assault</td>
<td>4 CR</td>
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<td>Contact Hours: 3 + 2</td>
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<td>Grade Mode: Pass/No Pass.</td>
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<td>Offered only at Kenai Peninsula College.</td>
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<tr>
<td></td>
<td>Introduces Women’s Resource and Crisis Center services, domestic violence and sexual assault issues, and basic skills necessary for victim advocacy.</td>
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<tr>
<td>CED A125</td>
<td>Yoga: Study and Practice</td>
<td>1 CR</td>
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<td>Contact Hours: .5 + 1</td>
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<td>Grade Mode: Pass/No Pass.</td>
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<td>A study of the health benefits of Hatha Yoga. Students practice the basic breathing, stretching, and relaxation techniques of yoga while learning of the effectiveness of this discipline in treating various health problems.</td>
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<tr>
<td>CED A126W</td>
<td>Yoga for Educators</td>
<td>1 CR</td>
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<td></td>
<td>Contact Hours: 1 + 0</td>
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<td></td>
<td>Integrates Yoga techniques and strategies into the P-12 curriculum and applies yoga-based practices for enhanced learning/productivity and personal health/wellness.</td>
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<tr>
<td>CED A133</td>
<td>Beginning Fly Fishing</td>
<td>1 CR</td>
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<td></td>
<td>Contact Hours: 1 + 0</td>
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<tr>
<td></td>
<td>Grade Mode: Pass/No Pass.</td>
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<tr>
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<td>Introduces the basics of fly fishing, including selection of equipment, types of line, flies, and techniques geared toward local lakes and streams.</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
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<tr>
<td>CED A150</td>
<td>Basic Japanese Cooking</td>
<td>1 CR</td>
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<tr>
<td>CED A157</td>
<td>The Art and History of Brewing</td>
<td>1 CR</td>
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<tr>
<td>CED A160</td>
<td>Appreciating Opera</td>
<td>1 CR</td>
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<tr>
<td>CED A171</td>
<td>Log Cabin Construction</td>
<td>1-3 CR</td>
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<tr>
<td>CED A185</td>
<td>Presenting Art Lessons in K-12</td>
<td>1 CR</td>
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<tr>
<td>CED A210</td>
<td>Crime Scene Investigation</td>
<td>2 CR</td>
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<tr>
<td>CED A231</td>
<td>Grant Proposal Writing</td>
<td>1 CR</td>
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<tr>
<td>CEL A292</td>
<td>Introduction to Civic Engagement</td>
<td>3 CR</td>
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<tr>
<td>CEL A390</td>
<td>Special Topics in Civic Engagement</td>
<td>1-3 CR</td>
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<tr>
<td>CEL A395</td>
<td>Civic Engagement Internship</td>
<td>3-9 CR</td>
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<tr>
<td>CHEM A055</td>
<td>Contemporary Chemistry</td>
<td>3 CR</td>
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<tr>
<td>CHEM A055L</td>
<td>Contemporary Chemistry Laboratory</td>
<td>1 CR</td>
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<tr>
<td>CHEM A103</td>
<td>Survey of Chemistry</td>
<td>3 CR</td>
</tr>
<tr>
<td>CHEM A103L</td>
<td>Survey of Chemistry Laboratory</td>
<td>1 CR</td>
</tr>
<tr>
<td>CHEM A104</td>
<td>Introduction to Organic Chemistry and Biochemistry</td>
<td>3 CR</td>
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</tbody>
</table>
Course Descriptions

CHEM A104L Introduction to Organic Chemistry and Biochemistry Laboratory 1 CR
Contact Hours: 0 + 3
Prerequisites: CHEM A103 with minimum grade of C and (CHEM A104 or concurrent enrollment).
Course Attributes: UAA GER Natural Sciences Lab Only.
Special Fees.
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. In the event of a student not attending the first scheduled meeting for this lab, they will be administratively dropped. 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.

Second semester introductory chemistry laboratory course. Experiments are designed to reinforce concepts students have been exposed to regarding the basics of laboratory equipment, data collection, data analysis, and reporting. This course illustrates, augments, and applies concepts covered in CHEM A104.

CHEM A105 General Chemistry I 3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A105 with minimum grade of C or MATH A107 or MATH A108 or MATH A109 or MATH A172 or MATH A200 or MATH A201 or MATH A272 or STAT A252 or STAT A253 or STAT A307 or ACT Math with score of 22 or SAT Mathematics with score of 520 or Accuplacer-Col/Alg Math with score of 90.
Registration Restrictions: CHEM A055 with a minimum grade of C or college preparatory high school chemistry with a minimum grade of C. If the MATH A105 prerequisite is not satisfied, appropriate scores on the SAT or ACT tests or appropriate scores on a UAA-approved placement test such as the Accuplacer placement test.
Course Attributes: UAA GER Natural Sciences Requirement.
Special Note: Assumes prior knowledge of college preparatory high school chemistry and algebra. CHEM A105L is the lab component of this course and requires a separate registration.

Introduction to general chemistry for science majors which includes topics in elements and compounds, the periodic table, atomic and subatomic theory and molecular interactions in gases, liquids, solids and solution chemistry.

CHEM A105L General Chemistry I Laboratory 1 CR
Contact Hours: 0 + 3
Prerequisites: CHEM A105 or concurrent enrollment.
Course Attributes: UAA GER Natural Sciences Lab Only.
Special Fees.
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. In the event of a student not attending the first scheduled meeting for this lab, they will 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.

An introductory chemistry laboratory course with experiments designed to introduce students to the basics of laboratory equipment, data collection, data analysis, and reporting; and to illustrate, augment and apply concepts covered in CHEM A105.

CHEM A106 General Chemistry II 3 CR
Contact Hours: 3 + 0
Prerequisites: CHEM A105 with minimum grade of C.
Course Attributes: UAA GER Natural Sciences Requirement.
Special Note: CHEM A106L is the laboratory component of this course and requires a separate registration.

The second semester in the general chemistry sequence for science majors. Topics include kinetics, equilibrium chemistry, acid-base chemistry, oxidation-reduction reactions, electrochemical cell chemistry, thermodynamics, nuclear chemistry, and chemical analysis methods.

CHEM A106L General Chemistry II Laboratory 1 CR
Contact Hours: 0 + 3
Prerequisites: CHEM A105L and (CHEM A106 or concurrent enrollment).
Course Attributes: UAA GER Natural Sciences Lab Only.
Special Fees.
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. In the event of a student not attending the first scheduled meeting for this lab, they will 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.

The second semester of this introductory chemistry laboratory course sequence. Experiments are designed to reinforce concepts students have been exposed to regarding the basics of laboratory equipment, data collection, data analysis, and reporting. This course illustrates, augments, and applies concepts covered in CHEM A106.

CHEM A212 Quantitative Analysis 5 CR
Contact Hours: 3 + 6
Prerequisites: CHEM A106 with minimum grade of C and CHEM A106L with minimum grade of C.
Special Fees.
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. In the event of a student not attending the first scheduled meeting for this lab, they will 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.

The second semester of this introductory chemistry laboratory course sequence. Experiments are designed to reinforce concepts students have been exposed to regarding the basics of laboratory equipment, data collection, data analysis, and reporting. This course illustrates, augments, and applies concepts covered in CHEM A106.

CHEM A253 Principles of Inorganic Chemistry 3 CR
Contact Hours: 3 + 0
Prerequisites: CHEM A106 with minimum grade of C.
Study of structure and bonding of inorganic compounds with emphasis on molecular symmetry, d-metal complexes and catalysis.

CHEM A311 Physical Chemistry: A Biological Orientation 3 CR
Contact Hours: 3 + 0
Prerequisites: CHEM A212 with minimum grade of C and MATH A200 with minimum grade of C.
Design to introduce the principles of physical chemistry to students primarily interested in the biochemical and biological aspects of chemistry. Topics of physical chemistry are presented from the viewpoint of their application to biochemical problems. Included are discussions of thermodynamics and biochemical energetics, properties of solutions and electrolytes, electrochemical applications to biological oxidation-reduction reactions, chemical and enzyme kinetics.

CHEM A321 Organic Chemistry I 3 CR
Contact Hours: 3 + 0
Prerequisites: CHEM A106 with minimum grade of C and CHEM A106L with minimum grade of C.
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.

CHEM A322 Organic Chemistry II 3 CR
Contact Hours: 3 + 0
Prerequisites: CHEM A321 with minimum grade of C.
Continuation of CHEM A321 which will include the study of spectroscopic techniques for structure determination, and the chemistry of alcohols, ethers, epoxides, thiols, sulfides, carbonyl compounds, amines, carboxylic acids, and amino acids. Emphasizes nomenclature, physical properties, synthetic methods, and reaction mechanisms.

CHEM A323L Organic Chemistry Laboratory 2 CR
Contact Hours: 0 + 6
Prerequisites: CHEM A321 with minimum grade of C and (CHEM A322 with minimum grade of C or concurrent enrollment).
Corequisite: CHEM A322.
Special Fees.
Special Note: Concurrent enrollment in CHEM A322 is required unless completed with a minimum grade of C.
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. In the event of a student not attending the first scheduled meeting for this lab, they will 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.

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.

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CHEM A331  Physical Chemistry I  3 CR  
Contact Hours: 3 + 0  
Prerequisites: CHEM A106 with minimum grade of C and CHEM A106L with minimum grade of C and MATH A202 with minimum grade of C and PHYS A212 with minimum grade of C and PHYS A212L with minimum grade of C.  
Special Note: MATH A302 is strongly recommended.  
A quantitative study of principles of thermodynamics, kinetic molecular theory of gases, and chemical kinetics. Applications to solutions, phase equilibria, chemical reactions and transport properties. A brief introduction to quantum mechanics and spectroscopy.

CHEM A332  Physical Chemistry II  3 CR  
Contact Hours: 3 + 0  
Prerequisites: [CHEM A331 with minimum grade of C or PHYS A303 with minimum grade of C and MATH A314 with minimum grade of C]. Special Note: MATH A302 is strongly recommended.  
Principles of quantum mechanics with application to atomic and molecular structure and spectroscopy. Introduction to statistical mechanics.

CHEM A333L  Physical Chemistry Lab  2 CR  
Contact Hours: 0 + 6  
Prerequisites: [CHEM A331 with minimum grade of C and (CHEM A332 with minimum grade of C or concurrent enrollment)] or [PHYS A403 with minimum grade of C and PHYS A413 with minimum grade of C]. Special Fees.  
A practical implementation of the theory learned in CHEM A331 and A332. Selected laboratory and computational experiments in thermodynamics, kinetics, transport phenomena, molecular and atomic structure.

CHEM A434  Instrumental Methods  4 CR  
Contact Hours: 2 + 6  
Prerequisites: CHEM A212 with minimum grade of C. May be stacked with: CHEM A634. Special Fees.  
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.

CHEM A441  Principles of Biochemistry I  3 CR  
Contact Hours: 3 + 0  
Prerequisites: BIOL A115 with minimum grade of C and CHEM A322 with minimum grade of C.  
Registration Restrictions: Junior standing. Completion of all GER Tier 1 (basic college-level skills) courses. Completion of seven credits of GER Tier 2 courses in the Natural Sciences including BIOL A115. May be stacked with: CHEM A641. Course Attributes: UAA GER Integrative Capstone. Special Note: Students who complete CHEM A441 as part of their undergraduate degree cannot receive credit towards their graduate degree from CHEM A641.  
A study of the structure and function of amino acids, proteins, carbohydrates, nucleic acids, lipids and membranes.

CHEM A442  Principles of Biochemistry II  3 CR  
Contact Hours: 3 + 0  
Prerequisites: CHEM A441 with minimum grade of C. May be stacked with: CHEM A642. Special Note: Students who complete CHEM A442 as part of their undergraduate degree cannot receive credit towards their graduate degree from CHEM A642.  
A study of the bioenergetics and the metabolic pathways of amino acids, proteins, carbohydrates, nucleic acids, and lipids.

CHEM A443  Biochemistry Laboratory  2 CR  
Contact Hours: 0 + 6  
Prerequisites: CHEM A441 with minimum grade of C and (CHEM A442 or concurrent enrollment). Special Fees.  
Laboratory course designed to provide instruction in modern biochemical laboratory techniques.

CHEM A450  Environmental Chemistry  3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: Junior or senior standing in biology, chemistry, or engineering. Special Note: This course is an introduction to environmental chemistry for all science majors.  
The origin and evolution of the environment, energy, mineral resources, solid wastes, recycling, and the effects of foreign substances on living systems. Air and water pollution. Quantitative chemical principles will be applied. The interrelationships among these problems will be demonstrated.
**Course Descriptions**

**CHEM A660**  Chemical Ecotoxicology  3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: Graduate standing  
May be stacked with: CHEM A460.  
Special Note: In addition to meeting all the requirements for CHEM A660, graduate students will be required to submit an extensive research proposal addressing a current problem of significant concern to ecotoxicologists. The proposal must be presented to the entire class. Not available for credit to students who have completed CHEM A460.  
The study of the relationships between the observed levels of chemicals in the environment and their biological effects. Special attention will be given to persistent toxic compounds, the dependence of their fate on their physical and chemical properties, and the environmental conditions that regulate their breakdown, movement, transport and ultimate fate.

**CHIN - Chinese**  
Offered through the College of Arts and Sciences  
Administration/Humanities Building (ADM) Suite 287, 786-4030  
www.uaa.alaska.edu/languages  

**CHIN A101**  First Year Chinese I  4 CR  
Contact Hours: 4 + 0  
Course Attributes: UAA GER Humanities Requirement.  
Special Fees.  
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.

**CHIN A102**  First Year Chinese II  4 CR  
Contact Hours: 4 + 0  
Prerequisites: CHIN A101.  
Course Attributes: UAA GER Humanities Requirement.  
Special Fees.  

**CIOS - Computer Information & Office Systems**  
Offered through the Community & Technical College  
University Center (UC), Room 130, 786-6426  
www.uaa.alaska.edu/ctc/programs/cet/cios  

**CIOS A082**  Clerical Accounting  3 CR  
Contact Hours: 3 + 0 or 0 + 9  
Special Fees.  
Special Note: Offered as Demand Warrants.  
Introduces accounting fundamentals using a service business to illustrate the basic accounting equation, closing the books, and preparing financial statements.

**CIOS A101**  Keyboarding  3 CR  
Contact Hours: 3 + 0 or 0 + 9  
Special Fees.  
Special Note: Credit will not be counted for both CIOS A101 and (CIOS A101A and CIOS A101B and CIOS A101C).  
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.

**CIOS A101A**  Keyboarding A: Basic Keyboarding  1 CR  
Contact Hours: 1 + 0 or 0 + 3  
Special Fees.  
Special Note: Credit will not be counted for both CIOS A101 and (CIOS A101A and CIOS A101B and CIOS A101C).  
Introduces the keyboard alphabet, number, and symbol keys. Emphasizes techniques and mechanics of keyboarding by touch.

**CIOS A101B**  Keyboarding B: Business Documents I  1 CR  
Contact Hours: 1 + 0 or 0 + 3  
Prerequisites: CIOS A101A.  
Special Fees.  
Special Note: Credit will not be counted for both CIOS A101 and (CIOS A101A and CIOS A101B and CIOS A101C).  
Introduces keyboarding of memos, personal and business letters, and envelopes in a word processing program and continues to develop keyboarding speed and accuracy.

**CIOS A101C**  Keyboarding C: Business Documents II  1 CR  
Contact Hours: 1 + 0 or 0 + 3  
Prerequisites: CIOS A101B.  
Special Fees.  
Special Note: Credit will not be counted for both CIOS A101 and (CIOS A101A and CIOS A101B and CIOS A101C).  
Introduces keyboarding of simple reports and tables in a word processing program and continues to develop keyboarding speed and accuracy.

**CIOS A102**  Keyboarding Skill Building  1 CR  
Contact Hours: 0 + 3  
Prerequisites: CIOS A101A.  
Grade Mode: Pass/No Pass.  
Special Fees.  
Special Note: May be repeated with only 1 credit in each semester.  
Emphasizes development of keyboarding speed and accuracy.

**CIOS A103**  Introduction to Personal Computers  1 CR  
Contact Hours: 1 + 0 or 0 + 3  
Grade Mode: Pass/No Pass.  
Special Fees.  
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 CR  
Contact Hours: 1 + 0 or 0 + 3  
Prerequisites: CIOS A113 and CIOS A130A.  
Special Fees.  
Introduces design fundamentals as they apply to using desktop publishing, image editing, and web design applications to communicate through online or print media.

**CIOS A113**  Operating Systems: MS Windows  1 CR  
Contact Hours: 1 + 0 or 0 + 3  
Special Fees.  
Introduces the MS Windows operating system. Includes file and disk management, the control panel, desktop, utilities, MS Windows setup, and maintenance.

**CIOS A115**  10-Key for Business Calculations  2 CR  
Contact Hours: 0 + 6  
Registration Restrictions: Proof of placement into MATH A055.  
Special Fees.  
Introduces the 10-key touch control method to solve business-related calculations while developing speed and accuracy.

**CIOS A116**  Business Calculations  3 CR  
Contact Hours: 3 + 0 or 0 + 9  
Prerequisites: [MATH A054 with minimum grade of C or ASSET Numerical Skills with score of 43].  
Special Fees.  
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.

**CIOS A118**  Payroll Procedures  2 CR  
Contact Hours: 2 + 0 or 0 + 6  
Special Fees.  
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 CR  
Contact Hours: 1 + 0 or 0 + 3  
Prerequisites: CIOS A101A and CIOS A113.  
Special Fees.  
Special Note: Knowledge of bookkeeping principles is recommended.  
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.

**CIOS A125A**  Electronic Communications I: MS Outlook  1 CR  
Contact Hours: 1 + 0 or 0 + 3  
Prerequisites: CIOS A101A and CIOS A113.  
Special Fees.  
Introduces electronic communication and time management features of Microsoft Outlook.
Course Descriptions

CIOS A130A  Word Processing I: MS Word  1 CR  
Contact Hours: 1 + 0 or 0 + 3  
Prerequisites: (CIOS A101A or concurrent enrollment).  
Special Fees.  
Introduces fundamentals, concepts, and applications of word processing.  
Students learn basic commands needed to create, format, edit, and print documents.

CIOS A135A  Spreadsheets I: MS Excel  1 CR  
Contact Hours: 1 + 0 or 0 + 3  
Prerequisites: (CIOS A101A or concurrent enrollment) and (CIOS A113 or concurrent enrollment).  
Special Fees.  
Introduces fundamental concepts in the design and use of spreadsheets.  
Includes basic commands, formulas and functions, and inserting of charts, objects, and hyperlinks.

CIOS A140A  Databases I: MS Access  1 CR  
Contact Hours: 1 + 0 or 0 + 3  
Prerequisites: CIOS A101A and CIOS A113.  
Special Fees.  
Introduces the fundamentals and concepts of creating a relational database including tables, queries, forms, and reports.

CIOS A146  Internet Concepts and Applications  2 CR  
Contact Hours: 1 + 2 or 0 + 4  
Prerequisites: CIOS A101A and CIOS A113.  
Special Fees.  
Introduces and applies Internet concepts, tools, and applications. Includes use of electronic mail, search strategies for research, academic, and personal use, the study of security and ethics issues, and new Internet technologies.

CIOS A150A  Presentations: MS PowerPoint  2 CR  
Contact Hours: 1 + 2 or 0 + 4  
Prerequisites: CIOS A101A and CIOS A113.  
Special Fees.  
Covers presentation software and design techniques for creating professional presentations. Incorporates tools for enhancing presentations with various objects.

CIOS A152A  Digital Imaging Concepts and Applications: Photoshop  3 CR  
Contact Hours: 3 + 0  
Prerequisites: (CIOS A108 or concurrent enrollment) and (CIOS A130A or concurrent enrollment) and (CIOS A146 or concurrent enrollment).  
Special Fees.  
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.

CIOS A153A  Website Design: HTML  1 CR  
Contact Hours: 1 + 0 or 0 + 3  
Prerequisites: CIOS A113.  
Special Fees.  
Introduces designing web pages and documents using Hypertext Markup Language (HTML). Emphasizes sound design principles and the use of CSS for formatting and layout.

CIOS A153B  Website Design: Dreamweaver  3 CR  
Contact Hours: 3 + 0  
Prerequisites: CIOS A130A and CIOS A146 and [(CIOS A152A or concurrent enrollment) or (CIOS A156 or concurrent enrollment)]].  
Special Fees.  
Introduces fundamentals of web design using the Dreamweaver application. Emphasizes sound design principles and the use of CSS for formatting and layout.

CIOS A153C  Web Site Design: MS FrontPage  1 CR  
Contact Hours: 1 + 0 or 0 + 3  
Prerequisites: CIOS A113.  
Special Fees.  
Introduces planning, designing, and creation of a website. Covers basic Microsoft FrontPage commands and functions.

CIOS A154A  Desktop Publishing I: PageMaker  1 CR  
Contact Hours: 1 + 0 or 0 + 3  
Prerequisites: CIOS A101A.  
Special Fees.  
Introduces fundamentals and concepts of desktop publishing and design elements used to create a variety of documents for publication, including flyers, brochures, and newsletters.

CIOS A154B  Desktop Publishing I: MS Publisher  1 CR  
Contact Hours: 1 + 0 or 0 + 3  
Prerequisites: CIOS A101A.  
Special Fees.  
Introduces fundamentals and concepts of desktop publishing and design elements used to create a variety of documents for publication, including flyers, brochures, and newsletters.

CIOS A160  Business English  3 CR  
Contact Hours: 3 + 0  
Prerequisites: [PRPE A086 with minimum grade of C or ASSET Writing Skills with score of 40].  
Special Fees.  
Introduces proofreading techniques applied to business communication.  
Develops skills in proofreading for content, usage, grammar, punctuation, and spelling.

CIOS A162A  Shorthand  3 CR  
Contact Hours: 3 + 0 or 0 + 9  
Prerequisites: CIOS A101.  
Special Fees.  
Introduces an alphabetic shorthand system designed for fast note taking or dictation.

CIOS A164  Filing  1 CR  
Contact Hours: 1 + 0 or 0 + 3  
Special Fees.  
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 CR  
Contact Hours: 3 + 0  
Prerequisites: CIOS A101B and CIOS A130A.  
Special Fees.  
Introduces the duties and responsibilities of office employees in the following areas: mail, records management, office communications, reprographics, travel, meetings, conferences, and employment procedures.

CIOS A190  Selected Topics in Office Technology  1-3 CR  
Contact Hours: 1-3 + 0 or 0 + 3-9  
Special Fees.  
Prerequisites: CIOS A101B or CIOS A101C.  
Special Fees.  
Prerequisites will vary with topic.  
Covers various topics in office technology. Course content is determined by specific student or industry needs.

CIOS A201A  Document Processing  3 CR  
Contact Hours: 3 + 0 or 0 + 9  
Prerequisites: CIOS A101A.  
Special Fees.  
Applies keyboarding and word processing skills to letters, mail merges, tabulations, reports, business forms, and other office documents while building speed and accuracy.

CIOS A207  Machine Transcription  1 CR  
Contact Hours: 0 + 3  
Prerequisites: [CIOS A101B or CIOS A101C] and CIOS A161A.  
Special Fees.  
Applies word processing and proofreading skills to create quality documents using transcription equipment. Designed for students with no previous transcription experience.
CIOS A208  Medical Transcription  3 CR  Contact Hours: 2 + 0 or 6 + 0  Prerequisites: Abstract A101B or CIOS A101C and CIOS A161A.  Special Fees.  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.  

CIOS A209A  Legal Transcription  1-3 CR  Contact Hours: 2 + 0 or 0 + 6  Prerequisites: CIOS A160 and CIOS A201A.  Registration Restrictions: Prerequisite or demonstrated equivalent skill and speed of 45 wpm.  Special Fees.  Applies word processing and business English skills to machine transcription of legal dictation to produce accurate legal documents. Designed for students with no previous transcription experience.  

CIOS A220A  Bookkeeping Software Applications II: QuickBooks  2 CR  Contact Hours: 2 + 0 or 0 + 6  Prerequisites: CIOS A120A.  Special Fees.  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.  

CIOS A230A  Word Processing II: MS Word  2 CR  Contact Hours: 2 + 0 or 0 + 6  Prerequisites: CIOS A130A.  Special Fees.  Presents intermediate and advanced word processing and desktop publishing. Includes styles, graphics, merging documents, object linking and embedding, publishing as a web page, working with master documents, indexes, table of contents, on-screen business forms and macros.  

CIOS A235A  Spreadsheets II: MS Excel  2 CR  Contact Hours: 2 + 0 or 0 + 6  Prerequisites: CIOS A135A.  Special Fees.  Presents concepts and techniques for using Excel to solve problems and make decisions. Topics include design and construction of spreadsheets and templates, macros, data exchange, database features, enhancing charts, and other advanced functions.  

CIOS A240A  Databases II: MS Access  2 CR  Contact Hours: 2 + 0 or 0 + 6  Prerequisites: CIOS A140A.  Special Fees.  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.  

CIOS A241  Integrated Applications  3 CR  Contact Hours: 3 + 0 or 0 + 9  Prerequisites: CIOS A151A and [CIOS A220A or CIOS A230B] and CIOS A235A and CIOS A240A.  Special Fees.  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.  

CIOS A251A  Desktop Publishing Concepts and Applications: InDesign  3 CR  Contact Hours: 3 + 0 or 0 + 9  Prerequisites: (CIOS A108 or concurrent enrollment) and (CIOS A130A or concurrent enrollment).  Special Fees.  Presents fundamental digital design techniques and the utilization of desktop publishing software to generate professional publications.  

CIOS A254B  Desktop Publishing II: MS Publisher  2 CR  Contact Hours: 2 + 0 or 0 + 6  Prerequisites: CIOS A154B.  Special Fees.  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.  

CIOS A255  Multimedia Applications  3 CR  Contact Hours: 3 + 0 or 0 + 9  Prerequisites: [CIOS A130A or CIOS A130B] and CIOS A135A and CIOS A150A.  Special Fees.  Applies computer skills to learn how to manipulate sound, digital video, and digital photography to create a multimedia presentation.  

CIOS A259  Preparing Electronic Documents: Adobe Acrobat  1 CR  Contact Hours: 1 + 0 or 0 + 3  Prerequisites: CIOS A130A and (CIOS A146 or concurrent enrollment).  Special Fees.  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.  

CIOS A260A  Business Communications  3 CR  Contact Hours: 3 + 0  Prerequisites: ENGL A111.  Registration Restrictions: Keyboarding and word processing skills, knowledge of document formats, or instructor permission.  Special Fees.  Applies communication principles to creating business messages that involve problem solving and human relations issues. Topics include communications foundations, the writing process, workplace correspondence and reporting data, and communicating both personally and digitally.  

CIOS A261A  Interpersonal Skills in Organizations  3 CR  Contact Hours: 3 + 0  Prerequisites: CIOS A165.  Special Fees.  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 any organization.  

CIOS A262A  Professional Development  3 CR  Contact Hours: 3 + 0  Special Fees.  Examines how to assess personal talents and career goals to develop appropriate cover letters, resumes, and portfolios. Emphasizes job search techniques, preparing to be successful during interviews and how to be successful on the job.  

CIOS A264A  Records Management  2 CR  Contact Hours: 2 + 0 or 0 + 6  Prerequisites: CIOS A140A and CIOS A164.  Special Fees.  Applies principles learned in CIOS A164 to management of information and records. Covers the field of records management, legal and ethical issues, and controls and technology related to creation, use, maintenance, protection, retrieval, and disposition of paper and electronic records.  

CIOS A265  Office Management  3 CR  Contact Hours: 3 + 0 or 0 + 9  Prerequisites: CIOS A165 and CIOS A260A.  Special Fees.  Examines workplace trends, management techniques, communication, conflict resolution, ethics, diversity, technology, legal issues, and the changing roles of the administrative professional.  

CIOS A267  Law Office Procedures: Client Documents  3 CR  Contact Hours: 3 + 0  Prerequisites: CIOS A201A and [CIOS A220A or CIOS A230B].  Special Fees.  Applies word processing and computer skills to preparation of legal documents in the areas of corporate, family, probate, real estate, and bankruptcy law with emphasis on accuracy, style, and understanding the purpose of the documents. Studies legal procedures and legal vocabulary in these areas and examines law office organization and legal ethics.  

CIOS A269  Alaska Rules of Civil Procedures  3 CR  Contact Hours: 3 + 0  Prerequisites: CIOS A266.  Special Fees.  Studies Alaska Rules of Civil Procedure and Alaska Rules of Appellate Procedure in depth as they apply particularly to lawyers’ assistants working with litigation documents.
CIS A270  Project Management Fundamentals  2 CR
Contact Hours: 2 + 0
Special Fees.
Introduces project management fundamentals and develops skills required to contribute as a project team member and leader of small projects that are related to a student's area of technical expertise. Topics include project planning and design, project team skills, project implementation and reporting, and project completion.

CIS A276A  Independent Project  1-3 CR
Contact Hours: 0 + 3-9
Registration Restrictions: 12 credits in CIS courses and instructor permission. Grade Mode: Pass/No Pass. Special Fees. Special Note: Advanced knowledge of CIS topics required.
Focuses on developing, implementing and completing a project based on a current business need or issue. Students work closely with faculty to produce an end product and report.

CIS A295  Office Internship  1-3 CR
Contact Hours: 0 + 3-9
Prerequisites: CIS A165. Registration Restrictions: Minimum of 12 CIS credits and instructor permission. Grade Mode: Pass/No Pass. Special Fees. Special Note: Requires 45 hours of work experience for each credit.
Places students in business offices related to their educational program and occupational objectives. Includes conference with faculty coordinator.

CIS - Computer Information Systems

Offered through the College of Business & Public Policy
Edward & Cathryn Rasmuson Hall (RH), Room 203, 786-4100
www.cbsp.uaa.alaska.edu

Students taking any ACCT, BA, CIS, ECON, LGOP, LOG, or PADM course will be charged a single lab fee of $25 for the semester. Applies to Elmendorf Air Force Base or Fort Richardson classes only when specifically noted on UAAOnline. Does not apply to Chugiak-Eagle River classes.

CIS A105  Introduction to Personal Computers and Application Software  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Keyboarding skill of 30 wpm or better is recommended.
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.

CIS A110  Computer Concepts in Business  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Recommended: MATH A105, CIS A105, familiarity with personal computers and basic software applications, and keyboarding of at least 30 wpm.
Introduction to computing concepts and productivity software from an end user's perspective. Course covers hardware, software, the information processing cycle, beginning programming concepts, and personal computer software packages. The course emphasizes solving business problems using spreadsheet and database applications.

CIS A210  Contemporary Business Applications Development  3 CR
Contact Hours: 3 + 0
Prerequisites: CIS A110 with minimum grade of C and [MATH A107 with minimum grade of C or MATH A172 with minimum grade of C]. Registration Restrictions: If prerequisite is not satisfied, approved UAA mathematics placement test score and current programming experience are required.
Business application development using contemporary technologies and programming languages. Design of user interfaces and integration with other development platforms such as spreadsheets and databases.

CIS A280  Managerial Communications  3 CR
Contact Hours: 2 + 2
Prerequisites: CIS A110 with minimum grade of C and [COMM A111 with minimum grade of C or COMM A241 with minimum grade of C] and ENGL A212 with minimum grade of C.
Registration Restrictions: BBA students with a catalog year earlier than 2010-2011 must take CIS A305 Managerial Presentations in lieu of CIS 280.
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.

CIS A295  Computer Programming Internship  1-6 CR
Contact Hours: 0 + 3-18
Prerequisites: CIS A210 with minimum grade of C. 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.
Grade Mode: Pass/No Pass. Special Fees. 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.
Computer programming and/or end-user support work to include maintenance of information equipment, networks, and software experience in a faculty-approved position.

CIS A305  Managerial Presentations  3 CR
Contact Hours: 3 + 0
Prerequisites: CIS A110 with minimum grade of C and ENGL A212 with minimum grade of C and ENGL A212.
Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing. BBA students with a catalog year earlier than 2010-2011 must take CIS A305 in lieu of CIS A280.
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.

CIS A310  Analysis of Business Systems  3 CR
Contact Hours: 3 + 0
Prerequisites: CIS A210 with minimum grade of C and CIS A305 with minimum grade of C.
Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing. Associate of Applied Science, BCS students may register with instructor approval.
Provides 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.

CIS A326  Information Age Literacy  3 CR
Contact Hours: 3 + 0
Prerequisites: COMM A111 or COMM A241.
Registration Restrictions: Completion of all GER Tier 1 (basic college-level skills) courses and Junior-level standing. Three credits of Tier 2 GER in Social Sciences.
Course Attributes: UAA GER Integrative Capstone.
Special Note: Course credits may not be applied toward any College of Business & Public Policy baccalaureate degree.
Analyses the historical, current, and future implications of information systems and emerging technologies on society. Discusses information literacy concepts with a focus on e-commerce and globalization issues. Students debate the use and abuse of technology as it interacts with traditional cultural norms and within the legal framework.

CIS A330  Database Management Systems  3 CR
Contact Hours: 3 + 0
Prerequisites: CIS A210 with minimum grade of C.
Registration Restrictions: BBA students must be admitted to upper-division standing.
Covers principles of database management systems including concepts and design, methods of file organization, data structures, query languages, and micro to client/server database environments. Students will be expected to design and implement a database project during the semester.

CIS A345  Managing Data Communications and Computer Networks  3 CR
Contact Hours: 3 + 0
Prerequisites: CIS A210.
Registration Restrictions: College of Business & Public Policy majors must be admitted to upper-division standing.
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.

University of Alaska Anchorage 2010-2011 Catalog
www.uaa.alaska.edu
Chapter 13 Page 349
CIS A360  Object-Oriented Programming in .Net  3 CR
Contact Hours: 3 + 0
Prerequisites: CIS A210 and CIS A305 and (CIS A330 or concurrent enrollment) and CIS A376.
Registration Restrictions: College of Business & Public Policy majors must be admitted to upper-division standing.

CIS A361  Advanced Programming for Business Applications  3 CR
Contact Hours: 3 + 0
Prerequisites: CIS A210.
Registration Restrictions: Admission to upper-division standing.
Advanced topics in business programming, with an emphasis on current and next generation programming languages, and on interfacing with the UNIX, Linux, and AIX operating systems. Covers system call interface, standard and nonstandard routines, advanced data structures, pointers, system calls, inter-process communications, and introduction to X Windows.

CIS A365  Object-Oriented Programming  3 CR
Contact Hours: 3 + 0
Prerequisites: CIS A210 with minimum grade of C.
Registration Restrictions: College of Business & Public Policy majors must be admitted to upper-division standing.
Covers basic concepts of Object-Oriented (OO) programming languages. Some of the recent relevant developments and applications will be discussed. The OO programming languages such as C++ or Java will be used as vehicles for illustrating the concepts discussed in the course. OO programming design and programming development patterns will be covered. Students will analyze and solve business problems and practice writing programs for business applications using a chosen programming language.

CIS A376  Management Information Systems  3 CR
Contact Hours: 3 + 0
Prerequisites: CIS A305 or COMM A241.
Registration Restrictions: BBA students must be admitted to upper-division standing. Completion of GER Tier 1 (basic college-level skills) courses and junior standing.
Course Attributes: UAA GER Integrative Capstone.
Analysis of the historical, current, and future implications of Information Systems (IS). Examination of the societal implications of emerging technologies, with emphasis on security, privacy, and ethics. Focus on e-commerce and globalization issues.

CIS A390  Selected Topics in Management Information Systems  1-6 CR
Contact Hours: 1-6 + 0
Prerequisites: CIS A210 with minimum grade of C.
Registration Restrictions: College of Business & Public Policy majors must be admitted to upper-division standing.
Special Note: May be repeated with change of subtitle/top. Maximum of 9 elective credits may be used for the BBA MIS degree. Check course schedule for specific titles being offered.
Study of specific current issues, techniques, and trends in Management Information Systems (MIS).

CIS A395  Programmer/Analyst Internship  3 CR
Contact Hours: 0 + 6-9
Prerequisites: CIS A210 with minimum grade of C.
College Restriction: Must be in UAA Coll of Bus/Public Policy.
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.
Grade Mode: Pass/No Pass.
Special Fees: 
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.
Computer programmer/analyst work experience in a faculty approved position.

CIS A410  Project Management  3 CR
Contact Hours: 3 + 0
Prerequisites: CIS A310 with minimum grade of C and CIS A330 with minimum grade of C and CIS A376 with minimum grade of C.
Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.
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.

CIS A420  Consulting and Training End Users  3 CR
Contact Hours: 3 + 0
Prerequisites: CIS A210 and CIS A376.
Registration Restrictions: Admission to upper-division standing.
Analyzes and applies the theories and strategies associated with consulting and training end users of business computer applications. Course projects are designed to advance and integrate competencies in communications skills (both oral and written) and computer technical skills obtained in prior applicable GER and CIS courses.

CIS A421  Multimedia Authoring  3 CR
Contact Hours: 3 + 0
Prerequisites: CIS A210 and CIS A376.
Registration Restrictions: Admission to upper division standing.
Provides opportunities for the exploration of multimedia authoring using a variety of software tools. Stresses design theory and the integration of various multimedia forms into a coherent business product.

CIS A430  Client-Server Programming for Business Applications  3 CR
Contact Hours: 3 + 0
Prerequisites: CIS A210 with minimum grade of C and CIS A330 with minimum grade of C and CIS A376 with minimum grade of C.
Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.
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.

CIS A445  Advanced Network Management  3 CR
Contact Hours: 3 + 0
Prerequisites: CIS A345.
College Restriction: Must be in UAA Coll of Bus/Public Policy.
Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.
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.

CIS A460  Web Development in the .Net Environment  3 CR
Contact Hours: 3 + 0
Prerequisites: CIS A360 and CIS A376.
Registration Restrictions: Admission to upper division standing.
Development of Web sites, portals, applications, and services within the .Net environment. Uses ASP.Net as the development environment; XML, XSLT, schemas and ADO.Net for database processing; and either C# or Visual Basic for server-side code. Installation, maintenance security and other server issues will be covered.

CIS A489  Systems Design, Development and Implementation  3 CR
Contact Hours: 3 + 0
Prerequisites: CIS A376 with minimum grade of C and CIS A410 with minimum grade of C and [CIS A365 with minimum grade of C or CIS A430 with minimum grade of C or CIS A460 with minimum grade of C].
Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.
Engages students in the design, development and implementation of an information system project. Projects 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.

CIS A495  Systems Analyst/User Support Internship  3 CR
Contact Hours: 0 + 6-9
Prerequisites: CIS A210 with minimum grade of C and CIS A376 with minimum grade of C.
College Restriction: Must be in UAA Coll of Bus/Public Policy.
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.
Grade Mode: Pass/No Pass.
Special Fees: 
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.
Systems analyst or user-support work experience in a faculty approved position.
CIS A498  Individual Research Project  1-6 CR  
Contact Hours: 1-6 + 0  
Prerequisites: CIFS A210 with minimum grade of C and CIS A376 with minimum grade of C.  
Registration Restrictions: Admission to upper division standing.  
Special Note: May be taken more than once for a maximum of 3 elective credits.  
Offered as demand warrants.

In a simulated professional environment, students complete an MIS project, prepare a project report, and make a managerial presentation.

CIS A690  Selected Topics in Management Information Systems  3 CR  
Contact Hours: 3 + 0  
Prerequisites: CIS A692.  
Registration Restrictions: Graduate standing.  
Special Note: May be repeated with change of subtitle/topic. Check course schedule for specific titles being offered. Maximum of 9 elective credits may be used for the MBA degree.  
Study of specific current issues, techniques, and trends in Management Information Systems (MIS).

CM - Construction Management

Offered through the Community and Technical College  
University Center (UC), Room 130, 786-6465  
www.uaa.alaska.edu/ctc/programs/cdt

CM A101  Fundamentals of CADD for Building Construction  4 CR  
Contact Hours: 2 + 4  
Registration Restrictions: Proof of eligibility for placement into MATH A105 and ENGL A111.  
Crosslisted with: AET A101.  
Special Fees.  
Introduces basic CADD (computer-aided drafting and design) skills necessary in civil, architectural, structural, mechanical, and electrical drafting within the construction industry. Defines the working relationship between design and construction professionals and drafters/technicians.

CM A102  Methods of Building Construction  3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: Proof of eligibility for placement into MATH A105 and ENGL A111.  
Crosslisted with: AET A102.  
Special Fees.  
Introduces basic knowledge of building materials, technical specifications, techniques, and systems. Outlines structural systems, construction processes, and assemblies. Includes a field project involving student team research of current Alaskan building type.

CM A123  Codes and Standards  3 CR  
Contact Hours: 3 + 0  
Prerequisites: CM A101 and CM A102.  
Crosslisted with: AET A123.  
Special Fees.  
Provides an introduction and overview of the fundamental provisions of the building codes used for plan review, life-safety evaluation of buildings, and community development.

CM A142  Mechanical and Electrical Technology  4 CR  
Contact Hours: 3 + 2  
Prerequisites: CM A101 and CM A102.  
Crosslisted with: AET A142.  
Special Fees.  
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, and interpretation of construction drawings.

CM A163  Building Construction Cost Estimating  3 CR  
Contact Hours: 2 + 2  
Prerequisites: CM A101 and CM A102 and MATH A105.  
Special Fees.  
Introduces CADD (computer-aided drafting and design) skills necessary in civil, architectural, structural, mechanical, and electrical drafting within the construction industry. Defines the working relationship between design and construction professionals and drafters/technicians.

CM A201  Construction Project Management I  3 CR  
Contact Hours: 3 + 0  
Prerequisites: CM A101 and CM A102.  
Special Fees.  
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.

CM A202  Project Planning and Scheduling  3 CR  
Contact Hours: 2 + 2  
Prerequisites: CM A201 and [MATH A105 or MATH A107 or MATH A108 or MATH A109 or MATH A172 or MATH A200 or MATH A201 or MATH A272].  
Special Fees.  
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.

CM A205  Construction Safety  3 CR  
Contact Hours: 3 + 0  
Prerequisites: CM A201.  
Special Fees.  
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.

CM A213  Civil Technology  4 CR  
Contact Hours: 2 + 4  
Prerequisites: CM A101 and CM A102.  
Crosslisted with: AET A213.  
Special Fees.  
Outlines elements of civil design, including soils and soil mechanics, foundations, roads, utilities using local, state, and federal regulations. Students will also be introduced to elements of construction surveying.

CM A231  Structural Technology  4 CR  
Contact Hours: 2 + 4  
Prerequisites: CM A101 and CM A102.  
Crosslisted with: AET A231.  
Special Fees.  
Examines structural theory and the physical principles that underlie structural behavior. Includes the use of materials in a manner to maintain structural stability against the natural forces of gravity, wind, snow, and earthquakes. Covers connection detailing and code requirements for wood, steel, and reinforced concrete.

CM A263  Civil Construction Cost Estimating  3 CR  
Contact Hours: 2 + 2  
Prerequisites: CM A201 and [MATH A105 or MATH A107 or MATH A108 or MATH A109 or MATH A172 or MATH A200 or MATH A201 or MATH A272].  
Special Fees.  
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.

CM A295  Construction Management Internship  3 CR  
Contact Hours: 0 + 15  
Registration Restrictions: Departmental approval.  
Grade Mode: Pass/No Pass.  
Special Fees.  
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.

CM A301  Construction Project Management II  3 CR  
Contact Hours: 3 + 0  
Prerequisites: CM A201 and ENGL A111.  
Special Fees.  
Analyzes advanced subjects in construction project management. Includes project procurement, project delivery methodology, managing project change, quality control, claims and disputes, and labor relations.
CM A313  Soils in Construction  3 CR  
Contact Hours: 3 + 0  
Prerequisites: CM A213 and MATH A107.  
Special Fees.  
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.

CM A331  Statics and Strength of Materials  3 CR  
Contact Hours: 3 + 0  
Prerequisites: [AET A231 or CM A231] and [MATH A108 or MATH A109] and PHYS A123 and PHYS A123L.  
Special Fees.  
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.

CM A401  Construction Law  3 CR  
Contact Hours: 3 + 0  
Prerequisites: CM A301 and [BA A241 or JUST A241].  
Special Fees.  
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.

CM A422  Sustainability in the Built Environment  3 CR  
Contact Hours: 3 + 0  
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.  
Course Attributes: UAA GER Integrative Capstone.  
Special Fees.  
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.

CM A440  Financial Management for Construction  3 CR  
Contact Hours: 3 + 0  
Prerequisites: CM A301.  
Special Fees.  
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.

CM A450  Construction Management Professional Practice  3 CR  
Contact Hours: 2 + 2  
Prerequisites: CM A301 and CM A495.  
Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) requirements.  
Course Attributes: UAA GER Integrative Capstone.  
Special Fees.  
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.

CM A460  Construction Equipment Management and Methods  3 CR  
Contact Hours: 3 + 0  
Prerequisites: CM A263 and CM A313.  
Special Fees.  
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.

CM A495  Advanced Construction Management Internship  3 CR  
Contact Hours: 1 + 15  
Registration Restrictions: Departmental approval.  
Special Fees.  
Provides career development through self-assessment and career exploration by placement in a construction management home or field office. Intern will perform duties directly related to construction management functions.

CNT A160  PC Operating Systems  3 CR  
Contact Hours: 2 + 3  
Special Fees.  
Develops fundamental understanding of command line, desktop, and server operating systems. Includes computer programming, architecture, and hardware necessary to understand the operating system interactions.

CNT A161  PC Architecture  1 CR  
Contact Hours: 1 + .5  
Special Fees.  
Covers basic hardware associated with microcomputer operation, including, but not limited to, memory, motherboards, CPUs, chipssets, buses, expansion slots, and resource allocation.

CNT A162  PC Building, Upgrading, and Architecture  3 CR  
Contact Hours: 2 + 2  
Special Fees.  
Introduces the concepts of networking protocols, communication techniques, and hardware components of LAN, MAN, and WAN networks.

CNT A164  Network Cabling  1 CR  
Contact Hours: 1 + .5  
Special Fees.  
Introduces the different physical mediums and their characteristics associated with networking. This will include, but not be limited to, types of copper and fiber optic cables, connections, testing, cabling planning, and layout.

CNT A165  Customer Service Fundamentals  1 CR  
Contact Hours: 1 + 0  
Special Fees.  
Introduces basic customer service principles, including relationships, perceptions, telephone techniques, quality, ethics, record keeping, interpersonal relationships, and teamwork.

CNT A170  Cisco Academy Network Fundamentals  4 CR  
Contact Hours: 3 + 2.5  
Special Fees.  
Covers networking fundamentals and develops basic skills in designing, installing, and troubleshooting local area networks. Topics include cabling, cabling closets, Ethernet technologies, management devices, protocols, subnetting, network device selection, installation and troubleshooting.

CNT A180  PC Interfacing, Peripherals, Storage and A+  4 CR  
Contact Hours: 3 + 2  
Prerequisites: CNT A160 and CNT A162.  
Special Fees.  
Covers PC peripheral devices, auxiliary storage devices and the interfaces used to connect them to the personal computer. Also covers the fundamentals topics necessary to prepare for the Core Hardware portion of the CompTIA A+ Certification.

CNT A181  PC Auxiliary Storage  1 CR  
Contact Hours: 1 + .5  
Prerequisites: CNT A160 and CNT A161 and CNT A162.  
Special Fees.  
Introduces PC storage devices and interfaces, including, but not limited to, magnetic storage, optical storage, disk drives, drive installation, configuration, and file systems.

CNT A182  PC Peripheral Devices  1 CR  
Contact Hours: 1 + .5  
Prerequisites: CNT A160 and CNT A161 and CNT A162.  
Special Fees.  
Introduces ancillary PC hardware, including keyboards, printers, pointing devices, video displays, video capture, scanners, and digital cameras.
Course Descriptions

CNT A183  Local Area Networks 3 CR
Contact Hours: 2 + 2
Prerequisites: CNT A160 and CNT A162.
Special Fees.
Prepresents 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.

CNT A184  Introduction to TCP/IP 1 CR
Contact Hours: 1 + 1
Prerequisites: CNT A183.
Special Fees.
Prepresents transmission control protocol/internet protocol, including structure, addressing, data transfer, software, applications, and troubleshooting.

CNT A190  Selected Topics in MOUS Certifications 1 CR
Contact Hours: 5 + 1
Prerequisites: CNT A101.
Special Note: May be repeated for credit with a change of subtitle.
Prepresents advanced Microsoft training leading to MOUS certifications in selected software topics from the Office 2000 suite.

CNT A210  PC Technician Fundamentals 3 CR
Contact Hours: 3 + 0
Prerequisites: CNT A105.
Prepresents the 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.

CNT A212  Network Technician Fundamentals 3 CR
Contact Hours: 1 + 2
Prerequisites: CNT A210.
Prepresents the introduction to 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.

CNT A240  Windows System Essentials 2 CR
Contact Hours: 1 + 2
Prerequisites: CNT A210.
Special Fees.
Provides an introduction to networking concepts, features, and capabilities and their implementation within the Windows environment.

CNT A241  Administering and Supporting Windows Workstations and Server 3 CR
Contact Hours: 2 + 2
Prerequisites: CNT A240.
Special Fees.
Prepresents concepts and skills necessary to install and configure Windows Server on stand-alone computers and on client computers that are part of a workgroup or domain.

CNT A242  Windows Network Infrastructure Administration 3 CR
Contact Hours: 2 + 2
Prerequisites: CNT A241.
Special Fees.
Prepresents students with the knowledge and skills to implement and manage the network infrastructure associated with a Windows domain.

CNT A243  Windows Directory Services Administration 3 CR
Contact Hours: 2 + 2
Prerequisites: CNT A242.
Prepresents students with the skills and knowledge to install, configure, and administer the Windows Active Directory Service for a Windows domain.

CNT A244  Designing Secure Windows Networks 3 CR
Contact Hours: 2 + 2
Prerequisites: CNT A242.
Prepresents students with the knowledge and skills to design a security framework for small, medium, and enterprise networks using Microsoft Windows technologies.

CNT A245  Windows Directory Services Design 2 CR
Contact Hours: 1 + 2
Prerequisites: CNT A243.
Prepresents students with the knowledge and skills to design a Microsoft Windows directory services infrastructure in an enterprise network.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
<th>Contact Hours</th>
<th>Prerequisites</th>
<th>Registration Restrictions</th>
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</thead>
<tbody>
<tr>
<td>CNT A290</td>
<td>Selected Topics in Information Technology</td>
<td>1-3 CR</td>
<td>0-3 + 0-6</td>
<td>Special Note: Prerequisites will vary with topic. Provides students with intermediate to advanced knowledge in information technology-related topics.</td>
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<tr>
<td>COMM</td>
<td><strong>Communication</strong></td>
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<td>Offered through the College of Arts and Sciences</td>
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<td><a href="http://www.uaa.alaska.edu/communication">www.uaa.alaska.edu/communication</a></td>
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<tr>
<td>CMM A101</td>
<td>Introduction to Human Communication</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Contact Hours: 3 + 0 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.</td>
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<tr>
<td>CMM A111</td>
<td>Fundamentals of Oral Communication</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Contact Hours: 3 + 0 Prerequisite: COMM A111 or COMM A235 or COMM A237 or COMM A241 or [Accuplacer-Reading Comp with score of 085 and Accuplacer-Sentence Skills with score of 095] or Enhanced ACT English with score of 22 or Original ACT English with score of 22 or SAT Critical Reading Score with score of 530 or SAT Verbal Score with score of 530 or SAT Verbal with score of 530 or [COMPASS E-Write (1-12 scale) with score of 10 and COMPASS Reading Skills with score of 75].</td>
<td>Registration Restrictions: Appropriate test score on English Placement Test, SAT Verbal Section, or ACT English Test will waive the ENGL A109 or PRPE A108 prerequisite.</td>
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<tr>
<td>CMM A235</td>
<td>Small Group Communication</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Contact Hours: 3 + 0 Prerequisite: COMM A111 with minimum grade of C or PRPE A108 with minimum grade of C or ENGL A111 or ENGL A211 or ENGL A212 or ENGL A213 or ENGL A214 or [Accuplacer-Reading Comp with score of 085 and Accuplacer-Sentence Skills with score of 095] or Enhanced ACT English with score of 22 or Original ACT English with score of 22 or SAT Critical Reading Score with score of 530 or SAT Verbal Score with score of 530 or SAT Verbal with score of 530 or [COMPASS E-Write (1-12 scale) with score of 10 and COMPASS Reading Skills with score of 75].</td>
<td>Registration Restrictions: Appropriate test score on English Placement Test, SAT Verbal Section, or ACT English Test will waive the ENGL A109 or PRPE A108 prerequisite.</td>
</tr>
<tr>
<td>CMM A236</td>
<td>Interviewing</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Contact Hours: 3 + 0 Prerequisite: COMM A111 or COMM A235 or COMM A237 or COMM A241 or [Accuplacer-Reading Comp with score of 085 and Accuplacer-Sentence Skills with score of 095] or Enhanced ACT English with score of 22 or Original ACT English with score of 22 or SAT Critical Reading Score with score of 530 or SAT Verbal Score with score of 530 or SAT Verbal with score of 530 or [COMPASS E-Write (1-12 scale) with score of 10 and COMPASS Reading Skills with score of 75].</td>
<td>Registration Restrictions: Appropriate test score on English Placement Test, SAT Verbal Section, or ACT English Test will waive the ENGL A109 or PRPE A108 prerequisite.</td>
</tr>
<tr>
<td>CMM A237</td>
<td>Interpersonal Communication</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Contact Hours: 3 + 0 Prerequisite: ENGL A109 with minimum grade of C or PRPE A108 with minimum grade of C or ENGL A111 or ENGL A211 or ENGL A212 or ENGL A213 or ENGL A214 or [Accuplacer-Reading Comp with score of 085 and Accuplacer-Sentence Skills with score of 095] or Enhanced ACT English with score of 22 or Original ACT English with score of 22 or SAT Critical Reading Score with score of 530 or SAT Verbal Score with score of 530 or SAT Verbal with score of 530 or [COMPASS E-Write (1-12 scale) with score of 10 and COMPASS Reading Skills with score of 75].</td>
<td>Registration Restrictions: Appropriate test score on English Placement Test, SAT Verbal Section, or ACT English Test will waive the ENGL A109 or PRPE A108 prerequisite.</td>
</tr>
<tr>
<td>CMM A241</td>
<td>Public Speaking</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Contact Hours: 3 + 0 Prerequisite: ENGL A109 with minimum grade of C or PRPE A108 with minimum grade of C or ENGL A111 or ENGL A211 or ENGL A212 or ENGL A213 or ENGL A214 or [Accuplacer-Reading Comp with score of 085 and Accuplacer-Sentence Skills with score of 095] or Enhanced ACT English with score of 22 or Original ACT English with score of 22 or SAT Critical Reading Score with score of 530 or SAT Verbal Score with score of 530 or SAT Verbal with score of 530 or [COMPASS E-Write (1-12 scale) with score of 10 and COMPASS Reading Skills with score of 75].</td>
<td>Registration Restrictions: Appropriate test score on English Placement Test, SAT Verbal Section, or ACT English Test will waive the ENGL A109 or PRPE A108 prerequisite.</td>
</tr>
<tr>
<td>CMM A305</td>
<td>Intercultural Communication</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Contact Hours: 3 + 0 Prerequisite: COMM A101 or COMM A111 or COMM A235 or COMM A237. 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.</td>
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<tr>
<td>CMM A320</td>
<td>Argumentation and Debate</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Contact Hours: 3 + 0 Prerequisite: COMM A111 or COMM A241. 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.</td>
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<tr>
<td>CMM A340</td>
<td>Nonverbal Communication</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Contact Hours: 3 + 0 Prerequisite: COMM A111 or COMM A241. 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.</td>
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<tr>
<td>CMM A341</td>
<td>Advanced Public Speaking</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Contact Hours: 3 + 0 Prerequisite: COMM A111 or COMM A241. 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.</td>
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</tbody>
</table>
COMM A345  Women and Communication  3 CR
Contact Hours: 3 + 0
Prerequisites: COMM A101 or COMM A111 or COMM A235 or COMM A237 or COMM A241.
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.

COMM A346  Oral Interpretation of Literature  3 CR
Contact Hours: 3 + 0
Prerequisites: COMM A111 or COMM A235 or COMM A237 or COMM A241.
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.

COMM A360  Competitive Debating  3 CR
Contact Hours: 3 + 0
Prerequisites: COMM A111 or COMM A241.
Registration Restrictions: Faculty permission.
Special Note: May be repeated once for credit.
Study of the theory and practice of competitive academic debating. Students will consider competitive debating from the perspective of debater, adjudicator and competition organizer.

COMM A370  Relational Communication  3 CR
Contact Hours: 3 + 0
Prerequisites: COMM A101 or COMM A111 or COMM A235 or COMM A237.
Study of communication processes in intimate personal relationships. Examines the role of communication in relationship engagement, relationship maintenance and relationship disengagement.

COMM A380  Theories of Human Communication  3 CR
Contact Hours: 3 + 0
Prerequisites: COMM A111 or COMM A235 or COMM A237 or COMM A241.
Study of major communication theories, principles, and research paradigms in interpersonal, group, organizational, and public contexts.

COMM A390  Selected Topics in Communication  3 CR
Contact Hours: 3 + 0
Prerequisites: COMM A111 or COMM A235 or COMM A237 or COMM A241.
Special Note: May be repeated once for credit with a change of subtitle.
Selected topics in communication arising from special circumstances of demand or faculty expertise. Specific titles as announced.

COMM A410  Communication in Education  3 CR
Contact Hours: 3 + 0
Prerequisites: COMM A111 or COMM A235 or COMM A237 or COMM A241.
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.

COMM A412  Persuasion  3 CR
Contact Hours: 3 + 0
Prerequisites: COMM A101 or COMM A111 or COMM A235 or COMM A237 or COMM A241.
Explores theory, modern theory, and practical application of persuasion theory. A review of current literature, examination of persuasion in interpersonal, organizational, political, and public contexts.

COMM A420  Family Communication  3 CR
Contact Hours: 3 + 0
Prerequisites: COMM A101 or COMM A111 or COMM A235 or COMM A237 or COMM A241.
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.

COUN - Counseling
Offered through the Advising and Testing Center
University Center (UC), Room 112, 786-4500
www.uaa.alaska.edu/advising-testing

COUN A101  Introduction to Career Exploration  1 CR
Contact Hours: 1 + 0
Grade Mode: Pass/No Pass.
Special Fees.
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 CR
Contact Hours: 1 + 0
Examines general causes of stress and effective methods to eliminate or manage stress in your own life.

CPLX - Complex Systems
Offered through the College of Arts and Sciences
Engineering Building (ENGR), Room 333, 786-4748
www.uaa.alaska.edu/complexsystems

CPLX A200  Introduction to Complexity  3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A107 or MATH A172.
Crosslisted with: BIOL A200.
Course Attributes: UAA GER Natural Sciences Requirement.
An introduction to the science of complexity, currently used to predict system behavior in the physical, life, and social sciences.

CS - Computer Science
Offered through the College of Arts and Sciences
Social Sciences Building (SSB), Room 154, 786-1744
www.math.uaa.alaska.edu

Each student taking any CS course will be charged a single lab fee for the semester. Does not apply to Eagle River, Fort Richardon, Elmnendorf Air Force Base or extended site offerings.

CS A101  Introduction to Computer Science  3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A105 or MATH A107 or MATH A108 or MATH A109 or MATH A172 or MATH A200 or MATH A201 or MATH A272.
Registration Restrictions: If prerequisite is not satisfied, appropriate SAT or ACT scores or approved UAA Placement Test required.
Special Fees.
Special Note: Students who intend to major in computer science may take this course as preparation for their course of study.
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.

CS A109  Computer Programming (Languages Vary)  3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A105 with minimum grade of C.
Registration Restrictions: If prerequisite is not satisfied, appropriate SAT or ACT scores or approved UAA Placement Test required.
Special Fees.
Special Note: May be repeated twice for credit with a change in language.
Problem analysis and solution using a selected programming language.

CS A110  Java Programming  3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A105 with minimum grade of C.
Registration Restrictions: If prerequisite is not satisfied, appropriate SAT or ACT scores or approved UAA placement test required.
Special Fees.
Introduction to the syntax of the Java language and object-orientation with an emphasis on writing programs to solve problems.

CS A111  Visual Basic .NET Programming  3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A105 with minimum grade of C or MATH A107 or MATH A108 or MATH A109 or MATH A172 or MATH A200 or MATH A201 or MATH A272.
Registration Restrictions: If prerequisite is not satisfied, appropriate SAT or ACT scores or approved UAA placement test required.
Special Fees.
Introduction to the syntax and semantics of the Visual Basic .NET programming language with an emphasis on writing programs to solve problems.
### Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>CS A201</td>
<td>Programming Concepts I</td>
<td>3 CR</td>
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<tr>
<td></td>
<td>Contact Hours: 3 + 0</td>
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<td></td>
<td>Prerequisites: CS A101 or [MATH A107 or MATH A108 or MATH A109].</td>
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<td></td>
<td>Registration Restrictions: Meet prerequisites or placement into MATH A200 or MATH A272.</td>
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<td>Special Fees:</td>
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<tr>
<td></td>
<td>An introduction to object-oriented programming techniques and problem solving. This includes basic syntax; sequential, branching, and loop execution; as well as concepts such as inheritance, encapsulation, and polymorphism.</td>
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<tr>
<td>CS A202</td>
<td>Programming Concepts II</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td></td>
<td>Prerequisites: CS A201</td>
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<td></td>
<td>Continuation of object-oriented programming. Topics include: inheritance, abstraction, interfaces, references, polymorphism, dynamic binding, class hierarchies, container classes, random access file I/O, serializability, graphical applications, event handling, UML, and object-oriented design.</td>
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<tr>
<td>CS A207</td>
<td>C Programming</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<tr>
<td></td>
<td>Prerequisites: MATH A105 with minimum grade of C or MATH A107 or MATH A108 or MATH A109 or MATH A172 or MATH A200 or MATH A201 or MATH A272.</td>
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<td></td>
<td>Registration Restrictions: If prerequisite is not satisfied, two years of high school algebra with a minimum grade of C or Math Placement Test is required.</td>
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<tr>
<td></td>
<td>Training and practice in writing programs in the C programming language.</td>
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<tr>
<td>CS A221</td>
<td>Computer Organization and Assembly Programming</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td></td>
<td>Prerequisites: CS A201</td>
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<tr>
<td></td>
<td>Introduces the hardware components of computer systems, the organization of those components, and the low-level programming operations that computer systems provide. Includes fundamentals of assembly language programming.</td>
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<tr>
<td>CS A241</td>
<td>Computer Hardware Concepts</td>
<td>4 CR</td>
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<td></td>
<td>Contact Hours: 3 + 3</td>
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<td></td>
<td>Prerequisites: CS A201 and [MATH A107 or MATH A172].</td>
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<td></td>
<td>Crosslisted with: EE A241</td>
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<td>Analysis and design of electronic devices used as building blocks for construction of simple digital systems. Presents formats for data storage, number systems and alpha-numeric codes, and methods of implementing logical and arithmetic operations within computers. Relates hardware component’s capabilities and limitations to design requirements for computer processing, memory, and control functions.</td>
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<tr>
<td>CS A304</td>
<td>Object-Oriented Analysis and Modeling</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: CS A201</td>
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<td></td>
<td>Object-oriented approach to modeling real-world entities and designing a language-independent software application or system based on that model. The course will include selected programming assignments and projects in a current object-oriented language.</td>
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<tr>
<td>CS A320</td>
<td>Operating Systems</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td></td>
<td>Prerequisites: CS A202</td>
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<tr>
<td></td>
<td>An introductory course on operating systems. Topics covered include process management and scheduling, threads, synchronization and deadlock, memory management and virtual memory, and file systems and I/O.</td>
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<tr>
<td>CS A330</td>
<td>Algorithms and Data Structures</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: CS A202</td>
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<td>Data structures and algorithms for their manipulation. The following topics will be covered: arrays, tables, stacks, queues, trees, linked lists, graphs, sorting, searching, and hashing.</td>
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<tr>
<td>CS A331</td>
<td>Programming Language Concepts</td>
<td>3 CR</td>
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<tr>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: CS A221 and CS A330.</td>
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<td></td>
<td>Study of the syntax and semantics of widely differing programming languages. Syntax specification, block structure, binding, data structure operators, and control structures. Comparison of several programming languages. The languages will be selected to cover the major topical areas of procedural, functional, logic, and scripting languages. Programming assignments will be given in each language studied.</td>
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<tr>
<td>CS A342</td>
<td>Networks</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: CS A221 and CS A330 and MATH A231.</td>
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<td>Introduction to data transmission, information theory, and computer networks. Topics include: characteristics of transmission media, multiplexing, error detection and correction, data security, communication protocols, packet switching, analysis of various network architectures, and review of selected commercial network environments.</td>
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<tr>
<td>CS A351</td>
<td>Automata, Algorithms, and Complexity</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: CS A330 and MATH A231.</td>
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<td>Study of the theory of computing and algorithm analysis and design. Topics in computing theory include: parsing, finite automata and regular languages, pushdown automata and context-free grammars, deterministic and nondeterministic Turing machines, decidability, and computability. Topics in the algorithm domain include: algorithm analysis and complexity, searching/sorting algorithms, mathematical algorithms, and graph theoretic algorithms.</td>
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<tr>
<td>CS A360</td>
<td>Database Systems</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td></td>
<td>Prerequisites: CS A202</td>
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<td></td>
<td>Application of data modeling, relational database concepts and design, normalization theory, and SQL. Study of underlying data structures, and data processing architectures and implementations.</td>
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<tr>
<td>CS A385</td>
<td>Computer Graphics</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: CS A330</td>
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<td></td>
<td>Introduction to the principles, techniques, and tools used in 3D computer graphics programming.</td>
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<tr>
<td>CS A395</td>
<td>Internship in Computing</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td></td>
<td>Prerequisites: CS A202 and CS A221.</td>
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<td>Registration Restrictions: Faculty approval. Grade Mode: Pass/No Pass. Special Fees.</td>
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<td>Special Note: This course is open to qualified students with faculty approval, and as placements are available. Special Note: May be taken up to three times, but only 3 credits may be applied towards CS major requirements. Application of computing skills in a professional work setting.</td>
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<tr>
<td>CS A401</td>
<td>Software Engineering</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: CS A330</td>
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<td>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 engineering techniques for programming large problems, advanced issues in object-oriented programming, design patterns, client-server computing, and principles of interface design.</td>
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<tr>
<td>CS A405</td>
<td>Artificial Intelligence</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: CS A330 and MATH A231.</td>
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<td>Introduction to concepts of artificial intelligence (AI). Topics include knowledge representation, predicate logic, heuristic search, natural language processing, machine learning and a survey of AI programming languages.</td>
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<tr>
<td>CS A407</td>
<td>Evolutionary Computing</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: CS A330</td>
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<td>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.</td>
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<tr>
<td>CS A413</td>
<td>Computer and Data Security</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: CS A202</td>
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<td>Fundamentals of computer and data security. Emphasizes the importance of proper data processing practices and management.</td>
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<tr>
<td>CS A431</td>
<td>Compilers: Concepts and Techniques</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: CS A331</td>
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<td>Top-down and bottom-up parsing, lexical analyzers, symbol tables, internal forms, intermediate languages, code generation, optimization. A compiler for a rudimentary language is constructed.</td>
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<tr>
<td>CS A448</td>
<td>Computer Architecture</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: CS A221 and CS A320 and CS A331.</td>
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<td>Instruction set design and evaluation, processor implementation techniques, pipelining, vector processors, memory systems, and I/O systems. Overview of parallel and distributed systems architecture. Development and application of software for the parallel and distributed environments: algorithms, programming languages, and development tools.</td>
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</tbody>
</table>
CSE - Computer Systems Engineering

Offered through the School of Engineering
Engineering Building (ENGR), Room 201, 786-1900
www.engr.uaa.alaska.edu

CSE A205 Introduction to C Programming for Engineers 3 CR
Contact Hours: 3 + 0
Prerequisites: [MATH A107 and MATH A108] or MATH A109.
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.

CSE A215 Object Oriented Programming for Engineers 3 CR
Contact Hours: 3 + 0
Prerequisites: CSE A205.
Object-oriented programming for engineers. Students will learn a programming language that can be used in many aspects of the engineering field. Assignments will focus on engineering applications that communicate with hardware devices through the use of programming skills, including objects, classes, hierarchies, inheritance, polymorphism, recursion, graphical user interfaces, event processing, and exception handling. This course is a cross-over class where students will learn object-oriented concepts in C++ and Java. Projects will focus on engineering applications in different fields.

CSE A225 Assembly Language Programming for Engineers using Xilinx 3 CR
Contact Hours: 3 + 0
Prerequisites: CSE A205.
Application of software development concepts, principles, and practices to a comprehensive, realistic system. The student will analyze, design, document, implement, and deliver a presentation and written report of a software system of moderate complexity under the supervision of the instructor.

CSE A325 Topics in Computer Science 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Faculty permission.
Special Note: May be repeated for credit with a change of subtitle.
Advanced topics in computer science not taught in other CSE course offerings.

CSE A395 Internship Project 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Junior or Senior Standing with minimum of 15 credits in CSE courses and faculty permission.
Special Fees.
Special Note: Enrollment will be permitted after a plan for the completion of the project is submitted to and approved by the instructor. Internships are subject to availability of placement. May be taken more than once, but only 3 credits of the upper division credit requirement for the bachelor's degree in CS may be met with CSE A495. Students wishing to earn internship credits without the project requirement should enroll in CS A395.

Professional work experience in appropriate areas of computing. The student will analyze, design, and document a realistic computer science project of moderate complexity under the supervision of a qualified professional who has agreed in advance to undertake this role.

CSE A498 Individual Research 1-3 CR
Contact Hours: 1-3 + 0
Registration Restrictions: Upper division standing and faculty permission.
Special Note: May be repeated up to a maximum of six credits.
Independent research projects under the supervision of a faculty member. The result will be a paper or presentation prepared to publication standards.

CSE A670 Computer Science for Software Engineers 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Faculty permission required.
In-depth survey of the theoretical underpinnings of computer science. Topics are taken from the areas of algorithms and data structures, computer architecture, networking, operating systems, computability and formal languages, programming languages, and compilers.

CSE A671 Advanced Software Engineering 3 CR
Contact Hours: 3 + 0
Prerequisites: CSE A401.
The study of software design as an engineering discipline. The phases of software development are covered under a variety of lifecycle models. The phases are examined across the spectrum from small scale to very large-scale projects.

CSE A690 Advanced Topics in Computer Science 1-3 CR
Contact Hours: 1-3 + 0
Registration Restrictions: Faculty permission required.
Special Note: May be repeated twice for credit with a change of subtitle for a maximum of 6 credits.
Advanced topics in computer science at the graduate level.
CSE A451 Digital Signal Processing 3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A231 and EE A351 and STAT A307.
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.

CSE A465 Network Security 3 CR
Contact Hours: 3 + 0
Prerequisites: CSE A455.
Analysis of network attack techniques and methods to defend against them,
including firewalls, virtual private networks; network intrusion detection; and
denial of service.

CTE - Career & Technical Education

Offered through the Community & Technical College
University Center (UC), Room 130, 786-6945
www.uaa.alaska.edu/ctc/programs/cte/index.cfm

CTE A411 Historical and Philosophical Foundations of Career and Technical Education 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Junior or senior standing or departmental approval
May be stacked with: CTE A611.
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.

CTE A490 Selected Topics in Career and Technical Education 1-6 CR
Contact Hours: 1-6 + 0
Registration Restrictions: Junior or senior standing or department approval.
May be stacked with: CTE A690.
Special Note: May be repeated for credit with a change of subtitle.
Studies emerging trends, standards and theories of learning that Career and
Technical educators may integrate into their curriculum. Explores opportunities for
application of models using work experiences to test the models.

CTE A611 Historical and Philosophical Foundations of Career and Technical Education 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
May be stacked with: CTE A411.
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.

CTE A633 Current Issues in Career and Technical Education 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
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.

CTE A643 Teaching in Career and Technical Education 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
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.

CTE A643A Career and Technical Education Methods I 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Departmental approval required.
Provides fundamentals of standards-based curriculum design and assessment
for diverse student populations in Career and Technical Education (CTE)
classrooms. Explores applied research regarding students’ learning and conceptual
development in CTE and corresponding pedagogy. Examines career and technical
education foundations and evaluates content and materials.

CTE A643B Career and Technical Education Methods II 2 CR
Contact Hours: 2 + 0
Prerequisites: CTE A643A.
Registration Restrictions: Departmental approval required.
Continues the development of professional teaching practices appropriate for
diverse student populations in Career and Technical Education (CTE) classrooms.
Examines current research and scholarship about teaching and learning that will
facilitate application in the classroom.

CTE A655 Curriculum and Assessment in Career and Technical Education 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
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.

CTE A690 Selected Topics in Career and Technical Education 1-6 CR
Contact Hours: 1-6 + 0
Registration Restrictions: Graduate standing or department approval.
May be stacked with: CTE A490.
Special Note: May be repeated for credit with a change of subtitle.
Studies emerging trends, standards, and theories of learning that Career and
Technical educators may integrate into their curriculum. Explores opportunities for
application of models using work experiences to test the models.

CTE A695 Internship 1-9 CR
Contact Hours: 0 + 3-27
Prerequisites: [CTE A611 and EDFN A601] or [EDFN A601 and EDFN A602 and
EDFN A603].
Registration Restrictions: Departmental approval required. Placement availability
may result in registration restrictions. Includes coursework and fingerprinting,
Alaska Student Teacher Authorization and medical clearance.
Grade Mode: Pass/No Pass.
Special Fees.
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 and Technical College. Partners may
limit registration. Completion of 9 credits is required for the MAT.
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.

CTE A695C Advanced Professional Experiences 1-6 CR
Contact Hours: 0 + 5-30
Registration Restrictions: Graduate standing and faculty permission.
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.

CTE A698 Individual Research 1-6 CR
Contact Hours: 1 + 5-30
Registration Restrictions: Graduate standing and advisor permission. Completion
of or concurrent enrollment in research courses by advisement.
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.

CTE A699 Thesis 1-6 CR
Contact Hours: 1 + 5-30
Registration Restrictions: Graduate standing and advisor permission. Completion
or concurrent enrollment in research courses by advisement.
Facilitates the development of a thesis and presentation jointly approved
by the student's graduate committee and the student. Supports journal quality
research that coincides with the student's professional objectives.
**CWLA - Creative Writing & Literary Arts**

*Undergraduate-level CWLA courses are offered through the College of Arts & Sciences*
*Graduate-level CWLA courses are offered through Administration/ Humanities Building (ADM), Room 270, 786-4394*

Contact Hours: 3 + 0

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**CWLA A260**
short Format: Introduction to Creative Writing

1 CR

Contact Hours: 1 + 0

Special Note: May be repeated twice for elective credit with a different topic.

Introduction to one creative writing genre in short one-credit workshops.

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**CWLA A262**
Introduction to Creative Writing: Poetry

3 CR

Contact Hours: 3 + 0

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.

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**CWLA A263**
Introduction to Creative Writing: Fiction

3 CR

Contact Hours: 3 + 0

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.

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**CWLA A264**
Introduction to Creative Writing: Drama

3 CR

Contact Hours: 3 + 0

Examines the fundamental problems and questions of writing drama. Includes discussing and practicing matters of technique and process and other more philosophical issues of drama. Advances student understanding of the elements of drama.

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**CWLA A265**
Introduction to Creative Writing: Nonfiction

3 CR

Contact Hours: 3 + 0

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.

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**CWLA A266**
Introduction to Creative Writing: Children's Stories

3 CR

Contact Hours: 3 + 0

Examines the fundamental problems and questions of writing children's stories. Includes discussing and practicing matters of technique and process and other more philosophical issues of children's stories. Advances student understanding of the elements of children's stories.

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**CWLA A325**
Writers' Workshop: Poetry

3 CR

Contact Hours: 3 + 0

Prerequisites: CWLA A260 with minimum grade of C and ENGL A111 with minimum grade of C.

Special Note: May be repeated once for elective credit.

Introduction to techniques of writing poetry, with instructor-guided peer critique of each student's work.

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**CWLA A332**
Writers' Workshop: Fiction

3 CR

Contact Hours: 3 + 0

Prerequisites: CWLA A260 with minimum grade of C and ENGL A111 with minimum grade of C.

Special Note: May be repeated once for elective credit.

Introduction to techniques of writing fiction, with intensive critique of each student's work.

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**CWLA A352**
Writers' Workshop: Nonfiction

3 CR

Contact Hours: 3 + 0

Prerequisites: CWLA A260 with minimum grade of C and ENGL A111 with minimum grade of C.

Special Note: May be repeated once for elective credit.

Study of creative nonfiction including analysis of representative texts and practice in writing nonfiction.

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**CWLA A362**
Writers' Workshop: Drama and Screenwriting

3 CR

Contact Hours: 3 + 0

Prerequisites: CWLA A260 with minimum grade of C and ENGL A111 with minimum grade of C.

Special Note: May be repeated once for elective credit.

Practice in writing drama for stage and screen, with instructor-guided peer critique of each student's work.

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**CWLA A372**
Writers' Workshop: Poetry

3 CR

Contact Hours: 3 + 0

Prerequisites: CWLA A260 with minimum grade of C and ENGL A111 with minimum grade of C.

Special Note: May be repeated once for elective credit.

Study of creative poetry including analysis of representative texts and practice in writing poetry.

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**CWLA A472**
Advanced Writers' Workshop: Poetry

3 CR

Contact Hours: 3 + 0

Prerequisites: CWLA A325 with minimum grade of C or CWLA A332 with minimum grade of C.

Registration Restrictions: Prior completion of CWLA A362 and ENGL A363 recommended.

Special Note: May be repeated once for elective credit.

Advanced study and practice of creative poetry including analysis of formal elements in representative texts, application of theoretical perspectives, production of numerous texts, and critiques of student work in workshop format.

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**CWLA A452**
Advanced Writers' Workshop: Fiction

3 CR

Contact Hours: 3 + 0

Prerequisites: CWLA A325 with minimum grade of C or CWLA A332 with minimum grade of C.

Registration Restrictions: Prior completion of CWLA A362 and ENGL A363 recommended.

Special Note: May be repeated once for elective credit.

Advanced practice in writing fiction in an intensive workshop format.

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**CWLA A432**
Advanced Writers' Workshop: Nonfiction

3 CR

Contact Hours: 3 + 0

Prerequisites: CWLA A325 with minimum grade of C or CWLA A332 with minimum grade of C.

Registration Restrictions: Prior completion of CWLA A362 and ENGL A363 recommended.

Special Note: May be repeated once for elective credit.

Advanced study and practice of creative nonfiction including analysis of formal elements in representative texts, application of theoretical perspectives, production of numerous texts, and critiques of student work in workshop format.

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**CWLA A482**
Advanced Writers' Workshop: Drama and Screenwriting

3 CR

Contact Hours: 3 + 0

Prerequisites: CWLA A332 with minimum grade of C or CWLA A362 with minimum grade of C.

Registration Restrictions: Prior completion of CWLA A362 and ENGL A363 recommended.

Special Note: May be repeated once for elective credit.

Practice in writing drama for stage and screen, with instructor-guided peer critique of each student's work.

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**CWLA A650A**
Creative Writing Internship

3 CR

Contact Hours: 0 + 20

Registration Restrictions: Students must be MFA candidates nominated by the Creative Writing and Literary Arts faculty and graduate standing.

Special Note: May be repeated once for credit.

An internship for students in the MFA Program. Students selected for this internship will work with the editor of Alaska Quarterly Review. Students assigned to AQR will learn how to produce, manage and edit a nationally recognized literary journal.
Course Descriptions

CWLA A650B  Creative Writing Internship  3 CR
Contact Hours: 0 + 12
Registration Restrictions: Students must be MFA candidates nominated by the Creative Writing and Literary Arts faculty and graduate standing.
Special Note: May be repeated once for credit.

An internship for students in the MFA Program. Students selected for this internship will work with the features editor of the "Anchorage Daily News." Students will learn how to report, edit, research, and write for the "Anchorage Daily News."

CWLA A650C  Creative Writing Internship  3 CR
Contact Hours: 0 + 12
Registration Restrictions: Students must be MFA candidates nominated by the Creative Writing and Literary Arts faculty and graduate standing.
Special Note: May be repeated once for credit.

An internship for students in the MFA Program. Students selected for this internship will work as editors of Inklings, the campus literary magazine. They will supervise all aspects of the magazine and make editorial decisions concerning the contents of the magazine. They will also mentor undergraduates on the staff and/or undergraduates who are contributors to the magazine, as appropriate.

CWLA A652  Graduate Writer's Workshop: Poetry  5 CR
Contact Hours: 5 + 0
Registration Restrictions: Admission to MFA program in creative writing.
Grade Mode: Pass/No Pass.
Special Fees.
Special Note: May be repeated twice for degree credit.

Advanced study and practice of the forms and techniques of poetry with close analysis of each student's creative work.

CWLA A662  Graduate Writer's Workshop: Fiction  5 CR
Contact Hours: 5 + 0
Registration Restrictions: Admission to MFA program in creative writing.
Grade Mode: Pass/No Pass.
Special Fees.
Special Note: May be repeated twice for degree credit.

Advanced study and practice of the forms and techniques of fiction with close analysis of each student's creative work.

CWLA A672  Graduate Writer's Workshop: Literary Nonfiction  5 CR
Contact Hours: 5 + 0
Registration Restrictions: Admission to MFA program in creative writing.
Grade Mode: Pass/No Pass.
Special Fees.
Special Note: May be repeated twice for degree credit.

Advanced study and practice of the forms and techniques of literary nonfiction with close analysis of each student's creative work.

CWLA A690  Studies in Form and Theory  5 CR
Contact Hours: 5 + 0
Registration Restrictions: Admission to MFA program in creative writing.
Grade Mode: Pass/No Pass.
Special Fees.
Special Note: May be repeated twice for degree credit.

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.

CWLA A695  Literary Practicum  1-5 CR
Contact Hours: 0 + 3-15
Registration Restrictions: Admission to MFA program in creative writing; permission of program director.
Grade Mode: Pass/No Pass.
Special Note: Practicum may be taken only after satisfactorily completing 20 credits of coursework.

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.

CWLA A698  Individual Research  1-6 CR
Contact Hours: 3 + 0
Registration Restrictions: Faculty permission.

The student conducts an individual research project under the close supervision of an instructor.

CWLA A699  Thesis  5 CR
Contact Hours: 0 + 15
Registration Restrictions: Admission to MFA program in creative writing; permission of advisor.
Grade Mode: Pass/No Pass.
Special Note: Must have satisfactorily completed 30 credits to enroll. May be repeated for a total of 10 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.

DA - Dental Assisting

Offered through the Community & Technical College
Allied Health Sciences Building (AHS), Room 160, 786-6929
www.uaa.alaska.edu/ctc/programs/alliedhealth/index.cfm

DA A101  Essentials of Dentistry  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Departmental approval.
Special Fees.

Provides foundations in general dentistry pertaining to dental assisting. Introduces basic dental procedures, safety, dental specialties, and dental anatomy.

DA A102  Infection Control in Dentistry  2/3 CR
Contact Hours: 2 or 0+2
Registration Restrictions: Departmental approval.
Special Fees.

Introduces infection control principles necessary for dental auxiliaries to operate safely within a dental office and to prevent the spread of microbial diseases.

DA A110  Dental Radiography  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Departmental approval.
Special Fees.

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.

DA A110L  Dental Radiography Laboratory  1 CR
Contact Hours: 0 + 2
Prerequisites: (DA A110 or concurrent enrollment).
Registration Restrictions: Departmental approval.
Special Fees.

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.

DA A127  Dental Practice Management and Professionalism  3 CR
Contact Hours: 3 + 0
Prerequisites: DA A123.
Special Fees.

Introduces the responsibilities of the dental assistant or dental practice management assistant and professionalism and related topics.

DA A130  Chairside Techniques I  4 CR
Contact Hours: 2 + 4
Registration Restrictions: Departmental approval.
Special Fees.

Introduces beginning skills necessary to function as a chairside dental assistant, and basic laboratory applications of restorative materials and alginate. Emphasis on developing clinical skills in four-handed dentistry techniques.

DA A150  Biomedical and Dental Sciences for Dental Assistants  3 CR
Contact Hours: 3 + 0
Prerequisites: DA A101.
Registration Restrictions: Departmental approval.
Special Fees.

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.
DA A160  Materials in Dentistry  3 CR
Contact Hours: 2 + 2
Registration Restrictions: Departmental approval.
Corequisite: DA A160L.
Special Fees.
- 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.

DA A195A  Dental Assisting Practicum I  1 CR
Contact Hours: 0 + 6
Prerequisites: (DA A110 or concurrent enrollment) and (DA A121 or concurrent enrollment) and (DA A123 or concurrent enrollment) and (DA A124 or concurrent enrollment) and (DA A128 or concurrent enrollment).
Grade Mode: Pass/No Pass.
Special Fees.
- Orientation and practice in dental assisting techniques under supervision in local dental offices and clinics. Emphasizes further development of chairside assisting skills. Students will spend 80-85 hours in an off-campus facility.

DA A195B  Dental Assisting Practicum II  3 CR
Contact Hours: 0 + 16
Prerequisites: DA A195A and (DA A122 or concurrent enrollment) and (DA A125 or concurrent enrollment) and (DA A126 or concurrent enrollment).
Grade Mode: Pass/No Pass.
Special Fees.
- A clinical, off-campus course for dental assisting students who have completed all program requirements in the fall and spring semesters. Students are placed in general and specialty dental offices. Direct supervision is provided by the participating dentist and program faculty. Seminars are held to discuss student progress and experiences.

DA A201  Chairside Techniques II  4 CR
Contact Hours: 2 + 4
Prerequisites: DA A110 and DA A110L and DA A130.
Registration Restrictions: Departmental approval.
Special Fees.
- 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.

DA A202  Dental Specialties for Dental Auxiliaries  3 CR
Contact Hours: 2 + 2
Prerequisites: DA A101 and DA A130.
Registration Restrictions: Departmental approval.
Special Fees.
- Expands and applies information and skills necessary in endodontics, oral and maxillofacial surgery, orthodontics, pediatrics, periodontics, and fixed/removable prosthetics.

DA A295A  Clinical Practicum II  3 CR
Contact Hours: 0 + 15
Registration Restrictions: Departmental approval.
Grade Mode: Pass/No Pass.
Special Fees.
- 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.

DA A295B  Clinical Practicum III  2 CR
Contact Hours: 0 + 5
Registration Restrictions: Departmental approval.
Grade Mode: Pass/No Pass.
- Applies clinical dental assisting experience in an instructional setting. Students will participate in the dental assisting clinic working with novice students.

DH - Dental Hygiene

Offered through the Community & Technical College
Allied Health Sciences Building (AHS), Room 160, 786-6929
www.uaa.alaska.edu/ctc/programs/alliedhealth/index.cfm

DH A202  Basic Techniques for Dental Hygienists  7 CR
Contact Hours: 3 + 8
Prerequisites: BIOL A111 and BIOL A112 and [BIOL A240 or BIOL A241].
Registration Restrictions: Departmental approval; BLS certification.
Special Fees.
- 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.

DH A204  Anatomy of the Orofacial Structures  2 CR
Contact Hours: 2 + 0
Prerequisites: BIOL A111 and BIOL A112.
Registration Restrictions: Departmental approval.
Special Fees.
- Provides students with anatomical knowledge necessary to perform technical skills within the oral cavity.

DH A222  Adjunctive Techniques for Dental Hygienists  1.5 CR
Contact Hours: 1 + 0.5
Prerequisites: DA A110 with minimum grade of C and DA A110L with minimum grade of C and DA A201 with minimum grade of C and DH A202 with minimum grade of C and DH A204 with minimum grade of C.
Registration Restrictions: Departmental approval; BLS certification.
Special Fees.
- Introduces adjunctive techniques used in dental hygiene treatment. Emphasizes skills applied in the practice of dental hygiene, such as polishing, sealant placement, and fluoride application.

DH A292D  Clinical Seminar I  1 CR
Contact Hours: 0 + 3
Prerequisites: DH A202 with minimum grade of C.
Registration Restrictions: Departmental approval.
Corequisite: DH A295D.
Grade Mode: Pass/No Pass.
Special Fees.
- Provides procedural instruction and general support for Clinical Practicum I. Emphasis is placed on review of treatment and case presentations.

DH A295D  Clinical Practicum I  4 CR
Contact Hours: 0 + 12
Prerequisites: DH A202 with minimum grade of C.
Registration Restrictions: Departmental approval, BLS certification, and required immunizations.
Corequisite: DH A292D.
Special Fees.
- 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.

DH A310  Oral Pain Control  3 CR
Contact Hours: 1.5 + 3
Prerequisites: DH A204 with minimum grade of C and DH A295D with minimum grade of C and DH A365 with minimum grade of C.
Registration Restrictions: Departmental approval; BLS certification.
Special Fees.
- 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).
- 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.

DH A331  Periodontics  2 CR
Contact Hours: 2 + 0
Prerequisites: [BIOL A240 with minimum grade of C or BIOL A241 with minimum grade of C] and DH A201 with minimum grade of C and DH A202 with minimum grade of C.
Registration Restrictions: Departmental approval.
Special Fees.
- Uses previous knowledge of periodontal structures and microbiology to enable the student to assess periodontal conditions and formulate treatment plans.

DH A312  Advanced Techniques for Dental Hygienists  3 CR
Contact Hours: 1 + 0
Prerequisites: DH A311 with minimum grade of C.
Registration Restrictions: Departmental approval; BLS certification.
Special Fees.
- Provides instruction in advanced procedures used in dental hygiene treatment, including root planing, ultrasonic scaling, and local chemotherapeutics.
Course Descriptions

DH A314  Pathology of Oral Tissues  2 CR
Contact Hours: 2 + 0
Prerequisites: [BIOL A240 with minimum grade of C or BIOL A241 with minimum grade of C] and DH A202 with minimum grade of C and DH A204 with minimum grade of C.
Registration Restrictions: Departmental approval.
Special Fees: 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.

DH A316  Professional Dental Hygiene Practice  1.5 CR
Contact Hours: 1.5 + 0
Prerequisites: DH A392C with minimum grade of C.
Registration Restrictions: Departmental approval.
Special Fees: Discusses ethical and legal concerns in the dental hygiene profession. Explores issues relevant to the practice of dental hygiene.

DH A321  Current Periodontal Therapies  2 CR
Contact Hours: 2 + 0
Prerequisites: DH A311 with minimum grade of C.
Registration Restrictions: Departmental approval.
Special Fees: Emphasizes theoretical instruction and application of current nonsurgical techniques in the treatment of periodontal disease.

DH A324  Community Dental Health I  2 CR
Contact Hours: 2 + 0
Prerequisites: DH A314 with minimum grade of C and DH A395C with minimum grade of C.
Registration Restrictions: Departmental approval; BLS certification.
Special Fees: 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.

DH A350  Basic Restorative Techniques  3 CR
Contact Hours: 1 + 6
Registration Restrictions: Second year dental hygiene student, licensed dental hygienist, or certified dental assistant; departmental approval.
Special Fees: Builds on previous coursework to introduce restorative skills for allied dental personnel. Provides supervised laboratory instruction on typodonts, with emphasis on Class I and Class II restorations.

DH A365  Pharmacology for Dental Hygienists  2 CR
Contact Hours: 2 + 0
Prerequisites: CHEM A104 with minimum grade of C and DH A202 with minimum grade of C.
Registration Restrictions: Departmental approval.
Special Fees: 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.

DH A390  Selected Topics in Dental Hygiene  1-6 CR
Contact Hours: 0.6 - 0.18
Registration Restrictions: Departmental approval.
Special Note: May be repeated for credit with change of subtitle. A maximum of 6 credits may be applied to the Bachelor of Science degree in Dental Hygiene. Studies emerging trends, standards, and theories in dental hygiene. Explores opportunities for clinical application.

DH A392C  Clinical Seminar II  1 CR
Contact Hours: 0 + 3
Prerequisites: DH A222 with minimum grade of C and DH A295D with minimum grade of C and DH A311 with minimum grade of C.
Registration Restrictions: Departmental approval.
Corequisite: DH A395C.
Grade Mode: Pass/No Pass.
Special Fees: Provides discussion and evaluation of clinical experiences in Clinical Practicum II. Emphasizes review of treatment and case presentations.

DH A392D  Clinical Seminar III  1 CR
Contact Hours: 0 + 3
Prerequisites: DH A321 with minimum grade of C and DH A395C with minimum grade of C.
Registration Restrictions: Departmental approval.
Corequisite: DH A395D.
Grade Mode: Pass/No Pass.
Special Fees: 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.

DH A395C  Clinical Practicum II  5 CR
Contact Hours: 0 + 15
Prerequisites: DH A222 with minimum grade of C and DH A295D with minimum grade of C and DH A311 with minimum grade of C.
Registration Restrictions: Departmental approval; BLS certification, and required immunizations.
Corequisite: DH A392C.
Special Fees: 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.

DH A395D  Clinical Practicum III  6 CR
Contact Hours: 0 + 18
Prerequisites: DH A321 with minimum grade of C and DH A395C with minimum grade of C.
Registration Restrictions: Departmental approval, BLS certification, and required immunizations.
Corequisite: DH A392D.
Special Fees: 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.

DH A395E  Community Practicum in Dental Hygiene  1-3 CR
Contact Hours: 0 + 3-9
Prerequisites: DH A295D.
Registration Restrictions: Departmental approval and current cardiopulmonary resuscitation certification.
Grade Mode: Pass/No Pass.
Special Note: May be repeated once for a maximum of 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.

DH A424  Community Dental Health II  3 CR
Contact Hours: 2 + 2
Prerequisites: DH A324 with minimum grade of C and [STAT A252 with minimum grade of C or STAT A253 with minimum grade of C].
Registration Restrictions: Departmental approval; Completion of GER Tier I (basic college-level skills) courses.
Course Attributes: UAA GER Integrative Capstone.
Special Fees: Presents advanced theoretical instruction on community dental health and research methodology, with emphasis on project design, development, and implementation for diverse populations.

DH A450  Advanced Restorative Techniques  1 CR
Contact Hours: 0 + 3
Prerequisites: DH A350 with minimum grade of C.
Registration Restrictions: Departmental approval.
Special Fees: Expands skills in restorative functions. Provides supervised laboratory instruction on typodonts, with emphasis on anterior and multiple-surface posterior restorations.

DH A460  Instructional Concepts in Dental Hygiene  1 CR
Contact Hours: 1 + 0
Prerequisites: DH A395C with minimum grade of C.
Registration Restrictions: Departmental approval.
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.
**Course Descriptions**

**DLS - Disability & Long-Term Support**

Offered through the College of Health & Social Welfare
UAA Center for Human Development
2702 Gambell Street, Suite 103, 272-8270
www.alaskachd.org

**DLS A101**  
Introduction to Children’s Behavioral Health  
3 CR  
Contact Hours: 2 + 2  
Prerequisites: DLS A201.  
Registration Restrictions: Department approval.  
Special Fees.  
Assists students in developing core skills for children’s behavioral health field. Students will explore ethics and ethical practices, legal requirements in residential care, boundaries in therapeutic relationships, culturally responsive treatment adaptations, recordkeeping and documentation standards. Course includes a 30-hour practicum.

**DLS A201**  
Skill Basics in Children’s Behavioral Health  
3 CR  
Contact Hours: 2 + 2  
Prerequisites: DLS A201.  
Registration Restrictions: Department approval.  
Assists students in developing core skills used to shape children’s (ages 0-18) behavior in a behavioral health setting. Students develop a basic understanding of learning theory and apply that understanding to communication strategies, teaching methods, and crisis prevention interventions. Course includes a 60-hour practicum.

**DLS A205**  
Teaching Social Skills to Youth in Children’s Behavioral Health  
4 CR  
Contact Hours: 2 + 4  
Prerequisites: DLS A201.  
Registration Restrictions: Department approval.  
Assists students in developing core skills used to shape children’s (ages 0-18) behavior in a behavioral health setting. Students develop a basic understanding of learning theory and apply that understanding to communication strategies, teaching methods, and crisis prevention interventions. Course includes a 60-hour practicum.

**DLS A206**  
Positive Behavioral Supports in Children’s Behavioral Health  
3 CR  
Contact Hours: 2 + 2  
Prerequisites: DLS A205.  
Registration Restrictions: Department approval.  
Students will extend knowledge of learning theory to functional behavior assessments of problem behaviors in children (age 0-18) and appropriate interventions. Students will learn to develop behavior support plans using non-aversive interventions for challenging and problematic behaviors with children. Course includes a 30-hour practicum.

**DLS A385**  
Working with Traumatized Children  
3 CR  
Contact Hours: 2 + 2  
Prerequisites: DLS A101.  
Registration Restrictions: Department approval.  
Students will extend knowledge of learning theory to functional behavior assessments of problem behaviors in children (age 0-18) and appropriate interventions. Students will learn to develop behavior support plans using non-aversive interventions for challenging and problematic behaviors with children. Course includes a 30-hour practicum.

**DN - Dietetics & Nutrition**

Offered through the Community & Technical College
Lucy Cuddy Hall (CUDY), Room 126, 786-4728
www.uaa.alaska.edu/ctc/programs/culinary

**DN A100**  
Introduction to Nutrition and Dietetics  
1 CR  
Contact Hours: 1 + 0  
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.

**DN A101**  
Principles of Nutrition  
3 CR  
Contact Hours: 3 + 0  
Studies 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.

**DN A145**  
Child Nutrition  
3 CR  
Contact Hours: 3 + 0  
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 A147**  
Geriatric Nutrition  
3 CR  
Contact Hours: 3 + 0  
Focuses on the nutritional needs of the older person, based on physiological changes in aging, with emphasis on nutritionally related diseases, procuring and preparing food, and assistive care. Designed for those preparing for careers in elderly care and for those interested in learning how to care for themselves in later years.

**DN A155**  
Survey of Alaska Native Nutrition  
3 CR  
Contact Hours: 3 + 0  
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 CR  
Contact Hours: 3 + 0  
Prerequisites: [(BIOL A112 or concurrent enrollment) and (BIOL A112L or concurrent enrollment)] or (CHEM A104 or concurrent enrollment).  
Studies nutrition in the life cycle including food sources and requirements of nutrients; physiological and metabolic aspects of nutrient function. Reviews disease states, food selection, cultural and contemporary issues of concern to health professionals.

**DN A215**  
Sports Nutrition  
3 CR  
Contact Hours: 3 + 0  
Prerequisites: [BIOL A111 and BIOL A111L] or BIOL A113.  
Examines nutrition guidelines and nutrient intakes with emphasis on the health and performance implications for the physically active individual, and the individual wanting to pursue increased physical activity. Includes review of body composition and weight control.

**DN A255**  
Concepts of Healthy Food  
3 CR  
Contact Hours: 3 + 0  
Prerequisites: DN A101 with minimum grade of C or DN A203 with minimum grade of C.  
Examines basic principles of food preparation including cooking, shopping, food handling and safety, meal management, menu writing, recipe modification and evaluation.

**DN A260**  
Food Science  
3 CR  
Contact Hours: 3 + 0  
Prerequisites: DN A255 with minimum grade of C.  
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.
**DN A295  Nutritional Care Practicum**  1 CR
Contact Hours: 3 + 4
Prerequisites: DN A250 with minimum grade of B.
Registration Restrictions: Current immunizations.
Grade Mode: Pass/No Pass.
Special Fees.
Special Note: Requires facility orientation.
Provides opportunity to interpret field experiences, differentiate between available strategies, recall and apply basic nutrition care principles and skills, and trace effects of efforts. Interpret institutional protocols, manuals, guides, etc. Apply basic principles to specific client actions, estimate results or outcomes, and discuss work with site supervisor. Facilitates 50 hour field experience.

**DN A301  Nutrition Assessment**  2 CR
Contact Hours: 2 + 1
Prerequisites: DN A203 with minimum grade of C and MATH A107 with minimum grade of C and [PSY A111 with minimum grade of C or SOC A101 with minimum grade of C].
Special Note: Requires access to a registered dietitian for a 16-hour practicum.
Explores methods of nutrition assessment in humans to evaluate dietary intake and body composition including the use of biological markers of human nutritional status.

**DN A303  Preventive and Therapeutic Nutrition**  3 CR
Contact Hours: 3 + 0
Prerequisites: DN A101 with minimum grade of C or DN A203 with minimum grade of C.
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.

**DN A310  Nutrition Communication**  2 CR
Contact Hours: 2 + 0
Prerequisites: DN A203 with minimum grade of C and ENGL A111 with minimum grade of C and [PSY A111 with minimum grade of C or SOC A101 with minimum grade of C].
Registration Restrictions: COMM course
Integrates theory and practice in communications in nutrition and dietetics.
Provides practice in employee training, nutritional educational materials development, public speaking, and media presentation strategies.

**DN A311  Nutrition Counseling**  1 CR
Contact Hours: 1 + 1
Prerequisites: DN A203 with minimum grade of C and ENGL A111 with minimum grade of C and [PSY A111 with minimum grade of C or SOC A101 with minimum grade of C].
Registration Restrictions: COMM course
Special Note: Requires access to a registered dietitian for a 16-hour practicum.
Provides theory and practice in nutrition counseling including behavior modification techniques, processes of cognitive change and cross-cultural counseling.

**DN A315  World Food Patterns**  3 CR
Contact Hours: 3 + 0
Prerequisites: DN A101 or DN A203.
Explores the role of food, including therapeutic uses of food, and nutrition in the human condition. Examines regional and ethnic influences on food selection and preparation.

**DN A350  Foodservice Systems and Quantity Foods**  3 CR
Contact Hours: 3 + 3
Prerequisites: DN A255 with minimum grade of C.
Registration Restrictions: Passing score (greater than or equal to 70%) on ServSafe exam.
Special Note: Includes a 40-hour practicum in a large foodservice operation (hospital-based for dietetics students).
Presents principles and theories of foodservice systems; menu planning; development, standardization, adjustment and costing of quantity recipes; procurement and production of quantity food.

**DN A355  Weight Management and Eating Disorders**  3 CR
Contact Hours: 3 + 0
Prerequisites: DN A101 or DN A203.
Analyzes the impact of obesity and eating disorders on the individual and society. Reviews etiology, incidence, socioeconomic influences, pathogenesis and treatments. Examines treatment techniques including modification of diet, activity and behavior.

**DN A375  Research Methods in Nutrition and Dietetics**  3 CR
Contact Hours: 3 + 0
Prerequisites: STAT A252 with minimum grade of C.
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, translational research and outcomes research methodology.
**DN A695C** Practicum in Clinical Nutrition 4 CR  
Contact Hours: 0 + 22  
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.  
Corequisite: DN A692A and DN A695D.  
Grade Mode: Pass/No Pass.  
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.

**DN A695D** Practicum in Community Nutrition 2 CR  
Contact Hours: 0 + 16  
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.  
Corequisite: DN A692A and DN A695C.  
Grade Mode: Pass/No Pass.  
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.

**DN A695E** Advanced Practicum in Community Nutrition 2 CR  
Contact Hours: 0 + 16  
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.  
Corequisite: DN A692B and DN A695F.  
Grade Mode: Pass/No Pass.  
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.

**DN A695F** Practicum in Foodservice Administration 4 CR  
Contact Hours: 0 + 20  
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.  
Corequisite: DN A692B and DN A695E.  
Grade Mode: Pass/No Pass.  
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.

**DNCE - Dance**

**Offered through the College of Arts and Sciences**  
Fine Arts Building (ARTS), Room 302, 786-1792  
http://theatre.uaa.alaska.edu

**DNCE A061**  
**Elementary Ballet** 1 CR  
Contact Hours: 1 + 1  
Special Fees.  
Special Note: May be repeated three times for 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.

**DNCE A071**  
**Elementary Modern Dance** 1 CR  
Contact Hours: 1 + 1  
Special Fees.  
Special Note: May be repeated three times for 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.

**DNCE A081**  
**Elementary Jazz** 1 CR  
Contact Hours: 1 + 1  
Special Fees.  
Special Note: May be repeated three times for 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.

**DNCE A101**  
**Fundamentals of Ballet I** 2 CR  
Contact Hours: 1 + 2  
Special Fees.  
Special Note: May be repeated three times for credit.  
Beginning ballet technique introduced through barre and center floor work. Emphasis on correct anatomical alignment and injury prevention.

**DNCE A121**  
**Fundamentals of Modern I** 2 CR  
Contact Hours: 1 + 2  
Special Fees.  
Special Note: May be repeated three times for credit.  
Beginning modern dance techniques. Introduces basic dance skills through warm-up exercises and movement combinations. Exploration of modern dance aesthetics and philosophy. Correct anatomical alignment and injury prevention stressed.

**DNCE A124**  
**Dance for Musical Theatre I** 2 CR  
Contact Hours: 1 + 2  
Crosslisted with: THR A124.  
Special Fees.  
Special Note: May be repeated three times for credit.  
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.

**DNCE A131**  
**Fundamentals of Music-Based Jazz I** 2 CR  
Contact Hours: 1 + 2  
Special Fees.  
Special Note: May be repeated three times for credit.  
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.

**DNCE A145**  
**Dances of the West African Diaspora I** 2 CR  
Contact Hours: 1 + 2  
Special Fees.  
Special Note: May be repeated three times for credit.  
Beginning course in dances of the West African Diaspora including those of the Caribbean such as Haiti and Cuba. Movement fundamentals of these dance forms are developed through warm-up exercises and through execution of the dances themselves. Three to five dances will be learned each semester. History and cultural context of the dances will be stressed throughout the class.

**DNCE A146**  
**Introduction to Alaska Native Dance** 1-2 CR  
Contact Hours: 5=1 or 1=2  
Crosslisted with: AKNS A146.  
Special Fees.  
Special Note: May be repeated for up to 8 credits.  
Beginning course in Alaska Native dance techniques involving movement, sounds/vocal, music, and storytelling. Historical, cultural, and aesthetic context of dance stressed throughout class.

**DNCE A147**  
**Popular American Social Dance** 2 CR  
Contact Hours: 1 + 2  
Special Fees.  
Special Note: May be repeated three times for credit.  
Theory and practice of partnership social dance in the contemporary United States. Designed for learners who wish to expand their skills in social partner 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.

**DNCE A151**  
**Fundamentals of Tap I** 1 CR  
Contact Hours: 1 + 1  
Special Fees.  
Special Note: May be repeated three times for 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.

**DNCE A170**  
**Dance Appreciation** 3 CR  
Contact Hours: 3 + 0  
Course Attributes: UAA GER Fine Arts Requirement.  
Special Fees.  
Develops an appreciation of dance for observers and participants through course readings, lectures, videos, live performances, writing, movement, and discussion sessions. Explores dance in social and cultural contexts, and as an aesthetic and kinesthetic experience. Dances across cultures examined along with the development of dance as an art form in Europe and America. A lecture course with four - six dance studio movement session per semester.

**DNCE A185**  
**Design for Dance** 3 CR  
Contact Hours: 3 + 0  
Special Fees.  
Designs and practices necessary for the preparation of scenery, lighting, and related areas of design for the stage. Provides hands-on experience to learn operational equipment basics and appropriate terminology to enable a successful mastery of the basic practices and techniques required for effective dance production work.
DNCE A205  
**Fundamentals of Ballet II**  
Contact Hours: 1 + 2  
Prerequisites: DNCE 101 with minimum grade of C. 
Special Fees. 
Special Note: May be repeated three times for credit. 
Technical, verbal, and theoretical knowledge of ballet enhanced by acquisition of new skills for control and movement. Concepts of dance aesthetics and style plus interrelationships between music and dance. Emphasis on correct anatomical alignment and science of movement. 

DNCE A223  
**Fundamentals of Modern II**  
Contact Hours: 1 + 2  
Prerequisites: DNCE A121 with minimum grade of C. 
Special Fees. 
Special Note: May be repeated three times for credit. 
Modern dance techniques and vocabulary expanded by additional dance skills. Introduction of long warm-ups and movement combinations to increase body strength and flexibility. Exploration of modern dance history, philosophy, and aesthetics. Qualities of dance movement and music/dance relationships explored. Correct alignment and injury prevention stressed. 

DNCE A224  
**Dance for Musical Theatre II**  
Contact Hours: 1 + 2  
Prerequisites: DNCE A124 with minimum grade of C or THR A124 with minimum grade of C.  
Crosslisted with: THR A224. 
Special Fees. 
Special Note: May be repeated three times for credit. 
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. 

DNCE A234  
**Fundamentals of Music-Based Jazz II**  
Contact Hours: 1 + 2  
Prerequisites: DNCE A131 with minimum grade of C. 
Special Fees. 
Special Note: May be repeated three times for credit. 
Jazz dance technique rooted in the complexity, variety, and spontaneity of jazz music. Includes the concepts of rhythmic manipulation, syncopation, swing and musical movement qualities. Explores structured improvisation techniques and critical moments of jazz history. Warm-up exercises and movement combinations increase jazz skills and promote strength and flexibility. Correct alignment and injury prevention stressed throughout class. 

DNCE A245  
**Dances of the West African Diaspora II**  
Contact Hours: 1 + 2  
Prerequisites: DNCE A145 with minimum grade of C. 
Special Fees. 
Special Note: May be repeated three times for credit. 
Level II course in social and religious dances of the West African Diaspora. May include those from South America and the Caribbean. Skills learned in Dances of the West African Diaspora I will be extended, while more complex dances will be introduced. Historical, social, and cultural context of each dance will be emphasized. Correct alignment and injury prevention stressed. 

DNCE A253  
**Beginning Tap II**  
Contact Hours: 5 + 1  
Prerequisites: DNCE A151 with minimum grade of C. 
Special Fees. 
Special Note: May be repeated three times for credit. 
This course increases the student's skill level in basic tap dance technique and augments tap vocabulary acquired in Beginning Tap I. Students are introduced to more complex steps and rhythms. Historical and social importance of tap discussed. 

DNCE A282  
**Theory and Improvisation**  
Contact Hours: 1 + 2  
Prerequisites: DNCE A205 with minimum grade of C or DNCE A223 with minimum grade of C or DNCE A234 with minimum grade of C or THR A124 with minimum grade of C or THR A221 with minimum grade of C. 
Special Fees. 
Special Note: May be repeated 3 times for credit. 
Explores ensemble movement improvisation, providing opportunities for students to practice as soloists and to integrate vocal work with movement. Students practice improvisational skills they may be expected to use in rehearsal, as part of the composition/choreographic process, and/or in performance. 

DNCE A290  
**Selected Topics in Dance**  
Contact Hours: 1-3 + 0  
Registration Restrictions: Prerequisites will vary according to topic. 
Special Fees. 
Special Note: May be repeated three times for credit with change of topic. Additional fees may apply depending on topic. 
Introduction to current topics in dance performance and theory. Topics will depend on special demands of the dance season or faculty expertise. 

DNCE A301  
**Intermediate Ballet I**  
Contact Hours: 1 + 2  
Prerequisites: DNCE A205 with minimum grade of C. 
Special Fees. 
Special Note: May be repeated three times for credit. 
Elaboration of ballet technique through barre and center practice with an emphasis on body placement, flexibility, and strength. A serious ballet course requiring regular attendance. 

DNCE A321  
**Intermediate Modern I**  
Contact Hours: 1 + 2  
Prerequisites: DNCE A223 with minimum grade of C. 
Special Fees. 
Special Note: May be repeated three times for credit. 
Increases the student's skill level and movement vocabulary in intermediate Modern I technique. Movement theory, phrasing and dynamics emphasized along with modern dance aesthetics. Structured technical exercises increase the student's strength, flexibility, and quality of movement. Correct alignment and injury prevention stressed. 

DNCE A322  
**Intermediate Modern II**  
Contact Hours: 1 + 2  
Prerequisites: DNCE A321 with minimum grade of C. 
Registration Restrictions: Instructor permission required. 
Special Note: May be repeated three times for credit. 
Continuation and elaboration of Intermediate Modern I technique and theories. Course will emphasize the refinement of performance technique, movement dynamics, and improvisational skills while incorporating techniques that focus on correct alignment, centering, and proper articulation of the joints. Continued exploration of modern dance history, philosophy, and aesthetics. Correct alignment and injury prevention stressed. 

DNCE A360  
**Contemporary Techniques, Composition, and Repertory**  
Contact Hours: 5 + 1  
Prerequisites: DNCE A205 with minimum grade of C or DNCE A223 with minimum grade of C or DNCE A234 with minimum grade of C. 
Registration Restrictions: Instructor permission by audition required. 
Special Fees. 
Special Note: May be repeated three times for credit. 
Performance-oriented course taught by UAA Faculty and/or guest dance artists from the professional community. Class work may include a diverse complement of dance techniques. Essential movement qualities, performance skills, and compositional elements of the dance style under study explored. Class will culminate in performance. 

DNCE A361  
**Approaches to Dance Composition**  
Contact Hours: 3 + 0  
Prerequisites: DNCE A205 with minimum grade of C or DNCE A223 with minimum grade of C or DNCE A234 with minimum grade of C] and DNCE A262 with minimum grade of C. 
Registration Restrictions: Instructor permission required. 
Special Fees. 
Special Note: May be repeated twice for credit. 
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. 

DNCE A365  
**Dance Repertory and Performance**  
Contact Hours: 1.5 + 3  
Prerequisites: DNCE A205 with minimum grade of C or DNCE A223 with minimum grade of C or DNCE A224 with minimum grade of C or DNCE A234 with minimum grade of C or DNCE A245 with minimum grade of C. 
Registration Restrictions: Instructor permission by audition required. 
Special Fees. 
Special Note: May be repeated three times for credit. 
Enhancement of dance technique and application of performance skills through performance repertory. Class work focuses on learning and refining works of choreography for performance. Involves an extensive rehearsal and performance schedule outside of the regularly scheduled class times.
DNCE A370  Interdisciplinary Dance Studies: Issues and Methods  3 CR
Contact Hours: 3 + 0
Prerequisites: DNCE A170 with minimum grade of C and [ENGL A211 with minimum grade of C or ENGL A212 with minimum grade of C or ENGL A213 with minimum grade of C or ENGL A214 with minimum grade of C].
Registration Restrictions: Completion of Ger Tier 1 (Basic college-level skills) courses and junior standing.
Course Attributes: UAA GER Integrative Capstone.
Special Fees.
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.

DNCE A395  Advanced Practicum: Performance  1-3 CR
Contact Hours: 0 + 3-9
Registration Restrictions: Junior or senior standing. Audition and faculty permission.
Special Note: May be repeated for up to 12 total credits.
Performance practicum for juniors and seniors. Advanced participation in dance production as a dancer, performance artist, or choreographer.

DNCE A465  Advanced Performance and Choreography Workshop  3 CR
Contact Hours: 3 + 0
Prerequisites: DNCE A302 with minimum grade of C or DNCE A332 with minimum grade of C or DNCE A332 with minimum grade of C.
Registration Restrictions: Instructor permission by audition required.
Special Fees.
Special Note: May be repeated three times for credit.
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.

DNCE A490  Selected Topics in Dance  1-3 CR
Contact Hours: 1-3 + 0
Registration Restrictions: Junior or senior standing.
Special Note: May be repeated for credit with change of topic.
Special Note: Additional fees may apply depending on topic.
Current topics in dance performance and theory resulting from special demands of the dance season or special faculty expertise.

ECON - Economics
Offered through the College of Business & Public Policy
Edward & Cathryn Rasmuson Hall (RH), Room 203, 786-4100
www.cbpp.uaa.alaska.edu
Students taking any ACCT, BA, CIS, ECON, LGOP, LOG, or PADM course will be charged a single lab fee of $25 for the semester. Applies to Elmdendorf Air Force Base or Fort Richardson classes only when specifically noted on UAA Online. Does not apply to Chugiaq-Eagle River classes.

ECON A123  Introduction to Behavioral Economics  3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Social Sciences Requirement.
An introduction to economics that incorporates insights from psychology. The implications of research findings are developed and applied to topics that include personal finance, health, happiness, and the design of public policies.

ECON A201  Principles of Macroeconomics  3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A105 or MATH A107 or MATH A172.
Registration Restrictions: If prerequisite is not satisfied, suitable SAT score, ACT score, or UAA-approved Math Placement Test is required.
Course Attributes: UAA GER Social Sciences Requirement.
Introduction to economics including analysis and theory of national income, money and banking, public finance and taxation, economic growth, and international finance. Primary concentration on the capitalist system and the United States economy.

ECON A202  Principles of Microeconomics  3 CR
Contact Hours: 3 + 0
Prerequisites: ECON A201.
Course Attributes: UAA GER Social Sciences Requirement.
Theory of prices and markets, industrial organization, public policy, income distribution, contemporary problems of labor and business, and international trade.

ECON A210  Environmental Economics and Policy  3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A105 with minimum grade of C or MATH A107 or MATH A172 or MATH A200 or MATH A201 or MATH A272.
Registration Restrictions: MATH A105 with minimum grade of C or completion of quantitative skills GER requirement.
Course Attributes: UAA GER Social Sciences Requirement.
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.

ECON A290  Special Topics in Economics  3 CR
Contact Hours: 3 + 0
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.
Study of specific current issues, techniques, and trends in economics.

ECON A300  The Economy of Alaska  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Junior or senior standing.
An introduction to the Alaska economy. Uses basic economic concepts to illustrate the Alaska economy. Includes a description of the sectors of the Alaska economy; an overview of the history of development; the economies of the state's urban and rural regions; and the important economic issues facing the state.

ECON A312  Econometrics for Business and Economics  3 CR
Contact Hours: 3 + 0
Prerequisites: BA A273 with minimum grade of C and [BA A377 with minimum grade of C or ECON A321 with minimum grade of C] and [MATH A200 with minimum grade of C or MATH A272 with minimum grade of C].
Registration Restrictions: Familiarity with personal computers and basic software applications. Keyboarding of at least 30 wpm recommended.
Basic concepts in regression analysis and econometric methods. Application of methods to naturally occurring and experimental data; emphasis on application through use of econometrics software and personal computers.

ECON A315  Urban and Regional Economics  3 CR
Contact Hours: 3 + 0
Prerequisites: ECON A201 and ECON A202.
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.

ECON A321  Intermediate Microeconomics  3 CR
Contact Hours: 3 + 0
Prerequisites: ECON A201 and ECON A202 and [MATH A200 or MATH A272].
Analysis of demand and supply under various market structures; theory of production and cost; factor pricing and theory of distribution; and survey of welfare economics.

ECON A324  Intermediate Macroeconomics  3 CR
Contact Hours: 3 + 0
Prerequisites: ECON A201 and ECON A202.

ECON A325  History of Economic Thought  3 CR
Contact Hours: 3 + 0
Prerequisites: ECON A201 and ECON A202.
Economic thought from Aristotle to the present; mercantilism, classical and neoclassical theory, institutional economics, and socialism are examined.

ECON A333  Experimental Economics  3 CR
Contact Hours: 3 + 0
Prerequisites: ECON A201 with minimum grade of C and ECON A202 with minimum grade of C.
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.
ECON A337 Development Economics 3 CR
Contact Hours: 3 + 0
Prerequisites: ECON A201 and ECON A202.
Economic approaches to the challenge of development. Physical and human
capital, technology, institutions, geography, culture, and natural resources as
as a developing region.

ECON A341 Labor Economics 3 CR
Contact Hours: 3 + 0
Prerequisites: ECON A201 and ECON A202.
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.

ECON A350 Money and Banking 3 CR
Contact Hours: 3 + 0
Prerequisites: ECON A201 with minimum grade of C and ECON A202 with
minimum grade of C.
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.

ECON A351 Public Finance 3 CR
Contact Hours: 3 + 0
Prerequisites: ECON A201 and ECON A202.
Government taxation, borrowing, and spending; economic effects of taxation,
and influence of fiscal policy on economic activity.

ECON A360 Modern Economic History 3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A102 and ECON A201.
Crosslisted with: HIST A301.
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.

ECON A363 International Economics 3 CR
Contact Hours: 3 + 0
Prerequisites: ECON A201 with minimum grade of C and ECON A202 with
minimum grade of C.
Examines the role of free trade agreements and common currency areas.

ECON A390 Special Topics in Economics 3 CR
Contact Hours: 3 + 0
Prerequisites: ECON A201 with minimum grade of C and ECON A202 with
minimum grade of C.
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.
Study of specific current issues, techniques, and trends in economics.

ECON A429 Business Forecasting 3 CR
Contact Hours: 3 + 0
Prerequisites: BA A273 with minimum grade of C and CIS A110 with minimum
grade of C and [BA A377 with minimum grade of C or ECON A321 with minimum
grade of C].
Applies methods of business forecasting and analyzes fluctuations in
economic activity. Statistical forecasts are prepared and evaluated.

ECON A435 Natural Resource Economics 3 CR
Contact Hours: 3 + 0
Prerequisites: ECON A321 with minimum grade of C.
Economic analysis of natural resource use, conservation, and management.
Examines minerals, energy, forests, fisheries, and ecosystem services. Uses Alaska
economics examples.

ECON A454 Economics Internship 3 CR
Contact Hours: 0 + 9
College Restriction: Must be in UAA Coll of Bus/Public Policy.
Major Restriction: Must be Economics major.
Class Standing Restriction: Must be Junior.
Registration Restrictions: Junior standing as an economics major; and permission of
ECON Faculty Internship Coordinator.
Special Fees
Work experience in an approved position with supervision and training in
applied economics or economic research.

ECON A459 Industrial Organization and Public Policy 3 CR
Contact Hours: 3 + 0
Prerequisites: ECON A321 with minimum grade of C.
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.

ECON A492 Seminar in Economic Research 3 CR
Contact Hours: 3 + 0
Prerequisites: ECON A321 with minimum grade of C and ECON A324 with
minimum grade of C and [ECON A412 with minimum grade of C or ECON A429 with
minimum grade of C].
Class Standing Restriction: Must be Senior.
Registration Restrictions: Completion of GER Tier 1 (basic college-level skills)
courses and senior standing.
Course Attributes: UAA GER Integrative Capstone.
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.

ECON A602 Introduction to Economics for Managers 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
Special Note: Foundation course for MBA and MPA programs. Does not satisfy the
minimum 30 credit hour requirement for an MBA or MPA program.
Introduction to economic theory and issues for private and public sector
managers. National income and business cycle analysis, money and banking, and

ECON A625 Economics and Public Policy 3 CR
Contact Hours: 3 + 0
Prerequisites: ECON A201 and ECON A202.
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Bachelors degree required.
Applies economic analysis to public policy issues and tools for public
management. Uses economics to explain public problems and provide solutions.

ECON A640 Economics of Transportation 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Faculty permission.
Economic aspects of the transportation industry with special emphasis on
problems of regulation and public policy.

ED - Education
Offered through the College of Education
Professional Studies Building (PSB), Room 220, 786-4481
http://coe.uaa.alaska.edu/tldept

ED A180 Beginning Sign Language 1 CR
Contact Hours: 1 + 0
Introductory training in manual communication methods used in the United
States. Students will learn how to carry on basic communication with deaf persons
via manual mode. Credit will be awarded upon demonstration of mastery of the
materials.

ED A181 Intermediate Sign Language 1 CR
Contact Hours: 1 + 0
Continued instruction in manual communication methods. Students will
become fluent in the most commonly used methods of communicating with deaf
persons. Credit will be awarded only upon demonstration of successful mastery of
the competencies required in the course.

ED A200 Tutoring Lab 1-3 CR
Contact Hours: 0 + 2-6
Prerequisites: ED A200A.
Offered only at Kenai Peninsula College.
The goal of this course is to successfully tutor students. Introduction to
tutoring lab serves as the practical experience for ED A200A, ED A200B, and ED
A200C.

ED A200A Beginning Tutor Training Seminar 1 CR
Contact Hours: 1 + 0
Registration Restrictions: Faculty permission.
Offered only at Kenai Peninsula College.
Students new to the tutor program develop skills for successfully helping
students with their course work. Tutors learn and practice techniques for handling
a variety of situations before tutoring begins. The framework for each semester
tutor program is established during the course.
ED A200B  Advanced Tutor Training Seminar  1 CR  Contact Hours: 1 + 0  Prerequisites: ED A200A. Offered only at Kenai Peninsula College.  Advanced tutors will hone their skills through seminars, workshops and projects. Tutors may qualify for assisting their peers in academic courses, adult basic education, and English-as-a-Second-Language, or in public schools.

ED A200C  Master Tutor Training Seminar  1 CR  Contact Hours: 1 + 0  Prerequisites: ED A200A and ED A200B. Registration Restrictions: 2 credits of ED A200 and faculty permission. Specific tutoring assignments may have other requirements. Offered only at Kenai Peninsula College.  Master tutors will hone their skills through seminars, workshops, and projects. Tutors may qualify for assisting their peers in academic courses, adult basic education, English-as-a-Second-Language, or in the public schools.

ED A216  Children's Literature  3 CR  Contact Hours: 3 + 0  Intended for teachers, parents, librarians, or anyone interested in reading many books for preschoolers through 6th grade. Much attention to selection and best use of children's literature.

ED A222  Bilingual Education and Paraeducators  1 CR  Contact Hours: 1 + 0  Registration Restrictions: Department approval.  A discussion of the dynamics and challenges of educating diverse populations. Provides working paraeducators the opportunity to develop ideas, define concepts, and to practice skills related to bilingual classrooms.

ED A223  Paraeducators and Developing Readers  2 CR  Contact Hours: 2 + 0  Registration Restrictions: Department approval.  A discussion of current issues and practices in teaching K-12 reading for paraeducators. Special emphasis on the role of the paraeducator in describing and reporting students' reading problems and assisting in individual and group instruction.

EDAE - Education - Adult Education

Offered through the College of Education
Professional Studies Building (PSB), Room 218, 786-4450
http://coe.uaa.alaska.edu/adulted

EDAE A615  Introduction to Adult Education  3 CR  Contact Hours: 3 + 0  Registration Restrictions: Graduate standing.  Exploration and broad overview of the field. Topical areas include people, literature, terms, issues, sociocultural context, and adult education as a field of practice. Includes skills foci on academic reading, writing, and student portfolio.

EDAE A639  Instructional Technology Product Evaluation  3 CR  Contact Hours: 3 + 0  Prerequisites: EDAE A638. Registration Restrictions: Graduate standing.  Provides the learner with the knowledge to effectively evaluate learning instruments through a variety of approaches. Evaluation of software and hardware instructional products is emphasized.

EDAE A645  The Teaching of Adults  3 CR  Contact Hours: 3 + 0  Registration Restrictions: Graduate standing.  Examines direct and indirect teaching methods. Activities assist learners to identify individual values and ethics. Involves critical thinking skills and ethical decision making. Explores current ethical issues applicable to adult education practices. Learners design, develop, and deliver several classes, workshops, and presentations.

EDAE A650  Principles of Human Resource Development  3 CR  Contact Hours: 3 + 0  Registration Restrictions: Graduate standing.  Examines current principles and theories of human resource development with respect to Adult Education. Strategies and techniques for practical application of procedures and tools are presented. Applicable to adult educators working in a variety of human resource systems that include educational institutions, not-for-profits, business and industry, and voluntary organizations.

EDAE A655  The Adult Learner  3 CR  Contact Hours: 3 + 0  Registration Restrictions: Graduate Standing.  Examines major principles, problems and information about adults and adult learning. Includes psychological, physical, intellectual and other factors affecting adults and their ability to learn; motivation, participation of adult learners, principles and theories of adult learning; and traditional, non-traditional, and self-directed learning.

EDAE A656  Understanding and Facilitating Adult Learning  1 CR  Contact Hours: 1 + 0  Registration Restrictions: Graduate standing.  Examines developmental concepts, theories, and approaches to facilitating learning in adulthood. Explores the creation of teacher professional development environments that incorporate best practices for adult learning.

EDAE A657  Current Topics in Adult Education  1-3 CR  Contact Hours: 1-3 + 0  Registration Restrictions: Bachelor's degree from an accredited university. Special Note: May be repeated for credit with change of subtitle. Restricted enrollment may apply. See advisor for applicability to degree program. Specific current issues, techniques, and trends affecting or of interest to adult educators.

EDAE A658  Design of Programs for Adults  3 CR  Contact Hours: 3 + 0  Registration Restrictions: Graduate standing.  Examination of fundamental concepts of educational program planning for adults in informal, community, health care, higher education, and human resource settings.

EDAE A665  History and Philosophy of Adult Education  3 CR  Contact Hours: 3 + 0  Prerequisites: EDAE A655 and EDAE A675. Registration Restrictions: Graduate standing.  Examination of the curriculum development process and exploration of instructional design elements.

EDAE A691  Professional Seminar  3 CR  Contact Hours: 3 + 0  Registration Restrictions: Bachelor's degree from an accredited university. Reviews research in adult education, current and past, with analysis of its directions, effect, methodology, quality, and prospects. Examines and compares current practices and trends in the field with core literature of adult education. Promotes examination of professional portfolios for adult educators.

EDAE A695  Practicum in Adult Education  1-3 CR  Contact Hours: 0 + 3-9  Prerequisites: EDAE A615 and EDAE A655 and EDAE A665 and EDAE A675. Registration Restrictions: Instructor approval. Grade Mode: Pass/No Pass.  Supervised field experience designed to facilitate exploration of the field and transfer of skills to an adult education practice setting.

EDAE A698  Inquiry Project  1-3 CR  Contact Hours: 0 + 3-9  Prerequisites: (EDAE A685 or concurrent enrollment) or (EDFN A627 or concurrent enrollment). Registration Restrictions: Departmental approval. Grade Mode: Pass/No Pass.  An inquiry project in an educational, community, or administrative setting related to the student's program concentration. The project, the culminating academic experience leading to the graduate degree, is original, creative work integrating theory and evidence-based practice.

EDAE A699  Thesis  1-3 CR  Contact Hours: 0 + 3-9  Prerequisites: (EDAE A685 or concurrent enrollment) or (EDFN A627 or concurrent enrollment). Registration Restrictions: Departmental approval. Grade Mode: Pass/No Pass.  Completion of a master's thesis. The thesis is based on original investigation and demonstrates scholarship, knowledge of the relevant literature and selection of appropriate methods of research.
EDCN - Education - Counselor Education
Offered through the College of Education
Professional Studies Building (PSB), 786-4401
http://coe.uaa.alaska.edu/coun

EDCN A610  Professional and Ethical Orientation to Counseling  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
Examines 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.

EDCN A613  Human Development for Helping Professionals  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
Introduces the counseling process. Includes theoretical concepts and current issues.

EDCN A614  Counseling Diverse Populations  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
Examines issues of cultural diversity and the impact on counseling.

EDCN A616  Counseling Theories  3 CR
Contact Hours: 3 + 0
Prerequisites: EDCN A610.
Registration Restrictions: Graduate standing.
Examines counseling theories from the psychodynamic, humanistic, behavioral, cognitive, and systems perspectives.

EDCN A620  Assessment in Counseling  3 CR
Contact Hours: 3 + 0
Prerequisites: EDRS A660.
Registration Restrictions: Graduate standing.
Examines the purpose, philosophy, and role of assessment in counseling.

EDCN A623  Counseling Skills and Techniques in School Counseling  3 CR
Contact Hours: 3 + 0
Prerequisites: EDCN A610 and EDCN A616.
Registration Restrictions: Graduate standing.
Examines group counseling including styles of leadership, stages of process, theoretical concepts, and common topics.

EDCN A625  Administration and Practices in Community Agencies  3 CR
Contact Hours: 3 + 0
Prerequisites: EDCN A610.
Registration Restrictions: Graduate standing.
Examines the community agency counseling as an entity and as a form of direct service delivery in K-12 school counseling programs.

EDCN A627  Counseling in Community Agencies  3 CR
Contact Hours: 3 + 0
Prerequisites: EDCN A610.
Registration Restrictions: Graduate standing.
Examines community agency counseling, includes topics such as ethical and legal issues, crisis counseling, domestic violence, and substance abuse.

EDCN A632  Lifespan Career Development  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
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.

EDCN A633  Counseling Children and Adolescents  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
Examines counseling work with children and adolescents. Includes topics such as ethical and legal issues, theories, techniques, and high risk issues.

EDCN A634  Counseling Practicum  3 CR
Contact Hours: 1 + 5
Prerequisites: EDCN A610 and EDCN A613 and EDCN A614 and EDCN A616 and EDCN A620 and EDCN A623 and EDCN A624 and EDCN A632.
Registration Restrictions: Departmental approval required; Admission to practicum.
Grade Mode: Pass/No Pass.
Special Fees.
Special Note: Students must apply for placement in advance. See advisor for deadlines and procedures.

EDCN A690  Current Topics in Counseling  1-3 CR
Contact Hours: 1-3 + 0
Registration Restrictions: Graduate standing.
Special Note: May be repeated for credit with change of subtitle. A maximum of 6 credits may be applied to the degree program. Restricted enrollment may apply.

EDCN A695A  Counseling Internship: Advanced  1-6 CR
Contact Hours: 0 + 4-27
Prerequisites: EDCN A695C or EDCN A695E or EDCN A695S.
Registration Restrictions: Department approval required; Admission to internship.
Grade Mode: Pass/No Pass.
Special Fees.
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.

EDCN A695C  Counseling Internship: Community Agency  3-6 CR
Contact Hours: 1 + 5-30
Prerequisites: EDCN A627 and EDCN A634 and EDCN A690 and EDSE A632.
Registration Restrictions: Departmental approval required; Admission to internship.
Grade Mode: Pass/No Pass.
Special Fees.
Special Note: Students attend seminar, 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.

EDCN A695E  Counseling Internship: Elementary School  3-6 CR
Contact Hours: 1 + 5-30
Prerequisites: EDCN A625 and EDCN A633 and EDCN A634 and EDSE A632.
Registration Restrictions: Departmental approval required; Admission to internship.
Grade Mode: Pass/No Pass.
Special Fees.
Special Note: Students attend seminar, 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.

EDCN A695S  Counseling Internship: Secondary School  3-6 CR
Contact Hours: 1 + 5-30
Prerequisites: EDCN A625 and EDCN A633 and EDCN A634 and EDSE A632.
Registration Restrictions: Departmental approval required; Admission to internship.
Grade Mode: Pass/No Pass.
Special Fees.
Special Note: Students attend seminar, 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.

EDCN A695S  Counseling Internship: Secondary School  3-6 CR
Contact Hours: 1 + 5-30
Prerequisites: EDCN A625 and EDCN A633 and EDCN A634 and EDSE A632.
Registration Restrictions: Departmental approval required; Admission to internship.
Grade Mode: Pass/No Pass.
Special Fees.
Special Note: Students attend seminar, 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.

EDCN A695S  Counseling Internship: Secondary School  3-6 CR
Contact Hours: 1 + 5-30
Prerequisites: EDCN A625 and EDCN A633 and EDCN A634 and EDSE A632.
Registration Restrictions: Departmental approval required; Admission to internship.
Grade Mode: Pass/No Pass.
Special Fees.
Special Note: Students attend seminar, 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.

EDCN A695S  Counseling Internship: Secondary School  3-6 CR
Contact Hours: 1 + 5-30
Prerequisites: EDCN A625 and EDCN A633 and EDCN A634 and EDSE A632.
Registration Restrictions: Departmental approval required; Admission to internship.
Grade Mode: Pass/No Pass.
Special Fees.
Special Note: Students attend seminar, 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.

EDCN A695S  Counseling Internship: Secondary School  3-6 CR
Contact Hours: 1 + 5-30
Prerequisites: EDCN A625 and EDCN A633 and EDCN A634 and EDSE A632.
Registration Restrictions: Departmental approval required; Admission to internship.
Grade Mode: Pass/No Pass.
Special Fees.
Special Note: Students attend seminar, 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.

EDCN A695S  Counseling Internship: Secondary School  3-6 CR
Contact Hours: 1 + 5-30
Prerequisites: EDCN A625 and EDCN A633 and EDCN A634 and EDSE A632.
Registration Restrictions: Departmental approval required; Admission to internship.
Grade Mode: Pass/No Pass.
Special Fees.
Special Note: Students attend seminar, 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.

EDCN A695S  Counseling Internship: Secondary School  3-6 CR
Contact Hours: 1 + 5-30
Prerequisites: EDCN A625 and EDCN A633 and EDCN A634 and EDSE A632.
Registration Restrictions: Departmental approval required; Admission to internship.
Grade Mode: Pass/No Pass.
Special Fees.
Special Note: Students attend seminar, 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.

EDCN A695S  Counseling Internship: Secondary School  3-6 CR
Contact Hours: 1 + 5-30
Prerequisites: EDCN A625 and EDCN A633 and EDCN A634 and EDSE A632.
Registration Restrictions: Departmental approval required; Admission to internship.
Grade Mode: Pass/No Pass.
Special Fees.
Special Note: Students attend seminar, 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.

EDCN A695S  Counseling Internship: Secondary School  3-6 CR
Contact Hours: 1 + 5-30
Prerequisites: EDCN A625 and EDCN A633 and EDCN A634 and EDSE A632.
Registration Restrictions: Departmental approval required; Admission to internship.
Grade Mode: Pass/No Pass.
Special Fees.
Special Note: Students attend seminar, 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.
EDC - Engineering Design and Drafting
Offered through Kenai Peninsula College
34820 College Drive, Soldotna, Alaska 99669, (907) 262-0300
www.kpc.alaska.edu

EDD A288 Computer Aided Drafting 4 CR
Contact Hours: 3 + 2
Registration Restrictions: Completion of a high school or college drafting course. Offered only at Kenai Peninsula College.
Introduction to computer aided drafting, instruction, and hands-on application using AutoCAD menu driven systems for data manipulation. Drawing production and drawing plotting.

EDEC - Education - Early Childhood
Offered through the College of Education
Professional Studies Building (PSB), Room 220, 786-4481
http://coe.uaa.alaska.edu/earlychildhood

EDEC A100 Fundamentals of Early Childhood Practice 3 CR
Contact Hours: 3 + 0
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 3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Social Sciences Requirement. Special Note: This course requires a field experience and background check clearance.
Survey of historical, social, and philosophical foundations of the field of early childhood. Core topics include ethics, developmentally appropriate practices, observation and documentation, survey of types of early childhood settings, and professionalism in the field of early childhood.

EDEC A106 Creativity and the Arts in Early Childhood 3 CR
Contact Hours: 2 + 2
Explores creativity and importance of the arts in early childhood education.

EDEC A201 Early Childhood Practitioner Roles and Responsibilities 2 CR
Contact Hours: 2 + 0
Focuses on the diverse roles of the early childhood practitioner, with an emphasis on self-analysis, ethical conduct, reflection and ongoing professional growth.

EDEC A206 Integrated Curriculum for Young Children 3 CR
Contact Hours: 2 + 2
Prerequisites: EDEC A105.
Examines early childhood curriculum models to organize, integrate, and implement with young children. Explores interest-based, developmentally appropriate, and standards-based curriculum ideas.

EDEC A210 Guiding Young Children 3 CR
Contact Hours: 3 + 0
Prerequisites: EDEC A105.
Examination of the learning principles relevant to guidance of young children. The course introduces the social, emotional, and intellectual development of young children and the implications for effective child guidance and motivation in the classroom.

EDEC A241 Infant and Toddler Development 3 CR
Contact Hours: 3 + 0
Prerequisites: EDEC A105.
Examines the development of infants and toddlers, infant/toddler care programs, the roles of caregivers and their relationships with families. This course emphasizes cognitive, language, emotional, and motor development, and the importance of relationships in the care and education of infants and toddlers.

EDEC A242 Family and Community Partnerships 3 CR
Contact Hours: 3 + 0
Prerequisites: EDEC A105 or EDFN A101 or EDSE A212 or PSY A245.
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.

EDEC A292 Early Childhood Practicum Seminar 1 CR
Contact Hours: 1 + 0
Registration Restrictions: Department approval
Corequisite: EDEC A295.
This seminar accompanies EDEC A295. Provides opportunity for exchange of ideas and experiences, evaluation and reflection concerning developmentally appropriate practice.

EDEC A295 Early Childhood Practicum 3 CR
Contact Hours: 2 + 0
Registration Restrictions: Department approval
Corequisite: EDEC A292.
Special Fees:
Supervised field experience in early childhood classroom. Students develop, implement and evaluate elements of a comprehensive, developmentally appropriate curriculum and learning environment.

EDEC A295B Practicum II 3 CR
Contact Hours: 1 + 2
Prerequisites: EDEC A295A.
Registration Restrictions: Faculty permission required. Must have faculty permission to take concurrently with EDEC A295A.

EDEC A303 Young Children in Inclusive Settings 3 CR
Contact Hours: 3 + 0
Prerequisites: EDEC A301.
Registration Restrictions: Departmental approval required: admission to College of Education, pre-major status or admission to Associate of Applied Sciences in Early Childhood.
Special Note: Field experience is required.
Examines the principles, issues, concepts, and teaching practices to support young children with disabilities in community child care settings and primary classrooms.

EDEC A304 Environment, Spaces, and Relationships 3 CR
Contact Hours: 3 + 0
Prerequisites: EDEC A242 and EDEC A303.
Registration Restrictions: Departmental approval required: admission to College of Education, full-major status.
Examines the design of the environment. This course will cover the principles that transform space into engaging places for young children. The design, organization, use of materials, and relationships to curriculum will be covered.

EDEC A306 Assessment of Young Children 3 CR
Contact Hours: 3 + 0
Prerequisites: EDEC A304.
Registration Restrictions: Departmental approval required; admission to College of Education, full-major status.
Special Fees:
Examines best practices, tools and approaches for assessing children from infancy through 8 years. Focuses on the understanding of the assessment process and the development of assessment skills. Addresses program planning and monitoring progress with special attention to diversity and to children with disabilities.

EDEC A403 Mathematics and Science in Early Childhood 3 CR
Contact Hours: 3 + 0
Prerequisites: EDEC A306.
Registration Restrictions: Department approval required; Concurrent enrollment in internship required.
Special Fees:
Examines the principles, developmental concepts, and curriculum designed to promote science and mathematics concepts. Analyzes how young children develop mathematical and scientific thinking. Methods of teaching mathematics and science to young children are covered.

EDEC A404 Literacy for Young Children 3 CR
Contact Hours: 3 + 0
Prerequisites: EDEC A306.
Registration Restrictions: Department approval required; Concurrent enrollment in internship required.
Examines the understanding and importance of language and literacy. The course will cover oral and written discourse as they relate to the development of methods, materials, and philosophy of reading curricula.
**Course Descriptions**

**EDEC A407**  
Observation and Documentation in Early Childhood 4 CR  
Contact Hours: 3 + 2  
Prerequisites: EDSE A212 or PSY A245.  
Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses.  
May be stacked with: EDEC A407.  
Special Note: Requires a 30-hour practicum.  
Examines the process of observation and documentation as a means to understand and make visible children's learning. Course covers the observation and documentation process as a cycle of inquiry as well as formal assessment systems.

**EDEC A408**  
Children's Literature: Early Childhood Years 3 CR  
Contact Hours: 3 + 0  
Prerequisites: EDSE A212 or PSY A245.  
May be stacked with: EDEC A608.  
Explores variety of children's literature with emphasis on selecting, interpreting, and using quality literature with young children.

**EDEC A492**  
Early Childhood Seminar 1 CR  
Contact Hours: 1 + 0  
Registration Restrictions: Departmental approval; Admission to internship.  
Corequisite: EDEC A495.  
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.

**EDEC A495**  
Early Childhood Internship 3-9 CR  
Contact Hours: 0 + 12-30  
Registration Restrictions: Departmental approval; admission to internship.  
Corequisite: EDEC A492.  
Grade Mode: Pass/No Pass.  
Special Fees.  
Special Note: Completion of 12 credits required for degree and certification.  
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.

**EDEC A605**  
Early Childhood Education Principles and Practices 3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: Admission to the Master Teacher Program Specialty Option in Early Childhood.  
Survey of current principles, practices, and research in early childhood education. Will cover an analysis of early childhood education theory and beliefs as it relates to teaching and curriculum decisions. Students will study their understanding of “Developmentally Appropriate Practices” in the classroom setting. Course assignments require students to analyze their teaching values, principles, and theory as embedded in their daily practices. Issues related to home, school, and community as it relates to the child are covered.

**EDEC A607**  
Observation and Documentation: Inquiry in Action 4 CR  
Contact Hours: 3 + 2  
Registration Restrictions: Graduate standing.  
May be stacked with: EDEC A407.  
Special Note: Requires a 30-hour practicum.  
Examines the process of observation and documentation as a means to understand and make visible children's learning. Course covers the observation and documentation process as a cycle of inquiry as well as formal and informal assessment systems. Students apply knowledge of observation and documentation to produce a professional artifact that contributes to the field.

**EDEC A608**  
Analysis of Children's Literature: Early Childhood Years 3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: Graduate standing.  
May be stacked with: EDEC A408.  
Intensive study of various genres of children's literature. Students will analyze and critique major historical and contemporary works of children's literature for use in classrooms.

**EDEL A405**  
Becoming an Elementary Teacher 2 CR  
Contact Hours: 1.5 + 2  
Prerequisites: ENGL A111 with minimum grade of C or ENGL A211 with minimum grade of C or ENGL A212 with minimum grade of C or ENGL A213 with minimum grade of C or ENGL A214 with minimum grade of C or ENGL A311 with minimum grade of C or ENGL A312 with minimum grade of C or ENGL A414 with minimum grade of C.  
Special Fees.  
Special Note: Requires a 30-hour field assignment that must be arranged by the College of Education. Partners may limit registration.  
Introduction to field of elementary education and the process of becoming an elementary teacher. Overview of core topics including the history of elementary education, teaching and learning, professionalism, observation strategies, and communicating with children.

**EDEL A325**  
Teaching Literacy in Elementary Schools 6 CR  
Contact Hours: 6 + 0  
Prerequisites: EDFN A301.  
College Restriction: Must be in UAA College of Education.  
Registration Restrictions: Admission to Department of Teaching and Learning.  
Corequisite: EDEL A327, EDEL A392 and EDEL A395.  
Special Fees.  
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.

**EDEL A327**  
Teaching Social Studies in Elementary Schools 2 CR  
Contact Hours: 2 + 0  
College Restriction: Must be in UAA College of Education.  
Registration Restrictions: Admission to Department of Teaching and Learning and enrolled in EDEL A395 or EDEC A495.  
Methodology and materials used in elementary social studies classrooms. Review of current research regarding P-6 student learning and conceptual development in social studies and corresponding pedagogies. Examines content selection, assessment, and curriculum design within a culturally responsive framework.

**EDEL A392**  
Elementary Education Seminar I: Culturally Responsive Teaching 2 CR  
Contact Hours: 2 + 0  
College Restriction: Must be in UAA College of Education.  
Registration Restrictions: Admission to Department of Teaching and Learning.  
Corequisite: EDEL A325, EDEL A327 and EDEL A395.  
Integrates theoretical knowledge of culturally responsive teaching with elementary classroom experiences. Emphasizes practices in teaching Alaska Natives, English language learners, and other students of diversity in Alaska's elementary classrooms.

**EDEL A395**  
Elementary Education Practicum I: Diversity, Literacy, Social Studies 2 CR  
Contact Hours: 0 + 6  
Prerequisites: [ENGL A111 with minimum grade of C or ENGL A211 with minimum grade of C or ENGL A212 with minimum grade of C or ENGL A213 with minimum grade of C or ENGL A214 with minimum grade of C or ENGL A311 with minimum grade of C or ENGL A312 with minimum grade of C or ENGL A414 with minimum grade of C] and ENGL A311 with minimum grade of C.  
Corequisite: EDEL A325, EDEL A392 and EDEL A395.  
Grade Mode: Pass/No Pass.  
Special Fees.  
Special Note: Placement must be arranged and supervised by the College of Education. Partners may limit registration.  
Supervised practicum in a K-6 education facility with children from diverse sociocultural backgrounds. Supports development of culturally responsive teaching practices through observing classrooms, interacting with elementary students and educational professionals, and teaching literacy and social studies curriculum.

**EDEL A425**  
Teaching Reading in Elementary Schools 4 CR  
Contact Hours: 4 + 0  
Prerequisites: EDFN A300 and EDFN A301 and EDFN A303 and EDSE A482.  
Registration Restrictions: Departmental approval required; Admission to Internship.  
Special Fees.  
Survey of current issues and practices in teaching K-6 reading. Focuses on the teaching of developmental and content reading, and provides informal assessment techniques and materials for reading. Concurrent enrollment in internship required.

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**EDEL - Education - Elementary Education**

**Offered through the College of Education**

**Professional Studies Building (PSB), Room 224, 786-4481**

[http://coe.uaa.alaska.edu/elementary](http://coe.uaa.alaska.edu/elementary)
EDEL A426 Teaching Mathematics in Elementary Schools  3 CR
Contact Hours: 3 + 0
Prerequisites: EDEL A395.
College Restriction: Must be in UAA College of Education.
Registration Restrictions: Admission to Department of Teaching and Learning.
Corequisite: EDEL A428, EDEL A492A and EDEL A495A.
Special Fees.
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.

EDEL A428 Teaching Science in Elementary Schools  2 CR
Contact Hours: 2 + 0
Prerequisites: EDEL A395.
College Restriction: Must be in UAA College of Education.
Registration Restrictions: Admission to Department of Teaching and Learning.
Corequisite: EDEL A429, EDEL A428A and EDEL A495A.
Special Fees.

EDEL A429 Teaching Health Education in Elementary Schools  2 CR
Contact Hours: 2 + 0
Prerequisites: EDFN A300 and EDFN A303 and EDSE A482.
Registration Restrictions: Departmental approval required; Admission to Internship.
Special Fees.
Methodology and materials used in the elementary health classroom. Students will be exposed to the current research, issues, curriculum, and standards. Concurrent enrollment in internship required.

EDEL A430 Teaching Language Arts in Elementary Schools  3 CR
Contact Hours: 3 + 0
Prerequisites: EDFN A300 and EDFN A301 and EDFN A303 and EDSE A482.
Registration Restrictions: Departmental approval required; Admission to Internship.
Special Fees.
Students focus on theory and process of language arts: reading, writing, speaking, listening, viewing, and visually representing. Reflects a constructivist approach to teaching and learning and research-based practice. Concurrent enrollment in internship required.

EDEL A431 Creative Expression: Music, Art, and Drama for Elementary Teachers  3 CR
Contact Hours: 1 + 4
Prerequisites: EDFN A300 and EDFN A301 and EDFN A303 and EDSE A482.
Registration Restrictions: Departmental approval required; Admission to Internship.
Special Fees.
Principles, methods, and materials of teaching music, art, and drama at the elementary school level. A wide variety of creative activities that are basic to elementary curricula are explored. Includes the use of music, art, and drama in standards-based curriculum planning and assessment for the diverse student population in elementary classrooms. Concurrent enrollment in internship required.

EDEL A432 Physical Education for Elementary Classroom Teachers  1 CR
Contact Hours: 1 + 0
Prerequisites: EDFN A300 and EDFN A303 and EDSE A482.
Registration Restrictions: Departmental approval required; Admission to Internship.
Special Fees.
Examines the methodology and materials for implementing physical education in the elementary classroom. Focuses on movement education, integration, and developmentally appropriate activities. Concurrent enrollment in internship required.

EDEL A492A Elementary Education Seminar II: Learning Environment  2 CR
Contact Hours: 2 + 0
Prerequisites: EDEL A395.
College Restriction: Must be in UAA College of Education.
Registration Restrictions: Admission to Department of Teaching and Learning.
Corequisite: EDEL A426, EDEL A428 and EDEL A495A.
Special Note: This course operates in accordance with the K-12 school year calendar, not the University academic year calendar. Intergates theoretical knowledge of learning environments and classroom management with elementary classroom experiences.

EDEL A492B Elementary Education Seminar III: Teaching Capstone  3 CR
Contact Hours: 3 + 0
College Restriction: Must be in UAA College of Education.
Registration Restrictions: Admission to internship.
Corequisite: EDEL A495B.
Special Note: This course operates in accordance with the K-12 school year calendar, not the University academic year calendar. Integrates theoretical knowledge from previous education courses with the internship experience.

EDEL A495A Elementary Education Practicum II: Learning Environment, Mathematics, Science  3 CR
Contact Hours: 0 + 9
Prerequisites: EDEL A395.
College Restriction: Must be in UAA College of Education.
Registration Restrictions: Admission to Department of Teaching and Learning.
Corequisite: EDEL A426, EDEL A428 and EDEL A492A.
Grade Mode: Pass/No Pass.
Special Fees.
Supervised practicum in a K-6 educational facility. Supports development of proficiencies in creating an inclusive, engaging learning environment and teaching mathematics and science.

EDEL A495B Elementary Education Internship  6-9 CR
Contact Hours: 0 + 18-27
College Restriction: Must be in UAA College of Education.
Registration Restrictions: Admission to internship.
Corequisite: EDEL A492B.
Grade Mode: Pass/No Pass.
Special Fees.
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.

EDET - Education - Educational Technology

Offered through the College of Education Professional Studies Building (PSB), Room 220, 786-4481 http://coe.uaa.alaska.edu/idept

EDET A626 Technology in Teaching and Learning  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing in the College of Education, and prior experience using a PC.
Special Fees.
The role of technology in restructuring learning environments. Explains how teaching and learning environments can be enhanced through different approaches to using technology. A broad range of technologies used in education will be explored, centering around microcomputers and optical hardware. Activities include hands-on experiences with applications software and hypermedia.

EDET A637 Design of e-Learning  3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.
Develops effective instructional methods for learners in web-based learning environments.

EDET A638 Facilitation of Learning with Technology  3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.
Using technology to facilitate teaching and learning in educational environments. Includes theory as well as hands-on production of artifacts using technology.

EDET A640 e-Learning Project Development  3 CR
Contact Hours: 3 + 0
Prerequisites: CIS A420 with minimum grade of C and EDET A637 with minimum grade of C and EDET A638 with minimum grade of C.
Registration Restrictions: Graduate standing.
Applying curriculum, instructional design and development knowledge with information and communication technologies in the construction of an e-learning project in a virtual and/or hybrid environment. This is a capstone course for the e-Learning Graduate Certificate.
EDFN - Education - Foundations

Offered through the College of Education
Professional Studies Building (PSB), Room 220, 786-4481
http://coe.uaa.alaska.edu/tldept

EDFN A101 Introduction to Education 3 CR
Contact Hours: 3 + 0
Introductory course for students exploring 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 field experience.

EDFN A206 Introduction to Assessment in Education 1 CR
Contact Hours: 1 + 0
Prerequisites: [(EDSE A212 or concurrent enrollment) or (PSY A245 or concurrent enrollment)]
Special Fees.
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.

EDFN A300 Philosophical and Social Context of American Education 3 CR
Contact Hours: 3 + 0
Prerequisites: (EDSE A212 or concurrent enrollment) or (PSY A245 or concurrent enrollment)
Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses and junior standing. Departmental approval
Course Attributes: UAA GER Integrative Capstone.
Special Fees.
Examines 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.

EDFN A301 Foundations of Literacy and Language Development 3 CR
Contact Hours: 3 + 0
College Restriction: Must be in UAA College of Education.
Registration Restrictions: Admission to Department of Teaching and Learning.
Special Fees.
Special Note: Outside class work includes a minimum of 30 hours field experience as part of course assignments. Field placement must be arranged by the College of Education. Partners may limit registration.
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.

EDFN A302 Foundations of Educational Technology 2 CR
Contact Hours: 2 + 0
Prerequisites: [EDSE A212 or PSY A245]
College Restriction: Must be in UAA College of Education.
Registration Restrictions: Admission to Department of Teaching and Learning.
Special Fees.
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.

EDFN A303 Foundations of Teaching and Learning 3 CR
Contact Hours: 3 + 0
Prerequisites: (EDFN A301 or concurrent enrollment) and [EDSE A212 or PSY A245]
Registration Restrictions: Departmental approval required; Admission to the College of Education.
Special Fees.
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. Focuses on the teacher's role and responsibility in lesson development, curriculum design, instructional methods, and integration of relevant educational psychology.

EDFN A304 Comparative Education 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Completion of all GER Tier 1 (basic college-level skills) courses and Junior standing.
Course Attributes: UAA GER Integrative Capstone.
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.

EDFN A444 Positive Learning Communities in K-6 Classrooms 1 CR
Contact Hours: 1 + 0
Registration Restrictions: Departmental approval required.
Special Note: Concurrent enrollment in internship required.
Research-based strategies and practices in creating positive learning communities in K-6 classrooms. Provides realistic connections from theory to practice for implementing and evaluating strategies in classroom management.

EDFN A470 Electronic Portfolio Development 1-3 CR
Contact Hours: 1-3 + 0-9
Registration Restrictions: Intermediate computer skills required. This is not a course for beginning computer users. A “readiness survey” will be available to help students assess whether they have the minimum computer skills.
Grade Mode: Pass/No Pass.
Special Fees.
Developing and using an electronic portfolio. For first credit, students create an electronic portfolio, selecting from a variety of strategies for development, organization, storage, and presentation. For second credit, students learn to add digital audio and video clips to the portfolio. For third credit, students will read the literature and become conversant with issues and research on electronic portfolio development for a variety of ages and situations, including useful criteria for evaluation portfolios based on national or local standards.

EDFN A478 Issues in Alaska Native Education, K-12 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Departmental approval required.
Special Note: This course meets the Alaska Department of Education and Early Development Alaska Studies requirement for State certification.
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.

EDFN A487 Field Experiences: Teacher Education 1-11 CR
Contact Hours: 0 + 0-22
Registration Restrictions: Departmental approval required.
Grade Mode: Pass/No Pass.
Special Fees.
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.

EDFN A601 Foundations: Philosophy of Education 2 CR
Contact Hours: 2 + 0
Registration Restrictions: Departmental approval required.
Special Fees.
Examines significant educational philosophies. Explores the development of a personal educational philosophy that encourages continuous self-assessment and reflection with the goal of improving professional teaching practice.

EDFN A602 Foundations: Educational Psychology 2 CR
Contact Hours: 2 + 0
Registration Restrictions: Departmental approval required.
Special Fees.
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. Focuses on the teacher's role and responsibility in lesson development, curriculum design, instructional methods, and integration of relevant educational psychology.

EDFN A603 Foundations: Educational History and Sociology 2 CR
Contact Hours: 2 + 0
Registration Restrictions: Departmental approval required.
Special Fees.
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.
EDFN A612 Community Relations 3 CR
Contact Hours: 3 + 0
Effective interpersonal and organizational communication, including facilitation, collaboration, conflict resolution, organizational change, dialogue, and intercultural communication.

EDFN A621 Culture, Language and Literacy 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing in the College of Education
Examination of the theoretical underpinnings of bilingual/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.

EDFN A622 Philosophy of Education 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing in the College of Education
Basic philosophic concepts and their historical development; philosophy applied to education and related issues and problems; examination of contributions of outstanding educators.

EDFN A627 Education Research 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing in the College of Education
Techniques of education research; selection of topics and problems; data gathering; interpretation and preparation of reports.

EDFN A631 Advanced Educational Psychology 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing in the College of Education
Human emotional, mental, physical and social development. Emphasis on individual differences. Assumes one previous course in human development, educational psychology, and teaching experience.

EDFN A636 Innovations in Teaching and Learning 3 CR
Contact Hours: 3 + 0
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 A647 Developing Literacies Across the K-12 Continuum 1 CR
Contact Hours: 1 + 0
Prerequisites: EDFN A478 and EDFN A602.
Registration Restrictions: Departmental approval required.
Special Fees.
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.

EDFN A649 Capstone Seminar: Inquiry in Teaching and Learning 2 CR
Contact Hours: 2 + 0
Prerequisites: CTE A695B or EDFN A695B.
Registration Restrictions: Departmental approval required.

EDFN A651 Curriculum Theory and Development 3 CR
Contact Hours: 3 + 0
Curriculum theory as it applies to current developments in K-12 curriculum. Participants will be exposed to curricular, instructional and assessment issues which evolve from contemporary research.

EDFN A654 Brain, Mind, and Education 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
Critically examines research from various fields including neurobiology and psychology. Students will evaluate the research for potential implications for and applications to educational settings.

EDFN A670 Current Topics in Education 1-3 CR
Contact Hours: 1-3 + 0
Registration Restrictions: Faculty permission.
Special Note: May be repeated for credit with a change of subtitle. Restricted enrollment may apply; see advisor for applicability to degree program.
Study of specific current issues, techniques and trends affecting educators.

EDFN A691 Current Topics in Second Language Education 1-3 CR
Contact Hours: 1-3 + 0
Registration Restrictions: Graduate standing; basic fluency in a second language desirable.
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.

EDFN A695 Internship 1-9 CR
Contact Hours: 0 + 3-27
Prerequisites: EDFN A601 with minimum grade of C and EDFN A602 with minimum grade of C and EDFN A603 with minimum grade of C.
Registration Restrictions: Departmental approval required.
Grade Mode: Pass/No Pass.
Special Fees.
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.
Supervised internship in a K-12 public school. Includes periodic on-campus seminars that emphasize theory-based inquiry into teaching and learning.

EDFN A695E Internship: English for Speakers of Other Languages (ESOL) 2-4 CR
Contact Hours: 0 + 6-12
Prerequisites: EDFN A478 and EDFN A602.
Registration Restrictions: Departmental approval
Grade Mode: Pass/No Pass.

EDFN A698 Individual Research 1-6 CR
Contact Hours: 1-6 + 0
Prerequisites: (ED A627 or concurrent enrollment).
Registration Restrictions: Faculty permission.
Grade Mode: Pass/No Pass.
As directed by graduate committee.

EDFN A699 Thesis 1-6 CR
Contact Hours: 1-6 + 0
Prerequisites: (ED A627 or concurrent enrollment).
Registration Restrictions: Faculty permission.
Grade Mode: Pass/No Pass.
As directed by graduate committee.

EDL - Educational Development & Leadership

Offered through the College of Education
Professional Studies Building (PSB), Room 218, 786-4450
http://coe.uaa.alaska.edu/edleadership

EDL A637 Educational Leadership and Organizational Behavior 3 CR
Contact Hours: 3 + 0
Special Fees.
Leadership and decision-making through collegial relations and consensus building in school settings. Includes skills for facilitating site-focused teams and activities, with emphasis on improving student performance and enhancing a school's reputation. Contemporary theories of organizational development and change are presented.

EDL A638 Instructional and Curricular Leadership 3 CR
Contact Hours: 3 + 0
Special Fees.
Knowledge, skills, and resources for instructional leaders to develop and implement activities that improve learning. Emphasizes contemporary practices in curriculum and assessment that assist school personnel in strengthening classroom instruction and enhance student academic performance.

EDL A639 The Politics of Education 3 CR
Contact Hours: 3 + 0
Special Fees.
Historical, social, and cultural influences that have shaped political decisions affecting the national, state, and local educational program. Attention to federal, state, and local requirements as they pertain to decisions of a principal. Analysis of political groups, formal, and informal for impact on school organization and curriculum. Current trends for historical significance and impact on schools of the future.
EDL A640  Law and Ethics in Education  3 CR
Contact Hours: 3 + 0
Special Fees.
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 A641  Principal Internship  3-6 CR
Contact Hours: 0 + 9-18
Prerequisites: EDL A606 and EDL A640 and [[EDL A642 or concurrent enrollment] or (EDL A643 or concurrent enrollment)].
Registration Restrictions: Admission to the Ed Leadership program.
Grade Mode: Pass/No Pass.
Special Fees.
Fieldwork in an appropriate educational or agency setting. Assignment will be respective to the Standards for Alaska’s Administrators.

EDL A642  Principal’s Seminar I  3 CR
Contact Hours: 3 + 0
Prerequisites: EDL A637 and EDL A640.
Registration Restrictions: Admission to Principal’s Certification Program.
Corequisite: EDL A641.
Special Fees.
Seminar presentations and discussions focus on urban/rural school-community relations and school facilities. Contributing school administrators augment academic instruction and offer a practical touchstone for students’ research and writing.

EDL A643  Principal’s Seminar II  3 CR
Contact Hours: 3 + 0
Prerequisites: EDL A637 and EDL A640.
Registration Restrictions: Admission to Principal’s Certification Program.
Corequisite: EDL A641.
Special Fees.
School seminar presentations and discussions focus on school finance, personnel, and labor relations. Contributing school administrators augment academic instruction and offer a practical touchstone for students’ research and writing.

EDL A652  Introduction to Teacher Leadership  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
Exploration and broad overview of teacher leadership. Emphasizes collaborative processes, reflection, and school-based research as paths to improving professional practice.

EDL A652A  Introduction to Teacher Leadership I  1 CR
Contact Hours: 1 + 0
Registration Restrictions: Graduate standing.
Exploration and broad overview of teacher leadership. Emphasizes collaborative processes, reflection, and school-based research as paths to improving professional practice.

EDL A652B  Introduction to Teacher Leadership II  2 CR
Contact Hours: 2 + 0
Prerequisites: EDL A652A.
Registration Restrictions: Graduate standing.
Extension of the exploration and broad overview of teacher leadership. Emphasizes collaborative processes, reflection, and school-based research as paths to improving professional practice, as a continuation of Introduction to Teacher Leadership I.

EDL A653  Leadership for Equity  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
Focuses on implementing and practicing leadership. Emphasizes equity and excellence in schools. Candidates learn to challenge in themselves and in schools the intellectual structures, definitions and assumptions about people that lead to inequities.

EDL A654  Building Mentoring Relationships  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
Focuses on the theories inherent in successful mentoring relationships and induction programs. Emphasizes the analysis and application of research and best practices in development of skills, understanding, and integration of theory in formal mentoring programs.

EDL A655  Professional Development and Teacher Learning  2 CR
Contact Hours: 2 + 0
Registration Restrictions: Graduate standing.
Examines the ways in which organizational policies, leadership, and professional practices affect the quality of teaching and learning. The focus is on critical analysis of the complex nature of teacher learning and professional growth with application of this knowledge to designing organizational programs.

EDL A659  Teacher Leadership Capstone Project  3 CR
Contact Hours: 3 + 0
Prerequisites: EDL A656 and EDL A637 and EDL A638 and EDL A639 and EDL A652 and EDL A653 and EDL A654 and EDL A655.
Registration Restrictions: Admission to the Teacher Leadership Program.
Special Note: May be repeated to six hours.
Culminating demonstration of skills and applied theories for the improvement of professional practice through the initiation of a student-determined research project. Provides for structured demonstration and documentation of collaborative processes in all phases of the research project.

EDL A671  Superintendent Stewardship and Systemic Change  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Master’s Degree.
Special Fees.
Role of superintendent as the steward of the entire school system and the leader responsible for improving student learning through public accountability measures.

EDL A672  Student Performance: Academic and Developmental  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Master’s Degree.
Special Fees.
Focus on the superintendent’s need to understand developmental research that explains student academic performance including the psycho-social, physiological, and cultural dimensions.

EDL A673  Human Resource Management and Labor Relations  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Master’s Degree.
Tools and approaches that enable superintendents to manage personnel and negotiation transactions within a school district.

EDL A674  Public School Finance and Facilities  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Master’s Degree.
Special Fees.
Key components of K-12 public school finance and K-12 facility design and maintenance as they relate to the preparation of superintendents.

EDL A675  Superintendent Internship  3-6 CR
Contact Hours: 0 + 9-18
Prerequisites: (EDL A676 or concurrent enrollment) or (EDL A677 or concurrent enrollment).
Registration Restrictions: Admission to the Ed Leadership Superintendent program and completion of any two of EDL A671, A672, A673, and A674.
Grade Mode: Pass/No Pass.
Special Fees.
Special Note: May be repeated for a maximum of 6 credits.
Fieldwork in an appropriate educational or agency setting. Assignment will be respective to the superintendency.

EDL A676  Superintendent Seminar I  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Admission to the Ed Leadership Superintendent program and completion of any two of EDL A671, A672, A673, and A674.
Corequisite: EDL A675.
Special Fees.
Theories 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.

EDL A677  Superintendent Seminar II  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Admission to the Ed Leadership Superintendent program and completion of any two of EDL A671, A672, A673, and A674.
Corequisite: EDL A675.
Special Fees.
Theories 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.
EDRD - Education - Reading

Offered through the College of Education
Professional Studies Building (PSB), Room 220, 786-4481
http://coe.uaa.alaska.edu/edleadership

EDRD A603 Developing Literacy: Early Childhood through Grade Twelve 3 CR
Contact Hours: 3 + 0
Prerequisites: EDFN A621.
Registration Restrictions: Current Teaching Certificate.

EDRD A610 Reading and Cognition 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Current Teaching Certificate.

EDRS - Education - Research

Offered through the College of Education
Professional Studies Building (PSB), 786-4450
http://coe.uaa.alaska.edu/edleadership

EDRS A660 Fundamentals of Research in Education 2 CR
Contact Hours: 2 + 0
Prerequisites: EDRS A660.

EDRS A661 Data-Informed Instruction 2 CR
Contact Hours: 2 + 0
Prerequisites: EDRS A661.

EDRS A662 Action Research in Education 2 CR
Contact Hours: 2 + 0
Prerequisites: EDRS A662.

EDRS A663 Research Design 2 CR
Contact Hours: 2 + 0
Prerequisites: EDRS A660.

EDRS A664 Developing and Writing Literature Reviews 2 CR
Contact Hours: 2 + 0
Prerequisites: EDRS A660.

EDRS A668 Introduction to Qualitative Research in Education 2 CR
Contact Hours: 2 + 0
Prerequisites: EDRS A660.
Registration Restrictions: Graduate standing.

EDSA - Education - School-Age Care

Offered through the College of Education
Professional Studies Building (PSB), Room 220, 786-4481
http://coe.uaa.alaska.edu/tldept

EDSA A101 Program Management for School-Age Care 2 CR
Contact Hours: 2 + 0
Prerequisites: EDSA A212 and PSY A245.

EDSA A202 School-Age Care Program Planning 2 CR
Contact Hours: 2 + 0
Prerequisites: EDSA A212 and PSY A245.

EDSA A212 Program Development for School-Age Care 2 CR
Contact Hours: 2 + 0
Prerequisites: EDSA A202.

EDSA A234 Administration and Supervision for School-Age Care 3 CR
Contact Hours: 3 + 0
Prerequisites: EDSA A212 and PSY A245.

EDSA A290 Special Topics School-Age Care 1 CR
Contact Hours: 1 + 0
Prerequisites: EDSA A212 and PSY A245.

EDSA A295A Practicum for School-Age Care 2 CR
Contact Hours: 0 + 10
Prerequisites: EDSA A101 and EDSA A102 and EDE A212 and PSY A245.

EDSA A295B Advanced Practicum for School-Age Care 1 CR
Contact Hours: 0 + 5
Prerequisites: EDSA A212 and EDEC A242 and PSY A245.

EDSE - Education - Special Education

Offered through the College of Education
Professional Studies Building (PSB), Room 225, 786-6317
http://coe.uaa.alaska.edu/coun

EDSE A212 Human Development and Learning 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Department approval.
Corequisite: EDSE A212L.
Emphasizes cognitive, physical, emotional, social, and communicative
development of children and youth. Patterns and sequences of development
are explored in terms of learning that is occurring in the home, school, or
neighborhood. Students will become familiar with the major categories of
disability. The information provided will be reviewed in relation to formal
and informal school learning, including the need for accommodations, teaching, and
curricular requirements and modifications.

EDSE A212L Human Development and Learning Lab 1 CR
Contact Hours: 0 + 2
Registration Restrictions: Departmental approval.
Corequisite: EDSE A212.
Grade Mode: Pass/No Pass. Laboratory experience that extends the understanding of linguistic, cognitive, affective, social, and physical development of children gained from EDSE A212.
Human Development and Learning. Includes observations in settings such as early intervention sites, pre-schools, elementary schools, and private and public agencies delivering to young children.

EDSE A215 Introduction to Inclusive Early Education: Strategies 3 CR
Contact Hours: 3 + 0
Special Fees.
Introduction to early childhood settings which include children with special needs. Overview of inclusive strategies in the classroom, home, and community. Includes introduction to the Individualized Family Service Plan, Individual Education Plan, and interdisciplinary team roles.

EDSE A216 Family and Community Issues: Supporting a Child with Special Needs 3 CR
Contact Hours: 3 + 0
Special Fees.
Introduction to family and community dynamics in caring for and supporting children, birth to age eight, with special needs. Includes study of preventive strategies, rural settings and cultural issues.

EDSE A217 Behavioral Health: Young Children with Special Needs 3 CR
Contact Hours: 3 + 0
Special Fees.
Examination of behavioral health of children with special needs from birth to age eight. Topics include introduction to identification; classification of diagnosis; impact of special needs on behavior; child abuse and neglect; inclusion of children with challenging behaviors; team approach in behavioral health.

EDSE A218 Understanding Legal and Ethical Issues: Young Children with Special Needs 3 CR
Contact Hours: 3 + 0
Special Fees.
In-depth look at the legal issues involved in working with young children with special needs. Examination of laws ADA and IDEA; IFSP and IEP processes; crisis intervention; mandated reporting of child abuse and neglect; cultural issues; legal guardianship. Confidentiality and service delivery in rural and remote areas stressed.

EDSE A219 Early Childhood Special Needs: Applied Communication Strategies 3 CR
Contact Hours: 3 + 0
Special Fees.
Overview of basic components of early childhood communication disorders: speech sound development, grammar, vocabulary, nonverbal communication, and language disorders. Applied techniques with hands-on material preparation and practice with paraprofessional screening tools. Intervention techniques appropriate in early childhood settings that include children with special needs.

EDSE A419 Diversity in the Classroom 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Admission to College of Education.
Special Fees.
Examination of diversity issues that impact education including linguistic and cultural considerations as well as disabilities. Course includes instructional methods and practices that enhance learning.

EDSE A474 Special Children from Birth through Five 3 CR
Contact Hours: 3 + 0
Special Fees.
Special Note: Students are expected to participate in experiences outside regular class periods (15 hours).
Legislative, historical, and philosophical perspectives of early childhood special education. Includes principles and procedures for developing infant learning and preschool programs for children with special needs.

EDSE A480 Culture, Schools, and Society 3 CR
Contact Hours: 3 + 0
Prerequisites: ED A321.
Interdisciplinary study of cultural issues in contemporary schools and society. Considers the psychological and social factors in the educational process. Specific attention given to curricular improvement and teaching strategies appropriate for diverse populations.

EDSE A482 Inclusive Classrooms for All Children 3 CR
Contact Hours: 3 + 0
Provides an in-depth understanding of concepts, strategies, and issues that surround supporting the needs of students who experience disabilities in the general education classroom. Course includes field experience.

EDSE A483 Language and Literacy: Assessment and Interventions 3 CR
Contact Hours: 3 + 0
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 A610 Clinical Assessment: Eligibility and Program Planning 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
Special Fees.
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.

EDSE A610Y Assessment: Early Childhood Special Education 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
Special Fees.
Prerequisites: ED A321. Techniques for assessing young children with special needs and their families. Historical development, basic purposes and assumptions of assessment, testing terminology and statistics, and the administration and interpretation of formal and informal procedures.

EDSE A611 Supporting Families of Exceptional Children 2 CR
Contact Hours: 2 + 0
Registration Restrictions: Graduate standing.
Special Fees.
Focuses on families of children with exceptionalities. Examines factors that impact school-parent relationships. Focuses on developing and implementing strategies to initiate and maintain positive relationships between families and the school.

EDSE A614S Advanced Internship in Speech-Language Pathology 1-12 CR
Contact Hours: 0 + 3-18
Registration Restrictions: Admission to Master’s program in speech-language pathology at the University of Northern Colorado or East Carolina University and to the internship.
Special Fees.
Provides supervised advanced internship experiences in speech-language pathology.

EDSE A620S Advanced Internship in Speech-Language Pathology 1-12 CR
Contact Hours: 0 + 3-18
Registration Restrictions: Admission to Master’s program in speech-language pathology at the University of Northern Colorado or East Carolina University and to the internship.
Special Fees.
Provides supervised advanced internship experiences in speech-language pathology.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>EDSE A620Y</td>
<td>Advanced Internship: Early Childhood</td>
<td>3-6 CR</td>
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<td>Contact Hours: 1 + 6-15</td>
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<td>Registration Restrictions: Admission to M.Ed. option in Early Childhood</td>
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<td>Special Education, instructor approval, and graduate standing.</td>
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<td>Grade Mode: Pass/No Pass.</td>
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<td>Special Fees.</td>
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<td></td>
<td>Supervised field experience with exceptional children in Anchorage</td>
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<td>area facilities. Assignments vary across areas of specialization.</td>
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<td>EDSE A622</td>
<td>Theories and Strategies</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Provides in-depth understanding of best practices in instruction of</td>
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<td>students in special education. Links learning theories and learner</td>
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<td>characteristics to instructional strategies. Emphasizes inclusive</td>
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<td>educational settings and collaboration skills needed to work</td>
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<td>effectively with other professionals.</td>
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<td>EDSE A622Y</td>
<td>Strategies: Early Childhood Special Education</td>
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<td>Provides in-depth understanding of best-practice strategies in the</td>
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<td>field of early intervention. Presents concepts necessary to prepare</td>
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<td>students to work with infants, toddlers, and preschoolers with</td>
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<td>disabilities and their families.</td>
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<td>EDSE A623</td>
<td>Language and Literacy: Best Practices in Assessment and Intervention</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Special Fees.</td>
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<td>Current research on literacy acquisition, assessment, and intervention.</td>
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<td>Emphasizes use of evidence-based practices in assessment and</td>
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<td>intervention. Identifies the link between language and literacy</td>
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<td>development and intervention. Considers academic, cultural, and</td>
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<td>linguistic diversity.</td>
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<td>EDSE A624</td>
<td>Social/Emotional Development: Assessment, and Intervention</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Current research in both normal and abnormal social/emotional</td>
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<td>development. Emphasizes the use of research-based practices in</td>
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<td>assessment and intervention.</td>
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<td>Explores academic and cultural diversity in the social/emotional</td>
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<td>growth of students with learning differences.</td>
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<td>EDSE A625</td>
<td>Teaching Mathematics to Special Learners</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Special Fees.</td>
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<td>Provides assessment and instructional strategies in mathematics for</td>
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<td></td>
<td>teachers of students with disabilities. Focuses on standards-based</td>
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<td>instruction, curriculum-based assessments, and preparation of</td>
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<td>students for high stakes testing.</td>
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<td>EDSE A632</td>
<td>Special Education Law: Principles and Practices</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Registration Restrictions: Graduate standing.</td>
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<td>Special Fees.</td>
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<td>Examines three federal laws that form the foundation of disability</td>
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<td>law: Individuals with Disabilities Education Act (IDEA) 2004; Section</td>
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<td>504 of the Rehabilitation Act of 1973; and the Americans with</td>
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<td>Disabilities Act. Focuses on substantive principles that underlie</td>
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<td>procedural requirements. Includes due process issues and case law</td>
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<td>analysis. Includes creation of a legally defensible Individual</td>
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<td>Educational Program (IEP).</td>
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<td>EDSE A633</td>
<td>Autism: Communication and Social Disorders</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Registration Restrictions: Graduate standing.</td>
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<td>Special Fees.</td>
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<td></td>
<td>Current methods for assessment and intervention for students with</td>
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<td></td>
<td>autism. Current issues and trends impacting educational practices are</td>
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<td>analyzed. Case study method used to make assessment and</td>
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<td>instructional decisions. Parent communication is emphasized.</td>
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<td>EDSE A634</td>
<td>Support and Supervision of Paraeducators</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Registration Restrictions: Graduate standing.</td>
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<td>Special Fees.</td>
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<td></td>
<td>Review and analysis of the literature on utilization, support, and</td>
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<td>supervision of paraeducators. Special attention is given to the</td>
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<td>knowledge and skills needed by supervising teachers. Course includes</td>
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<td>the benefits and concerns regarding utilization of paraeducators, and</td>
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<td>common problems and solutions are identified.</td>
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<td>EDSE A637</td>
<td>Inclusive Teaching and Learning in Secondary Schools</td>
<td>2 CR</td>
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<td></td>
<td>Contact Hours: 2 + 0</td>
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<td>Prerequisites: EDFN A478 and EDFN A602.</td>
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<td>Registration Restrictions: Departmental approval required.</td>
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<td>Special Note: Concurrent enrollment in internship required.</td>
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<td></td>
<td>Focuses on the inclusion of students with special learning needs and</td>
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<td>disabilities in the regular classroom. Attention will be paid to</td>
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<td>the philosophy of inclusion, compliance requirements promoting</td>
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<td>inclusiveness, developmental, and instructional needs of students</td>
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<td>with special education needs, and the role of the secondary teacher</td>
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<td>in providing appropriate classroom instruction for all the students</td>
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<td>in the inclusive classroom.</td>
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<td>EDSE A670</td>
<td>Topics in Special Education</td>
<td>1-3 CR</td>
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<td>Contact Hours: 1-3 + 0</td>
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<td>Registration Restrictions: Graduate standing.</td>
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<td>Special Fees.</td>
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<td>Special Note: May be repeated with a change in subtitle. A maximum of</td>
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<td>6 credits may be applied to a degree program.</td>
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<td>Explores issues of concern to professionals in special education and</td>
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<td>related fields.</td>
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<td>EDSE A674</td>
<td>Families: Developing Parent Professional Partnerships</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Registration Restrictions: Faculty permission and graduate standing.</td>
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<td>Special Fees.</td>
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<td></td>
<td>Concepts and practices related to providing family centered services</td>
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<td>to families who have a member who experiences a disability.Professionals</td>
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<td>will be provided with an in-depth understanding of concepts and</td>
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<td>strategies required to develop effective parent/professional</td>
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<td>partnerships.</td>
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<td>EDSE A675</td>
<td>Supervision</td>
<td>2 CR</td>
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<td>Contact Hours: 2 + 0</td>
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<td>Registration Restrictions: Graduate standing.</td>
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<td>Special Fees.</td>
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<td>Provides a theoretical and practical overview of best practices in</td>
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<td>supervision in education, special education, and related services.</td>
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<td>The course provides opportunities to practice skills through</td>
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<td>interactive activities and case studies.</td>
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<td>EDSE A676</td>
<td>Special Education Finance</td>
<td>2 CR</td>
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<td>Contact Hours: 2 + 0</td>
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<td>Registration Restrictions: Graduate standing.</td>
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<td>Special Fees.</td>
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<td>Focuses on sources and processes for funding special education and</td>
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<td>related services. Other financial management processes are included.</td>
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<td>EDSE A681</td>
<td>Issues in Early Childhood Special Education</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Registration Restrictions: Graduate Standing.</td>
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<td>Special Fees.</td>
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<td>Special Note: Students are expected to participate in experiences</td>
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<td>outside of the regular class period (15 hours).</td>
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<td>A critical study of theoretical and practical issues related to</td>
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<td>personal, curricular, cultural, political, coordination, and service</td>
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<td>delivery needs of young children who experience disabilities and their</td>
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<td>families.</td>
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<td>EDSE A685</td>
<td>Young Children with Complex Needs</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Registration Restrictions: Graduate Standing.</td>
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<td>Special Fees.</td>
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<td>Professionals working with families and their young children, who</td>
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<td>experience severe medical-complex needs, will acquire basic knowledge</td>
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<td>and awareness of medical, educational, and health issues.</td>
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<td>EDSE A690</td>
<td>Advanced Seminar: Special Education</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Registration Restrictions: Graduate Standing.</td>
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<td>Special Fees.</td>
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<td>Special Note: Intended for the post special education certification/</td>
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<td>master’s student with field experience. The content of the course</td>
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<td>varies and it may be repeated for credits.</td>
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<td>Current issues of concern to professionals in special education and</td>
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<td>related fields. Issues include ethics, philosophy, multidisciplinary</td>
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<td>emphasis, assessment and intervention approaches, and new directions</td>
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<td>in the field of special education.</td>
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EDSE A695D Internship: Special Education Administration 3-6 CR
Contact Hours: 0 + 15-30
Prerequisites: ED A478 and ED A672 and ED A675 and ED A676.
Registration Restrictions: Departmental approval, admission to internship.
Grade Mode: Pass/No Pass.
Special Fees.
Field-based experience in the administration, supervision, and coordination of services for students with disabilities and their families.

EDSY A695E Advanced Internship in Special Education: Elementary 3-6 CR
Contact Hours: 0 + 9-18
Registration Restrictions: Graduate standing, Departmental approval.
Grade Mode: Pass/No Pass.
Special Fees.
Special Note: Must apply by specified deadline—see advisor.
Supervised internship in elementary school settings with children with disabilities.

EDSY A695S Advanced Internship in Special Education: Secondary 3-6 CR
Contact Hours: 0 + 9-18
Registration Restrictions: Graduate standing, Departmental approval.
Grade Mode: Pass/No Pass.
Special Fees.
Special Note: Must apply by specified deadline—see advisor.
Supervised internship in secondary school settings with children with disabilities.

EDSE A698 Individual Research 1-6 CR
Contact Hours: 0 + 3-18
Prerequisites: ED A627.
Grade Mode: Pass/No Pass.
Special Fees.
As directed by graduate committee.

EDSE A699 Thesis 1-6 CR
Contact Hours: 0 + 3-18
Prerequisites: ED A627.
Grade Mode: Pass/No Pass.
Special Fees.
As directed by graduate committee.

EDSY - Education - Secondary Education

Offered through the College of Education Professional Studies Building (PSB), Room 220, 786-4481 http://coe.uaa.alaska.edu/secondary

EDSY A630 Language, Culture, and Teaching in Secondary Schools 2 CR
Contact Hours: 2 + 0
Prerequisites: EDFN A478 and EDFN A602.
Registration Restrictions: Departmental approval required.
Special Fees.
Special Note: Concurrent enrollment in internship required.
Focuses on the development of professional teaching dispositions and practices appropriate for secondary curricula. Integrates technology and all forms of literacy.

EDSY A644 Developing a Community of Learners in Middle/High School 3 CR
Contact Hours: 3 + 0
Prerequisites: EDFN A478 and EDFN A602.
Registration Restrictions: Departmental approval required.
Special Fees.
Special Note: Concurrent enrollment in internship required.
Examines schools as complex social systems in order to empower practitioners to develop strategies to meet the needs of all secondary students. The course will focus on the teachers’ role and responsibilities in secondary students’ learning, development, and academic achievement, with attention given to the development of classroom learning, communities that meet the diverse needs of 7-12 students and teachers as members of their own learning communities.
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>EDSY A668</td>
<td>Teaching English as a Second Language in Secondary Schools</td>
<td>3 CR</td>
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<tr>
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<td>Contact Hours: 3 + 0&lt;br&gt;Prerequisites: EDFN A601 with minimum grade of C and EDFN A602 with minimum grade of C and EDFN A603 with minimum grade of C.&lt;br&gt;Registration Restrictions: Departmental approval required.&lt;br&gt;Special Fees.&lt;br&gt;Special Note: Concurrent enrollment in internship is required.&lt;br&gt;  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.</td>
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<tr>
<td>EDSY A669</td>
<td>Teaching Science in Secondary Schools</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0&lt;br&gt;Registration Restrictions: Departmental approval required.&lt;br&gt;Special Fees.&lt;br&gt;Special Note: Concurrent enrollment in internship is required.&lt;br&gt;  Fundamentals of standards-based, integrated curriculum planning and assessment for the diverse student populations in secondary 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.</td>
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## EE - Electrical Engineering

Offered through the School of Engineering<br>Engineering Building (ENGR), Room 201, 786-1900<br>www.engr.uaa.alaska.edu

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>EE A102</td>
<td>Introduction to Electrical Engineering</td>
<td>3 CR</td>
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<tr>
<td></td>
<td>Contact Hours: 2 + 3&lt;br&gt;Prerequisites: (MATH A200 or concurrent enrollment).&lt;br&gt;Special Fees.&lt;br&gt;Special Note: Offered Fall Semesters.&lt;br&gt;  Introduces components, circuits, and methods of analysis of DC electrical systems and devices.</td>
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<td>EE A203</td>
<td>Fundamentals of Electrical Engineering I</td>
<td>4 CR</td>
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<td>Contact Hours: 3 + 3&lt;br&gt;Prerequisites: EE A102 and MATH A200 and (MATH A201 or concurrent enrollment).&lt;br&gt;Special Fees.&lt;br&gt;Special Note: Offered Spring Semesters.&lt;br&gt;  Introduces components, circuits, and methods of analysis of DC and AC electrical systems and devices using impedance and complex notation, frequency response, and Laplace analysis. Covers resonance, filters, power, transformers, and three phase circuits.</td>
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<tr>
<td>EE A204</td>
<td>Fundamentals of Electrical Engineering II</td>
<td>4 CR</td>
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<td>Contact Hours: 3 + 3&lt;br&gt;Prerequisites: MATH A201 and EE A203.&lt;br&gt;Special Fees.&lt;br&gt;Special Note: Offered Fall Semesters.&lt;br&gt;  Introduces electronic devices, their characteristics, uses, and limitations. Covers methods of analysis of circuits containing solid state devices including diodes, bipolar junction transistors, field effect transistors, and operational amplifiers. Covers design and operation of primitive digital devices including logic gates and analog/digital converters.</td>
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<td>EE A241</td>
<td>Computer Hardware Concepts</td>
<td>4 CR</td>
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<td>Contact Hours: 3 + 3&lt;br&gt;Prerequisites: CS A201 and [MATH A107 or MATH A172].&lt;br&gt;Crosslisted with: CS A241.&lt;br&gt;Special Fees.&lt;br&gt;  Analysis and design of electronic devices used as building blocks for construction of simple digital systems. Presents formats for data storage, number systems and alpha-numeric codes, and methods of implementing logical and arithmetic operations within computers. Relates hardware component's capabilities and limitations to design requirements for computer processing, memory, and control functions.</td>
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<td>EE A308</td>
<td>Instrumentation and Measurement</td>
<td>3 CR</td>
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<td>Contact Hours: 2 + 3&lt;br&gt;Prerequisites: ES A309.&lt;br&gt;Crosslisted with: ME A308.&lt;br&gt;  Instrumentation theory and concepts of digital and analog devices, transducers, data sensing transmission, recording, and display, instrumentation system, remote sensing, and hostile environmental conditions.</td>
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<tr>
<td>EE A314</td>
<td>Electromagnetics</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0&lt;br&gt;Prerequisites: PHYS A212 and PHYS A212L and MATH A302.&lt;br&gt;Crosslisted with: PHYS A314.&lt;br&gt;  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.</td>
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<tr>
<td>EE A314L</td>
<td>Electromagnetics Laboratory I</td>
<td>1 CR</td>
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<td>Contact Hours: 0 + 3&lt;br&gt;Corequisite: EE A314.&lt;br&gt;  Laboratory experiments in transmission lines, impedances, bridges, scattering parameters, hybrids, and waveguides.</td>
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<tr>
<td>EE A324</td>
<td>Electromagnetics II</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0&lt;br&gt;Prerequisites: [EE A314 or PHYS A314] and MATH A302.&lt;br&gt;Crosslisted with: PHYS A324.&lt;br&gt;  Use of Maxwell's equations in analysis of plane wave propagation, wave reflection, radiation and antennas, waveguides, cavity resonators, transmission lines, and radio propagation.</td>
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<tr>
<td>EE A324L</td>
<td>Electromagnetics Laboratory II</td>
<td>1 CR</td>
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<tr>
<td></td>
<td>Contact Hours: 0 + 3&lt;br&gt;Corequisite: EE A324.&lt;br&gt;  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.</td>
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<tr>
<td>EE A353</td>
<td>Circuit Theory</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0&lt;br&gt;Prerequisites: EE A203 and MATH A302.&lt;br&gt;  Circuit analysis by application of Laplace transform, state variable, Fourier methods, and includes convolution, frequency selective networks, and two-port circuits.</td>
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<tr>
<td>EE A354</td>
<td>Engineering Signal Analysis</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0&lt;br&gt;Prerequisites: EE A353 and MATH A302.&lt;br&gt;  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.</td>
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<tr>
<td>EE A407</td>
<td>Power Distribution</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0&lt;br&gt;Prerequisites: EE A308 and EE A351.&lt;br&gt;  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.</td>
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<tr>
<td>EE A408</td>
<td>Dynamics of Systems</td>
<td>3 CR</td>
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<td>Contact Hours: 2 + 3&lt;br&gt;Prerequisites: [ENGR A161 or ES A201] and [ES A208 or ES A210] and MATH A302.&lt;br&gt;Crosslisted with: ME A408.&lt;br&gt;  Response of mechanical systems to internal and external forces. Free and forced vibration, random vibration. Discrete and continuous systems. Vibration parameter measurements and stability criteria.</td>
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<tr>
<td>EE A438</td>
<td>Design of Electrical Engineering Systems</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0&lt;br&gt;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.&lt;br&gt;Course Attributes: UAA GER Integrative Capstone.&lt;br&gt;  Capstone course in which electrical engineering students design an electrical engineering project or system starting with the initial design specification to the implementation and testing. Students apply knowledge and skills learned in their undergraduate curriculum.</td>
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<tr>
<td>EE A441</td>
<td>Integrated Circuit Design</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0&lt;br&gt;Prerequisites: EE A204 and CHEM A105 and PHYS A303.&lt;br&gt;  Develops the design and fabrication of integrated circuits (ICs) used in computer electronics. Describes the material properties, methods of charge transport, energy exchanges within the devices, fundamentals of device fabrication for common device families, and fabrication process capabilities and limits. Electrical characteristics, timing considerations, heat and power considerations, and reliability of IC devices are analyzed and evaluated.</td>
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Course Descriptions

EE A453 Introduction to Wi-Fi 1 CR
Contact Hours: 1 + 0
Prerequisites: EE A353.
- Wi-Fi networks, relevant radio propagation fundamentals, design issues relevant to WLANs (wireless local area network), design techniques for Wi-Fi and useful design tools. Also includes automatic approaches that use radio resource management techniques including dynamic channel assignment, transmit power control and load sharing.

EE A454 Systems Reliability Engineering 1 CR
Contact Hours: 1 + 0
Prerequisites: EE A204 and ES A302 and MATH A302.
- Apply theoretical and practical concepts surrounding the field of system reliability theory. Topics include basic reliability concepts, failure models, qualitative analysis techniques, component importance, Markov processes, reliability of maintained systems, life data analysis and reliability data sources.

EE A456 Fiber Optic Communications 1 CR
Contact Hours: 1 + 0
Prerequisites: EE A353.
- Analyze and practical concepts surrounding the field of fiber optic communications. Topics include optical fibers, optical transmitters, optical receivers, system design, multichannel systems, optical amplifiers, and dispersion compensation.

EE A458 Antenna Theory 3 CR
Contact Hours: 3 + 0
Prerequisites: EE A324.
- Analysis of dipole, loop, aperture, reflector, and other antennas; array theory, radiation resistance, directivity, and input impedance of antennae.

EE A462 Communication Systems 3 CR
Contact Hours: 3 + 0
Prerequisites: EE A351 and STAT A307.
- Develops the theory behind the design and operation of electronic communication systems. Includes the mathematical representation of signals 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.

EE A465 Telecommunications 3 CR
Contact Hours: 3 + 0
Prerequisites: EE A351.
- 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.

EE A471 Automatic Control 3 CR
Contact Hours: 3 + 0
Prerequisites: EE A351 and MATH A302.
- Crosslisted with: ME A471.
- Use of linear system representation by transfer functions, signal flow graphics, and state equations. Feedback, time and frequency response of linear systems. Stability analysis by Routh-Hurwitz criterion and frequency domain methods, and system design and compensation.

EMT - Emergency Medical Technology

Offered through the Community and Technical College
Allied Health Sciences Building (AHS), Room 165, 786-6476
www.uaa.alaska.edu/ctc/programs/alliedhealth

EMT A110 Emergency Trauma Technician 3 CR
Contact Hours: 2 + 2
Special Fees:
- State certified basic emergency medical course beyond advanced first aid. Emphasizes prevention, assessment, and care of illness and injury commonly encountered in both urban and rural settings.

EMT A130 Emergency Medical Technician I 6 CR
Contact Hours: 4 + 4
Registration Restrictions: Provide evidence of professional CPR training and certification that includes adult, child, and infant CPR and airways obstruction relief maneuvers, including two rescuer CPR and barrier devices.
- Special Fees:
- 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.
- Provides the necessary training to become state or nationally registered as an EMT I, which is optional. Presents skills for proficiency in victim assessment, recognition, and treatment of medical emergencies and other basic life support procedures. Includes practicum experience in hospitals, emergency rooms, or other sites.

EMT A230 Emergency Medical Technician II 3 CR
Contact Hours: 2 + 2
Prerequisites: EMT A130.
- Registration Restrictions: Must be certified as a State of Alaska EMT I or nationally Registered EMT-Basic (comity is required). Current healthcare provider CPR card; Documentation of 10 patient contacts since becoming a certified EMT and a DHSS-approved sponsoring physician.
- Special Fees:
- 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.
- Provides the EMT I with added skills of advanced airway, specialized tourniquets, and intravenous treatment.

EMT A231 Emergency Medical Technician III 3 CR
Contact Hours: 2 + 2
Prerequisites: EMT A130 and EMT A230.
- Registration Restrictions: Currently certified in Alaska as an EMT II, documented 10 patient contacts and 10 intravenous sticks.
- Special Fees:
- 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).
- Emphasizes knowledge and skills necessary to apply electrodes and monitor cardiac activity, defibrillate life-threatening arrhythmias, and administer specific pharmacological agents.

ENGL - English

Offered through the College of Arts and Sciences
Administration/Humanities Building (ADM), Suite 101, 786-4355
http://english.uaa.alaska.edu

ENGL A109 Introduction to Writing in Academic Contexts 3 CR
Contact Hours: 3 + 0
Prerequisites: PRPE A086 with minimum grade of C or [COMPASS E-Write (1-12 scale) with score of 08 and COMPASS Reading Skills with score of 75] or [Accuplacer-Reading Comp with score of 070 and Accuplacer-Sentence Skills with score of 080].
- Registration Restrictions: Meet Prerequisite or appropriate score on English Placement Test.
- Special Fees:
- Preparation for ENGL A111 and alternative to PRPE A108. Introduces academic essay writing and technology skills in a computer classroom. Develops practical skills for writing and revising, including review of grammar and punctuation.

ENGL A111 Methods of Written Communication 3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A109 with minimum grade of C or PRPE A108 with minimum grade of C or [COMPASS E-Write (1-12 scale) with score of 11 and COMPASS Reading Skills with score of 75] or [Accuplacer-Reading Comp with score of 085 and Accuplacer-Sentence Skills with score of 095] or SAT Critical Reading Score with score of 530 or SAT Verbal Score with score of 530 or Enhanced ACT English with score of 22 or Original ACT English with score of 22 or ACT English with score of 22 or SAT Verbal with score of 530.
- Registration Restrictions: Appropriate score on English Placement Test, SAT Verbal Section, or ACT English Test will waive the ENGL A109 or PRPE A108 prerequisite.
- Course Attributes: UAA GER Written Communication.
- Special Fees:
- Special Note: Offered Fall and Spring Semesters.
- Instruction in composition of expository essays with emphasis on different techniques for organization and development. Documented paper required. Readings in some sections may be coordinated with another discipline.

ENGL A120 Critical Thinking 3 CR
Contact Hours: 3 + 0
- 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 CR
Contact Hours: 3 + 0
- Course Attributes: UAA GER Humanities Requirement.
- Course for non-majors. Introduction to analysis and appreciation of fiction, drama, and poetry. Emphasis on reading and discussion.
ENGL A201  Masterpieces of World Literature I  3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A111.
Course Attributes: UAA GER Humanities Requirement.
Introductory course for majors and non-majors. Emphasizes understanding literature, forming critical vocabulary, and developing critical judgment. Selected masterpieces from ancient times through the Renaissance.

ENGL A202  Masterpieces of World Literature II  3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A111.
Course Attributes: UAA GER Humanities Requirement.
Introductory course for majors and non-majors. Emphasizes understanding literature, forming critical vocabulary, and developing critical judgment. Selected masterpieces from the Renaissance to the present.

ENGL A211  Academic Writing About Literature  3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A111 with minimum grade of C or ENGL A1W with minimum grade of C or ENGL A2W with minimum grade of C or ENGL A3W with minimum grade of C or SAT Critical Reading Score with score of 620 or SAT Verbal Score with score of 620 or Enhanced ACT English with score of 30 or Original ACT English with score of 30.
Course Attributes: UAA GER Written Communication.
Instruction in writing based on close analysis of literature. Develops a broad range of expository writing skills. MLA research paper required.

ENGL A212  Technical Writing  3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A111 with minimum grade of C or ENGL A1W with minimum grade of C or ENGL A2W with minimum grade of C or ENGL A3W with minimum grade of C or SAT Critical Reading Score with score of 620 or SAT Verbal Score with score of 620 or Enhanced ACT English with score of 30 or Original ACT English with score of 30.
Registration Restrictions: If prerequisite is not satisfied, appropriate SAT, ACT, or AP scores or approved UAA placement test required.
Course Attributes: UAA GER Written Communication.
Special Fees.
Instruction in basic communicative purposes, forms, styles, and visual elements commonly used by professionals who write and edit technical documents. Provides experience in writing and editing in a collaborative environment. Requires a research report and APA documentation style.

ENGL A213  Writing in the Social and Natural Sciences  3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A111 with minimum grade of C or ENGL A1W with minimum grade of C or ENGL A2W with minimum grade of C or ENGL A3W with minimum grade of C or SAT Critical Reading Score with score of 620 or SAT Verbal Score with score of 620 or Enhanced ACT English with score of 30 or Original ACT English with score of 30.
Course Attributes: UAA GER Written Communication.
Special Fees.
Instruction in academic writing based on close analysis of readings in various disciplines, primarily the social and natural sciences. Develops a broad range of expository writing skills, including composition of the empirical report. APA research paper required.

ENGL A214  Persuasive Writing  3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A111 with minimum grade of C or ENGL A1W with minimum grade of C or ENGL A2W with minimum grade of C or ENGL A3W with minimum grade of C or SAT Critical Reading Score with score of 620 or SAT Verbal Score with score of 620 or Enhanced ACT English with score of 30 or Original ACT English with score of 30.
Course Attributes: UAA GER Written Communication.
Special Fees.
Special Note: Offered Fall and Spring Semesters.
Instruction in writing based on theories of persuasion and argument practiced in disciplines across the curriculum. Focuses on the rhetorical issues of audience, invention, evidence, and style. Develops a broad range of analytical, descriptive, and persuasive skills, with special attention to their application in a variety of academic environments. Research-supported papers required. Selection of readings may be coordinated with another discipline.

ENGL A301  Literature of Britain I  3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A211 with minimum grade of C or ENGL A212 with minimum grade of C or ENGL A213 with minimum grade of C or ENGL A214 with minimum grade of C.
Course Attributes: UAA GER Humanities Requirement.
Study of significant writers of Britain from Anglo-Saxon times to the Restoration.

ENGL A302  Literature of Britain II  3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A211 with minimum grade of C or ENGL A212 with minimum grade of C or ENGL A213 with minimum grade of C or ENGL A214 with minimum grade of C.
Course Attributes: UAA GER Humanities Requirement.
Study of significant writers of Britain from the Restoration to the present.

ENGL A305  National Literatures in English  3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A211 with minimum grade of C or ENGL A212 with minimum grade of C or ENGL A213 with minimum grade of C or ENGL A214 with minimum grade of C.
Course Attributes: UAA GER Humanities Requirement.
Special Note: Applies once toward national literatures requirements for English majors; may be repeated once for elective credit with a change of subtitle. ENGL A201 and A202 recommended.
Study of selected national literatures composed in English, excluding the literature of England and the United States. Each offering examines the literature of a particular “nation”--a group of people or peoples united by multiple factors such as common descent, language, culture, government, history, geographical location--in which publication is largely in the English language. Examples include literature of Canada, Ireland, Scotland, Australia, New Zealand, Nigeria, or the Caribbean. The selected focus of each course offering is identified in the subtitle.

ENGL A306  Literature of the United States I  3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A211 with minimum grade of C or ENGL A212 with minimum grade of C or ENGL A213 with minimum grade of C or ENGL A214 with minimum grade of C.
Course Attributes: UAA GER Humanities Requirement.
Study of significant writers of the United States focusing primarily on the 19th century and including literature that reflects important cultural, historical, political, and aesthetic forces.

ENGL A307  Literature of the United States II  3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A211 with minimum grade of C or ENGL A212 with minimum grade of C or ENGL A213 with minimum grade of C or ENGL A214 with minimum grade of C.
Course Attributes: UAA GER Humanities Requirement.
Study of significant writers of the United States focusing primarily on the 20th century and including literature that reflects important cultural, historical, political, and aesthetic forces.

ENGL A309  Texts of American Subcultures and Regions  3 CR
Contact Hours: 3 + 0
Prerequisites: [ENGL A211 with minimum grade of C or ENGL A212 with minimum grade of C or ENGL A213 with minimum grade of C or ENGL A214 with minimum grade of C].
Special Note: May be repeated once for credit with a change in the subtitle.
Intensive study of the texts of an American subculture or region from the beginnings to the present day, with emphasis on major figures within their historical context.

ENGL A310  Ancient Literature  3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A211 with minimum grade of C or ENGL A212 with minimum grade of C or ENGL A213 with minimum grade of C or ENGL A214 with minimum grade of C.
Course Attributes: UAA GER Humanities Requirement.
Selected Biblical texts and Classical Western and ancient Asian literature in English translations.

ENGL A311  Advanced Composition  3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A211 with minimum grade of C or ENGL A212 with minimum grade of C or ENGL A213 with minimum grade of C.
Course Attributes: UAA GER Written Communication.
Special Note: Offered Spring Semesters.
Advanced instruction in composing and reviewing written texts, with focus on multiple rhetorical situations.

ENGL A312  Advanced Technical Writing  3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A211 with minimum grade of C or ENGL A212 with minimum grade of C or ENGL A213 with minimum grade of C.
Registration Restrictions: ENGL A212 recommended.
Course Attributes: UAA GER Written Communication.
Special Fees.
Special Note: Offered Fall and Spring Semesters.
Instruction in principles of textual and visual design in order to understand, analyze, evaluate, and design effective technical communication. Practice in standard editing for both print and online documents.
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<tr>
<th>Course Description</th>
<th>Year</th>
<th>Credits</th>
<th>Contact Hours</th>
<th>Prerequisites</th>
<th>Restrictions</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL A313</td>
<td>Professional Writing</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>ENGL A211 with minimum grade of C or ENGL A212 with minimum grade of C or ENGL A213 with minimum grade of C or ENGL A214 with minimum grade of C.</td>
<td>Special Note: May include special fees if delivered in a computerized classroom. 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.</td>
</tr>
<tr>
<td>ENGL A315</td>
<td>Survey of Medieval Literature</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>ENGL A201 with minimum grade of C and ENGL A202 with minimum grade of C.</td>
<td>Registration Restrictions: Upper-division standing recommended. A selective survey of primarily Western literature from the fifth century through the fifteenth. Representative authors and genres.</td>
</tr>
<tr>
<td>ENGL A319</td>
<td>Renaissance Literature</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>ENGL A201 with minimum grade of C and ENGL A202 with minimum grade of C.</td>
<td>A selective survey of Western literature from the fifteenth through the middle of the seventeenth. Representative authors and genres.</td>
</tr>
<tr>
<td>ENGL A325</td>
<td>Neoclassical Literature</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>ENGL A201 and ENGL A202.</td>
<td>A selective survey of primarily British literature of the period 1660-1798.</td>
</tr>
<tr>
<td>ENGL A330</td>
<td>Literature of Romanticism</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>ENGL A201 and ENGL A202.</td>
<td>A study of the Romantic movements from late eighteenth century to mid-nineteenth century.</td>
</tr>
<tr>
<td>ENGL A340</td>
<td>The Victorian Period</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>ENGL A201 with minimum grade of C or ENGL A202 with minimum grade of C.</td>
<td>A multi-genre survey of selected literature of the Victorian period with special attention paid to historical and cultural contexts.</td>
</tr>
<tr>
<td>ENGL A343</td>
<td>Modern and Contemporary Literature</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>ENGL A201 or ENGL A202 or ENGL A211.</td>
<td>Study of representative literary works from the twentieth and twenty-first centuries. Includes selections from U.S. and international literatures.</td>
</tr>
<tr>
<td>ENGL A351</td>
<td>Poetry</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>ENGL A201 and ENGL A202.</td>
<td>An intensive study of the forms and techniques used by poets.</td>
</tr>
<tr>
<td>ENGL A361</td>
<td>The Novel</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>ENGL A201 or ENGL A202 or ENGL A211.</td>
<td>An intensive study of the forms and techniques used by novelists within the framework of a historically developing genre.</td>
</tr>
<tr>
<td>ENGL A363</td>
<td>Short Story</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>ENGL A201 and ENGL A202.</td>
<td>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.</td>
</tr>
<tr>
<td>ENGL A371</td>
<td>Narrative Nonfiction</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>ENGL A121 or ENGL A201 or ENGL A202 and ENGL A211 with minimum grade of C or ENGL A212 with minimum grade of C or ENGL A213 with minimum grade of C or ENGL A214 with minimum grade of C.</td>
<td>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.</td>
</tr>
<tr>
<td>ENGL A381</td>
<td>Drama</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>ENGL A201 with minimum grade of C and ENGL A202 with minimum grade of C.</td>
<td>An intensive study of the forms and techniques used by dramatists, including significant criticism from Aristotle to the present.</td>
</tr>
<tr>
<td>ENGL A383</td>
<td>Film Interpretation</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>ENGL A211 or ENGL A212 or ENGL A213 or ENGL A214.</td>
<td>Course Attributes: UAA GER Humanities Requirement. Special Fees. An intensive study of the forms and techniques used in film. Includes an introduction to film theory and criticism.</td>
</tr>
<tr>
<td>ENGL A391</td>
<td>Genres of Subject and Theme</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>ENGL A211 with minimum grade of C or ENGL A212 with minimum grade of C or ENGL A213 with minimum grade of C or ENGL A214 with minimum grade of C.</td>
<td>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. Study of genre defined in terms of subject or theme rather than form. Examples include captivity narrative, utopian literature, science fiction, adolescent literature.</td>
</tr>
<tr>
<td>ENGL A403</td>
<td>Topics in Autobiography</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>ENGL A211 with minimum grade of C or ENGL A212 with minimum grade of C or ENGL A213 with minimum grade of C.</td>
<td>Prerequisites: ENGL A211 with minimum grade of C or ENGL A212 with minimum grade of C or ENGL A213 with minimum grade of C. Special Note: Applies once toward the Specialized Studies requirement for English literature majors; may be repeated once with a change of subtitle for elective credit. Study of autobiography and the techniques used and issues raised in this form, with readings focused on a selected theme. Practice in writing autobiography.</td>
</tr>
<tr>
<td>ENGL A404</td>
<td>Topics in Women's Literature</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>ENGL A211 with minimum grade of C or ENGL A212 with minimum grade of C or ENGL A213 with minimum grade of C.</td>
<td>Special Note: Offered Fall Semesters. Study of particular topics in literature by women writers.</td>
</tr>
<tr>
<td>ENGL A414</td>
<td>Research Writing</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>ENGL A211 with minimum grade of C or ENGL A212 with minimum grade of C or ENGL A213 with minimum grade of C.</td>
<td>Prerequisites: ENGL A211 with minimum grade of C or ENGL A212 with minimum grade of C. Course Attributes: UAA GER Written Communication. 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.</td>
</tr>
<tr>
<td>ENGL A424</td>
<td>Shakespeare</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>ENGL A201 with minimum grade of C and ENGL A202 with minimum grade of C.</td>
<td>Prerequisites: ENGL A201 with minimum grade of C and ENGL A202 with minimum grade of C. Major works and a survey of Shakespearean criticism. Plays covered vary from semester to semester.</td>
</tr>
<tr>
<td>ENGL A429</td>
<td>Major Authors</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>ENGL A201 with minimum grade of C or ENGL A202 with minimum grade of C or ENGL A211 with minimum grade of C or ENGL A212 with minimum grade of C.</td>
<td>Prerequisites: ENGL A201 with minimum grade of C or ENGL A202 with minimum grade of C or ENGL A211 with minimum grade of C or ENGL A212 with minimum grade of C or ENGL A213 with minimum grade of C or ENGL A214 with minimum grade of C or ENGL A215 with minimum grade of C. Special Note: May be repeated once for credit with a change of subtitle. Intensive cross-disciplinary study of a single writer or of a small connected movement among writers.</td>
</tr>
<tr>
<td>ENGL A434</td>
<td>History of Rhetoric</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>ENGL A211 and ENGL A212 or ENGL A213 or ENGL A214 and HIST A101 and HIST A102.</td>
<td>Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses and junior standing. Course Attributes: UAA GER Integrative Capstone. Special Fees: Study of significant western rhetorical theories and practices from ancient Greece to contemporary culture. Emphasis on the evolution of rhetorical knowledge and on the historical relationships between rhetoric and culture.</td>
</tr>
<tr>
<td>ENGL A435</td>
<td>History of Criticism</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>ENGL A211 and ENGL A202.</td>
<td>Prerequisites: ENGL A201 and ENGL A202. Critical theory from its classical origins to the present.</td>
</tr>
</tbody>
</table>
ENGL A440  Topics in Comparative Literature  3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A201 or ENGL A202.
Special Note: May be repeated once for degree credit with a change of subtitle.
Comparative analysis of selected texts from modern and contemporary international literatures. Includes readings in poetics and literary history.

ENGL A444  Topics in Native Literatures  3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A211 with minimum grade of C or ENGL A212 with minimum grade of C or ENGL A213 with minimum grade of C or ENGL A214 with minimum grade of C.
Special Note: Applies once towards requirement for English majors; may be repeated once for elective credit with a change of subtitle. Offered Spring Semesters.

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 literatures in the world.

ENGL A445  Alaska Native Literatures  3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A211 with minimum grade of C or ENGL A212 with minimum grade of C or ENGL A213 with minimum grade of C or ENGL A214 with minimum grade of C.
Course Attributes: UAA GER Humanities Requirement.

ENGL A450  Linguistics and English Language Teaching  3 CR
Contact Hours: 3 + 0
Prerequisites: LING A101 with minimum grade of C.
A survey of 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.

ENGL A475  Modern Grammar  3 CR
Contact Hours: 3 + 0
Prerequisites: LING A201 with minimum grade of C.
Special Note: Recommended for students in the Education Option for the English Major.

An inductive linguistic analysis of English emphasizing transformational grammar.

ENGL A476  History of English Language  3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A121 or ENGL A201 or ENGL A202 and LING A101.
Investigates origins, development, and variation of the English language from linguistic, social, literary, and technological perspectives. Connects history and variation in English to contemporary issues about language.

ENGL A478  Public Science Writing  3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A211 with minimum grade of C or ENGL A212 with minimum grade of C or ENGL A213 with minimum grade of C or ENGL A214 with minimum grade of C.
Registration Restrictions: Completion of GER Tier 1 (basic college-level skills), junior standing, and 4 credits of Natural Science GER, including one lab credit.
Course Attributes: UAA GER Integrative Capstone.

Special Fees.

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.

ENGL A487  Standard Written English  3 CR
Contact Hours: 3 + 0
Prerequisites: LING A201 with minimum grade of C.
Analysis of English emphasizing traditional grammar, standard usage, and rhetoric.

ENGL A490  Topics in Language and Literature  1-3 CR
Contact Hours: 1-3 + 0
Prerequisites: ENGL A201 or ENGL A202.
Registration Restrictions: For courses with a linguistics topic, LING A101 prerequisite required.
Special Note: May be repeated for a maximum of 6 credits with a change of subtitle.

Current topics in English literature, composition, rhetoric, or linguistics, arising from special circumstances of demand or faculty expertise.

ENGL A491  Topics in Composition and Rhetoric  3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A211 with minimum grade of C or ENGL A212 with minimum grade of C or ENGL A213 with minimum grade of C.
Special Note: Applies once toward Rhetoric and Language theory requirement for Rhetoric Option; may be repeated once with a change of subtitle for elective credit. Offered Fall Semesters.

Study of composition and rhetoric as an academic field with a focus on theories, issues, perspectives, and activities around which the field organizes itself. Examples include the study of Composition Theory and Pedagogy, Computers and Teaching Composition, and Origins of Rhetoric.

ENGL A495  Internship in Professional Writing  1-6 CR
Contact Hours: 0 + 3-18
Prerequisites: ENGL A211 with minimum grade of B or ENGL A212 with minimum grade of B or ENGL A213 with minimum grade of B or ENGL A214 with minimum grade of B.
Registration Restrictions: Faculty permission required.

Special Note: May be repeated for up to 6 credits with change in setting and/or responsibilities or change in venue.

Advanced application of writing skills in a professional setting.

ENGL A499  English Honors Thesis  3 CR
Contact Hours: 0 + 9
Registration Restrictions: Completion of six credits of 400-level courses w/ grade of B (ENGL A401, A404, A429, A440, A444, A490, A491).

Individual in-depth study of a selected topic, resulting in a thesis.

ENGL A602  Contemporary Literary Theory  3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.

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.

ENGL A603  Issues in Rhetoric and Composition  3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.

Advanced study of issues in the disciplines of rhetoric and composition framed in a historical perspective. Readings will include theoretical, performative, critical, research, and/or multimedia texts.

ENGL A610  Studies in Literary Periods and Movements  3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.

Advanced study of selected topics within particular literary periods and/or movements.

ENGL A611  Studies in Genre  3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.

Special Note: May be repeated once for degree credit with a change of subtitle.

Advanced study of particular topics, trends, and issues in literatures of the English language.

ENGL A612  Studies in English Linguistics  3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.

Special Note: May be repeated once for degree credit with a change of subtitle.

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.

ENGL A613  Studies in Rhetoric and Composition  3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.

Special Note: May be repeated once for degree credit with a change of subtitle.

An investigation into significant historical and/or contemporary developments in rhetorical theory and practice, which may also include composition, literacy studies, or linguistics.

ENGL A636  Studies in Contemporary Theory  3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.

Special Note: May be repeated once for degree credit with a change of subtitle.

Advanced study of key thinkers, major schools, or central topics in contemporary literary, rhetorical, or linguistic theory and practice.
ENGL A676  Studies in Texts and Cultures  3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.
Special Note: May be repeated once for degree credit with a change of subtitle.
Advanced study of relationships between cultural forces and the production, reception, and interpretation of texts. Focuses on both theory and analysis of selected texts.

ENGL A687  Composition Theory and Practice  3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.
Special Note: Required core course for Teaching Assistants.
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.

ENGL A689  Advanced Research and Professional Practices  3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A602 or ENGL A603.
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Formal admission to MA in English; permission of graduate advisor.
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.

ENGL A698  Individual Research  1-6 CR
Contact Hours: 1-6 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing and faculty permission.
Students work individually with faculty mentors to research a topic of the students' choice, generally in preparation for the MA thesis.

ENGL A699  Thesis  1-6 CR
Contact Hours: 1-6 + 0
Prerequisites: ENGL A689 with minimum grade of B.
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing, faculty permission, and an approved thesis proposal.
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.

ENGR - Engineering

Offered through the School of Engineering
Engineering Building (ENGR), Room 201, 786-1900
www.engr.uaa.alaska.edu

ENGR A105A  Engineering Computer-Aided Design I  1 CR
Contact Hours: 1 + 3
Applied engineering design course focusing on engineering graphics concepts using applied Computer-Aided Design (CAD) tools. Orthographic projections, auxiliary views, sectional views, and layer management are explored and implemented in assigned engineering design projects. Part I of a three part series.

ENGR A105B  Engineering Computer-Aided Design II  1 CR
Contact Hours: 1 + 3
Prerequisites: ENGR A105A.
Applied engineering design course focusing on engineering graphics concepts using applied Computer-Aided Design (CAD) tools. Object snaps, engineering drawing editing, blocks and external references, multi viewports and views, object linking and embedding, raster image manipulation, and basic 3-D modeling are explored and implemented in assigned engineering design projects. Part II of a three part series.

ENGR A105C  Engineering Computer-Aided Design III  1 CR
Contact Hours: 1 + 3
Prerequisites: ENGR A105B.
Applied engineering design course focusing on engineering graphics concepts using applied Computer-Aided Design (CAD) tools. Surfaces, featured based modeling, solid editing, extraction of orthographic, auxiliary and section views from a 3-D model, printing and plotting are explored and implemented in assigned engineering design projects. Part III of a three part series.

ENGR A151  Engineering Practices I  3 CR
Contact Hours: 3 + 0
Prerequisites: [MATH A107 and MATH A108] or MATH A109.
Provides an overview of the engineering profession and the fundamental tools for practicing engineering. Presents the basic skills required of engineers including an introduction to engineering mathematics, spreadsheets, analytical problem solving, word processing, communication, presentations, descriptive geometry, and computer graphics.

ENGR A161  Engineering Practices II  3 CR
Contact Hours: 3 + 0
Prerequisites: [MATH A107 and MATH A108] or MATH A109.
Presents the basic skills required of engineers for using computers to solve engineering problems and presenting results in a professional form. Application of computation methods and tools for practicing engineering. Introduction to computer programming and engineering problem solving softwares including visual basic in spreadsheets, Matlab, and Mathcad.

ENGR A192  Engineering Seminar I  1 CR
Contact Hours: 1 + 0
May be stacked with: ENGR A292.
Exploration of engineering design with presentations given by student interns, faculty, and leaders of industry about the engineering design as well as other aspects of engineering such as marketing, behavioral issues, and socio-economical issues facing today's engineer.

ENGR A251  Engineering Practices III  3 CR
Contact Hours: 3 + 0
Prerequisites: ENGR A151 and ENGR A161 and MATH A200.
Application of analytical and computational methods for solving engineering problems. Experimental problems will be solved and projects presented in technical reports.

ENGR A292  Engineering Seminar II  1 CR
Contact Hours: 1 + 0
Prerequisites: ENGR A192.
Exploration of engineering design with presentations given by student interns, faculty, and leaders of industry about the engineering design as well as other aspects of engineering such as marketing, behavioral issues, and socio-economical issues facing today's engineer.

ENVI - Environmental Studies

Offered through the College of Arts and Sciences
Beatrice McDonald Hall (BMH), Room 213, 786-6049
www.uaa.alaska.edu/ges

ENVI A211  Earth Systems: The Science and Geography of the Natural Environment  3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A111 and MATH A105.
Crosslisted with: GEOG A211.
Course Attributes: UAA GER Natural Sciences Requirement.
Special Note: A student may apply no more than 3 credits from ENVI A202, GEOG A205, ENVI A211, or GEOG A211 toward the graduation requirements for a baccalaureate degree.
The earth and its geography are discussed as a system of systems with feedbacks and interrelationships. Study of natural systems, cycles, and flows and natural and human induced changes in these systems. Topics include basic ecology, weather and climate, resources and resource stress (air, water, oceans, soils), natural hazards. Uses local, Arctic, and other regional examples.
ES A111  Engineering Science  3 CR
Contact Hours: 3 + 0
Registration Restrictions: High school algebra and trigonometry or concurrent enrollment in MATH A200 required.
Special Fees.
A survey of engineering science and problem solving techniques, including static and dynamic equilibria, presentation of results, and engineering ethics. Students will be introduced to the use of computers and will participate in a design project.

ES A201  Computer Techniques  3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A107 and MATH A108 or (MATH A200 or concurrent enrollment).
Special Fees.
An introduction to programming using BASIC. Computer programming for solving problems in science and engineering, and applications using spreadsheets.

ES A208  Engineering Mechanics  4 CR
Contact Hours: 3 + 3
Prerequisites: [ENGR A151 or ES A111] and MATH A201.
Application of statics and dynamics for solving engineering type problems. Application of vector quantities, equilibrium including friction forces, moments of inertia, and the kinetics and kinematics or particles and rigid bodies.

ES A209  Engineering Statics  3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A201 with minimum grade of C and PHYS A211 with minimum grade of C and PHYS A211L with minimum grade of C.
Principles and analysis of static force systems, equilibrium, distributed forces, centroids, centers of gravity, moments of inertia, structures, friction, and virtual work.

ES A210  Engineering Dynamics  3 CR
Contact Hours: 3 + 0
Prerequisites: ES A209 with minimum grade of C.
Kinematics and kinetics of particles and rigid bodies with applications of Newton's second law and principles of work-energy, impulse-momentum, and vibration.

ES A302  Engineering Data Analysis  3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A201 and ES A201.
Analytical and spreadsheet methods appropriate to the solution of engineering problems using the concepts from probability and statistics.

ES A309  Elements of Electrical Engineering  3 CR
Contact Hours: 3 + 0
Prerequisites: PHYS A212 and (MATH A302 or concurrent enrollment).
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.

ES A331  Mechanics of Materials  3 CR
Contact Hours: 3 + 0
Prerequisites: ES A209 with minimum grade of C and (MATH A302 with minimum grade of C or concurrent enrollment).
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.

ES A341  Fluid Mechanics  3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A201 with minimum grade of C and MATH A201 with minimum grade of C and PHYS A211 with minimum grade of C and PHYS A211L with minimum grade of C.
Special Fees.
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.

ES A341L  Fluid Mechanics Laboratory  1 CR
Contact Hours: 0 + 3
Prerequisites: (ES A341 with minimum grade of C or concurrent enrollment).
Special Fees.
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.
Course Descriptions

ES A346 Basic Thermodynamics 3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A201 and [PHYS A211 or CHEM A106].
Thermodynamics systems, properties, processes, and cycles. Fundamental principles of thermodynamics (first and second laws), and laboratory applications.

ES A411 Northern Design 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Senior standing or graduate standing in an accredited program in architecture or engineering, or instructor permission.
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.

ESL - English as a Second Language

Offered through the Community and Technical College
Beatrice McDonald Hall (BMH), Room 121, 786-6856
www.uaa.alaska.edu/ctc/programs/cpds

ESL A066 ESL Through Newspapers 1-4 CR
Contact Hours: 1-4 + 0
Special Fees.
Special Note: May be taken for up to 4 credits in one semester and for up to 12 credits altogether.
For ESL students of varied skill levels. Using newspapers to practice listening, speaking, reading, writing, and other skills. Some individual instruction.

ESL A103 College Grammar I 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Appropriate score on TOEFL/TSE or interview with ESL director.
Special Fees.
Special Note: Required language lab work.
For intermediate to advanced students. Instruction in pronunciation, listening comprehension, and speaking strategies for academic and career settings. Emphasis on self-monitoring. Includes special practice in group discussion techniques.

ESL A104 Oral Fluency I 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Appropriate score on English Placement Test or TOEFL. Special Fees.
Special Note: Required language lab work.
For intermediate to advanced students. Extensive practice in reading and composition strategies for academic and career settings. Emphasis on alternatives to translation. Includes special practice in grammar.

ESL A105 Vocabulary Enhancement I 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Appropriate score on English Placement Test or TOEFL. Special Fees.
Special Note: Required language lab work.
For intermediate to advanced students. Extensive practice in different methods of acquiring a larger, more precise vocabulary. Emphasis on using context clues and choosing words to match the occasion/audience. Includes special instruction in idioms used by adults.

ESL A106 College Grammar I 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Appropriate score on English Placement Test. May be stacked with: ESL A110.
Special Fees.
Presents elements of English grammar for improving comprehension and accuracy. Provides focused instruction in intermediate grammar of Standard American English for academic and professional settings. Includes practice in editing. Designed for ESL students only.

ESL A107 Oral Fluency II 3 CR
Contact Hours: 3 + 0
Prerequisites: ESL A103.
Registration Restrictions: Appropriate score on TOEFL/TSE, or interview with ESL director.
Special Fees.
Special Note: Required language lab work.
For advanced students. Further instruction in pronunciation, listening comprehension, and speaking strategies for academic and career settings. Emphasis on self-correction. Includes special practice in formal presentation techniques.

ESL A108 College Reading and Writing II 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Appropriate score on English placement test or TOEFL. Special Fees.
Special Note: Required language lab work.
For advanced students. Further practice in reading and composition strategies for academic and career settings. Emphasis on the use of on-campus resources for self-improvement. Includes additional practice in grammar.

ESL A109 Vocabulary Enhancement II 3 CR
Contact Hours: 3 + 0
Prerequisites: ESL A105.
Registration Restrictions: Appropriate score on English placement test or TOEFL. Special Fees.
Special Note: Requires language lab work.
For advanced students. Further practice in different methods of acquiring a larger, more precise vocabulary. Emphasis on applying knowledge of word parts from Latin and Greek. Includes special instruction in academic vocabulary.

ESL A110 College Grammar II 3 CR
Contact Hours: 3 + 0
Prerequisites: ESL A106 with minimum grade of C.
Registration Restrictions: Appropriate score on English Placement Test or prerequisite course.
May be stacked with: ESL A106.
Special Fees.
Examines elements of English grammar for improving comprehension and accuracy. Provides focused instruction in high-intermediate and advanced grammar of Standard American English for academic and professional settings. Includes practice in editing. Designed for ESL students only.

ESL A190 Selected Topics in English as a Second Language 1-3 CR
Contact Hours: 1-3 + 0
Registration Restrictions: Placement at the appropriate level for topic by ESL faculty.
Special Fees.
Special Note: Repeatable for credit with change of topic.
Presents English as a Second Language related to a selected topic or field. Emphasizes increasing language proficiency for non-native English speakers. Focuses on integrated skills: reading, writing, speaking, and listening.

ESM - Engineering & Science Management

Offered through the School of Engineering
University Lake Building Annex (ULBA), 786-1924
http://soe.uaa.alaska.edu/espm

ESM A450 Economic Analysis and Operations 3 CR
Contact Hours: 3 + 0
Special Note: Not offered for credit toward the Master of Science in engineering management or science management. Offered Spring Semesters.
Fundamentals of engineering economy, project scheduling, estimating, legal principles, professional ethics, and human relations.

ESM A601 Engineers in Organizations 3 CR
Contact Hours: 3 + 0
Registration Restrictions: BS degree in Engineering or in a physical science. Special Fees.
Development of organizations and techniques appropriate to managing engineering and scientific effort. Included will be a study of engineering and scientific activity and personnel in order to organize, motivate, evaluate, develop, and coordinate for maximum effectiveness, with due consideration to the goals of individuals.

ESM A605 Engineering Economy 3 CR
Contact Hours: 3 + 0
Special Fees.
The science of fiscal decision making. Graduate level studies in problems of replacement, economic selections, income tax accounting, engineering evaluation and introduction to the problems of depreciation.

ESM A608 Legal Environment for Engineering Management 3 CR
Contact Hours: 3 + 0
Devoted to those aspects of law specifically related to technical management: contracts, sales, real property, business organization, labor, patents, and insurance.
**Course Descriptions**

**ESM A610**  Cost Estimating  3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: BS degree in Engineering or in a physical science or faculty permission.  
Special Fees.  
Principles, practices and procedures used in the preparation of engineering cost estimates. Exposition of the basic concepts and steps required to develop engineering type, labor and material based, and parametric cost estimates. Preparation of cost proposals and study of bidding procedures. Students will manage the student project teams, prepare a research paper, and make a class presentation.

**ESM A613**  Management of Technical People  3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: BS degree in Engineering or in a physical science.  
Human factors with which engineers and scientists will be involved in the work place. Includes labor and union concerns, human relations as a major factor in supervision, and other problems of the engineer or scientist in working with people.

**ESM A617**  Technology Management  3 CR  
Contact Hours: 3 + 0  
Level Restriction: Must be Graduate - UAA level.  
Registration Restrictions: Graduate standing. Cроссlisted with: BA A617.  
Issues and case studies of policy development, strategy, planning and management of technology in the overall corporate environment.

**ESM A619**  Computer Simulation of Systems  3 CR  
Contact Hours: 3 + 0  
Prerequisites: BA A601 or ESM A620.  
Special Fees.  
Intensive study of simulation concepts and methods, introduction to major simulation languages. Survey of simulation applications in various disciplines.

**ESM A620**  Statistics for ESM  3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: Undergraduate Statistics course.  
Special Fees.  
Development of an overall perspective on the role of statistics within the framework of engineering and management decision making. Includes the use of statistical software.

**ESM A621**  Operations Research  3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: Undergraduate probability and statistics course.  
Special Fees.  
Mathematical techniques for aiding managerial decision making. Topics will include waiting line theory, inventory models, linear programming, transportation problems, dynamic programming, PERT/CPM, Markov chains, and simulation. The emphasis is on the application of techniques to engineering management situations.

**ESM A623**  Total Quality Management  3 CR  
Contact Hours: 3 + 0  
Prerequisites: BA A601 or ESM A620 and [BA A632 or ESM A601].  
Special Fees.  
Brief history of the origins of modern quality management; review of basic tools for continuous quality improvement involving everyone in the organization. The organizational climate for continuous improvement. Survey of statistical tools for continuous quality improvement.

**ESM A684**  ESM Project  3 CR  
Contact Hours: 3 + 0  
Individual study of an actual engineering or science management problem, resulting in a report which includes recommendations for action.

**ESM A698**  Individual Research  1-6 CR  
Contact Hours: 1-6 + 0  
Registration Restrictions: Faculty permission.  
A course to be designed between the student and faculty member to allow students the chance to pursue special advanced interests in Engineering/Science Management at the MS level.

**ESM A699**  ESM Thesis  1-9 CR  
Contact Hours: 1-9 + 0  
Registration Restrictions: Faculty permission.

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**ET - Electronics Technology**

**ET A101**  Basic Electronics: DC Physics  4 CR  
Contact Hours: 3 + 3  
Prerequisites: MATH A055.  
Offered only at Kenai Peninsula College.  
Course assumes no previous knowledge of electronics and prepares the student for further study. Subjects included are basic physics of electricity, direct current and practices, magnetism, and use of test equipment. Two hours lab per week.

**ET A102**  Basic Electronics: AC Physics  4 CR  
Contact Hours: 3 + 3  
Prerequisites: ET A101.  
Offered only at Kenai Peninsula College.  
Principles of alternating current, vectors, phase relationships, inductive and capacitive reactance and impedance. AC circuit analysis, series and parallel resonant circuits, transformers, and network analysis. Two hours lab per week.

**ET A126**  Principles of Logic and Gating  4 CR  
Contact Hours: 3 + 2  
Registration Restrictions: High school math and reading skills.  
Special Fees.  
Introduces concepts of digital logic circuitry including, but not limited to, number systems, logic gates, switches, displays, counters, registers, decoders, mux and demux circuits, and converters.

**ET A151**  Basic Electricity for the Trades  4 CR  
Contact Hours: 3 + 3  
Prerequisites: MATH A055.  
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.

**ET A160**  DC Electrical Systems  3 CR  
Contact Hours: 3 + 0  
Corequisite: ET A161.  
Covers basic DC electrical concepts, definitions, laws, and applications. Introduces passive electrical components, schematic symbols, wiring diagrams, power sources, and distribution systems.

**ET A161**  DC Lab  1 CR  
Contact Hours: 0 + 3  
Corequisite: ET A160.  
Special Fees.  
Examines theory and application of basic concepts, definitions and laws governing alternating current signal and power sources. Includes AC waveforms, sources, components, wiring diagrams, schematic symbols, and analysis of AC power distribution.

**ET A162**  AC Electrical Systems  3 CR  
Contact Hours: 3 + 0  
Prerequisites: ET A160 and ET A161.  
Corequisite: ET A163.  
Principles of alternating current, vectors, phase relationships, inductive and capacitive reactance and impedance. AC circuit analysis, series and parallel resonant circuits, transformers, and network analysis. Two hours lab per week.

**ET A163**  AC Lab  1 CR  
Contact Hours: 0 + 3  
Prerequisites: ET A160 and ET A161.  
Corequisite: ET A162.  
Special Fees.  
Examines theory and application of basic concepts, definitions and laws governing alternating current signal and power sources. Includes AC waveforms, sources, components, wiring diagrams, schematic symbols, and analysis of AC power distribution.

**ET A165**  Introduction to Digital Devices  1 CR  
Contact Hours: 1 + .5  
Special Fees.  
Introduces the principles and practical applications of digital electronics used by computers, communications equipment, and control systems. Topics will include digital logic gates, binary numbers, flip-flops, registers, counters, and shift registers.
ET A166  Technical Calculations and Applications  2 CR
Contact Hours: 2 + 0
Presents applied calculations for students in technical fields. Covers basic arithmetic, conversions, solving equations, logarithms, multinomial equations, graphs and applied basic concepts of geometry, trigonometry, and statistics.

ET A175  Technical Introduction to Microcomputers  3 CR
Contact Hours: 3 + 0
Offered only at Kenai Peninsula College.
Provides the student with a survey of the field of microcomputers from a technical viewpoint. Coverage includes terminology, number systems, basic microcomputer architecture, assembly language programming, and MS/DOS operating system.

ET A180  Semiconductor Devices  4 CR
Contact Hours: 3 + 2
Prerequisites: ET A162 and ET A163.
Special Fees.
Introduces semiconductor fundamentals and parameters. Covers semiconductor physics, diode and transistor characteristics and applications. Provides methods for analyzing and troubleshooting complex semiconductor circuitry. Component coverage includes specialty diodes, multi-layer control devices, bipolar transistors, JFETs, MOSFETs, and multistage coupling devices.

ET A181  Digital Electronics  4 CR
Contact Hours: 3 + 2
Special Fees.
Presents digital electronics concepts, logic families and applications. Provides methods for analyzing and troubleshooting complex digital circuitry. Topics include binary numbers, digital logic gates, flip-flops, registers, counters, shift registers, logic interfacing, logic families, timers, analog and digital converters, and memory devices.

ET A182  Applied Integrated Circuits  2 CR
Contact Hours: 1.5 + 2
Prerequisites: ET A180.
Special Fees.
Presents the electrical characteristics and applications of the ideal operational amplifier. Topics include input and output characteristics, comparators, amplifiers, signal/function generation, active filtering and power supply regulation.

ET A183  Data Communications  1 CR
Contact Hours: 1 + 5
Prerequisites: CNT A164 and ET A165.
Presents basic data communication concepts, including history, data conversion, A/D and D/A protocol, interfacing, direction control, and multiplexing.

ET A184  Telecommunications  2 CR
Contact Hours: 1.5 + 1
Prerequisites: ET A162 and ET A163.
Presents and examines basic telecommunication and data communication concepts and equipment. Topics include history, transmission methodology, multiplexing, media, data conversion, analog-to-digital and digital-to-analog, protocols, interfacing, direction control, telecommunication equipment, switching systems, subscriber services, and distribution techniques.

ET A185  Transmitters and Receivers  3 CR
Contact Hours: 2 + 3
Prerequisites: ET A184.
Explores the methods and techniques used in transmission and reception of AM, FM, and single-sideband signals. Emphasizes antennas, transmission lines, signal propagation, transmitter and receiver circuitry, alignment and troubleshooting. Also examines communications technology including microwave, radar, satellite, mobile and cellular telephone, video, and other wireless systems.

ET A243  Programmable Logic Controllers  3 CR
Contact Hours: 3 + 0
Prerequisites: ET A126.
Offered only at Kenai Peninsula College.
Introduction of discrete input/output control including ladder diagrams and electromechanical relays. The use of programmable logic controllers to monitor and control discrete devices is the primary focus.

ET A246  Electronic Industrial Instrumentation  3 CR
Contact Hours: 3 + 0
Prerequisites: ET A245 and (MATH A101 or concurrent enrollment) and (MATH A105 or concurrent enrollment).
Offered only at Kenai Peninsula College.
Explains the methods of analog electronic signal transmission. In addition, discusses the details of several actual pieces of equipment in-depth providing practice in establishing correct interconnectors. Basic concepts used in troubleshooting this type of equipment are also introduced.

ET A280  Instrumentation and Control Processes  3 CR
Contact Hours: 2 + 3
Prerequisites: ET A180 and ET A181 and ET A182.
Special Fees.
Covers theory of measurement, control, and data acquisition. Includes instrumentation circuitry, mechanical control elements, computer control processes, sensors, transducers, IP interfacing, and applications.

ET A261  Electronic Systems Troubleshooting  2 CR
Contact Hours: 1.5 + 2
Prerequisites: ET A180 and ET A182.
Explores troubleshooting and repair techniques for electronic circuits and systems. Includes schematic use, soldering, test equipment use, and safe practices for simple and complex circuits.

ET A262  Transmitters, Receivers, and Advanced Communications  3 CR
Contact Hours: 2 + 3
Prerequisites: ET A184.
Explores the methods and techniques used in transmission and reception of AM, FM and single-sideband signals. Emphasizes antennas, transmission lines, signal propagation, transmitter and receiver circuitry, alignment and troubleshooting. Also examines communications technology including microwave, radar, satellite, mobile and cellular telephone, video, and other wireless systems.

ET A276  Independent Project  3 CR
Contact Hours: 0 + 11
Registration Restrictions: Faculty Permission; and working knowledge of TES topics.
Develops, implements, and completes a project based on a relevant technological issue. Student works closely with faculty to produce an end project and report.

ET A282  Work Study  3 CR
Contact Hours: 0 + 11
Registration Restrictions: Faculty Permission; and successful completion of 12 credits in TES program.
Grade Mode: Pass/No Pass.
Provides supervised workplace experience in industry settings. Integrates advanced level knowledge and practices to demonstrate skill competencies.

ET A291  Selected Topics in Electronics Technology  1-4 CR
Contact Hours: 1-4 + 0-12
Special Note: Prerequisites may be imposed depending on topic. May be repeated under a different topic.
Offers selected topics in electronics pertaining to state-of-the-art technology and trends. Course content is determined by current trends, new technologies, and student and employer needs.

FCS - Family & Consumer Sciences
Offered through the Community & Technical College
Allied Health Sciences Building (AHS), Room 172, 786-6494
www.uaa.alaska.edu/ctc

FCS A120  Learn to Sew  1 CR
Contact Hours: 0 + 2
Basic principles of sewing and simple clothing construction. Includes use of sewing machine, selection of fabrics and patterns, and simple construction techniques. Students must provide own sewing equipment (except sewing machine) and all patterns and fabrics for class projects.
FCS A124  Sewing Topics  1-3 CR
Contact Hours: 1-3 + 2.6  
Prerequisites: FCS A121 or FCS A122.  
Special Note: May be repeated any number of times, but a maximum of 6 credits applicable toward degree requirements.  
Flexible workshops offering variety of specialized clothing and textile skill techniques.

FD - Floral Design
Offered through the Community & Technical College  
Lucy Cuddy Hall (CUDY), Room 126, 786-4728  
www.uaa.alaska.edu/ctc/programs/eagleriver

FD A161  Floral Design I  3 CR
Contact Hours: 2 + 2  
Special Fees.  
Special Note: Appropriate for persons with personal and professional interests.  
Covers basic principles, techniques, and mechanics of floral design, flower identification and selection, and the use and care of equipment and supplies.

FD A162  Floral Design II  3 CR
Contact Hours: 2 + 2  
Prerequisites: FD A161.
Special Fees.  
Covers basic principles, techniques, and mechanics of floral design and specialty corsages using fresh plant materials. Includes pricing and cost control.

FIRE - Fire Science
Offered through the Community & Technical College  
Allied Health Sciences Building (AHS), Room 161, 786-6928  
www.uaa.alaska.edu/ctc/programs/alliedhealth/fire

FIRE A101  Principles of Emergency Services  3 CR
Contact Hours: 3 + 0  
Introduces fire protection; career opportunities in fire protection and related fields; philosophy and history of fire protection/service; fire loss analysis; organization and function of public and private protection services; fire departments as part of local government; laws and regulations affecting the fire service; fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; introduction to fire protection systems; and fire strategy and tactics.

FIRE A105  Fire Prevention  3 CR
Contact Hours: 3 + 0  
Introduces the fundamentals of the history and philosophy of fire prevention, organization, and operation of a fire prevention bureau, use of fire codes, identification and correction of fire hazards, and the relationships of fire prevention with built-in fire protection systems, fire investigation, and fire and life-safety education.

FIRE A107  Strategy and Tactics  3 CR
Contact Hours: 3 + 0  
Prerequisites: FIRE A101.
Provides an in-depth analysis of the principles of fire control through utilization of personnel, equipment, and extinguishing agents on the fire ground.

FIRE A111  Fire Administration I  3 CR
Contact Hours: 3 + 0  
Prerequisites: FIRE A101.
Special Fees.  
Introduces the organization and management of a fire department and the relationship of government agencies to the fire service. Emphasizes fire service leadership from the perspective of the company officer's role in management, leadership, personnel, planning, and communication.

FIRE A117  Rescue Practices  3 CR
Contact Hours: 3 + 0  
Prerequisites: EMT A110 or EMT A130.  
Registration Restrictions: Departmental approval  
Special Fees.  
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.  
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.

FIRE A121  Fire Behavior and Combustion  3 CR
Contact Hours: 3 + 0  
Prerequisites: MATH A105 or MATH A107 or MATH A108 or MATH A109 or MATH A172 or MATH A200 or MATH A201 or MATH A272.  
Presents the theories and fundamentals of how and why fires start, why they spread, and how they are controlled.

FIRE A123  Fire Investigation I  3 CR
Contact Hours: 3 + 0  
Prerequisites: FIRE A101 and FIRE A121.  
Introduces the fundamentals and technical knowledge needed for proper fire scene interpretations, including recognizing origin and cause, preservation of evidence and documentation, scene security, motives of the fire-setter, and types of fire causes.

FIRE A131  Firefighter I, Series I  3 CR
Contact Hours: 3 + 0  
Special Fees.  
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)  
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).

FIRE A133  Firefighter I, Series II  3 CR
Contact Hours: 2 + 2  
Prerequisites: FIRE A131.  
Special Fees.  
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)  
Presents the fundamentals and 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.

FIRE A135  Firefighter I, Series III  3 CR
Contact Hours: 2 + 2  
Prerequisites: FIRE A133.  
Special Fees.  
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)  
Presents the fundamentals and 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.

FIRE A137  Firefighter I, Series IV  3 CR
Contact Hours: 3 + 1  
Prerequisites: FIRE A135.  
Special Fees.  
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)  
Presents the fundamentals and 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.

FIRE A151  Wildland Fire Control I  3 CR
Contact Hours: 3 + 0  
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.”
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.

FIRE A155  Wildland Fire Behavior  3 CR
Contact Hours: 3 + 0  
Prerequisites: MATH A105 or MATH A107 or MATH A108 or MATH A109 or MATH A172 or MATH A200 or MATH A201 or MATH A272.  
Special Fees.  
Provides the knowledge and skills for fire behavior prediction. Introduces the manual method of fire behavior calculations. Provides an understanding of the determinants of fire behavior through studying input and how to interpret fire behavior output.
Course Descriptions

FIRE A157 Wildland Air Operations and Safety 3 CR
Contact Hours: 3 + 0
Special Fees
Introduces aircraft types and capabilities, aviation management and safety for flying in and working with agency aircraft, tactical and logistical uses of aircraft, and requirements for helicopter take-off and landing areas. The regulations and policies addressed in this course are primarily those governing federal agency and ICS operations.

FIRE A159 Wildland Fire Operations Function 3 CR
Contact Hours: 3 + 0
Prerequisites: FIRE A151.
Special Fees
Assists the structure and wildland firefighters in the wildland/urban interface tactical decision making process. Introduces the duties associated with the single resource boss position from initial dispatch through demobilization to the home unit.

FIRE A170 Occupational Safety and Health for Fire Service 3 CR
Contact Hours: 3 + 0
Introduces the basic concepts of occupational health and safety as they relate to emergency service organizations. Topics include risk evaluation and control procedures for fire stations, training sites, emergency vehicles, and emergency situations involving fire, EMS, hazardous materials, and technical rescue.

FIRE A201 Principles of Emergency Management 3 CR
Contact Hours: 3 + 0
Prerequisites: FIRE A101.
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.

FIRE A202 Fire Protection Hydraulics and Water Supply 3 CR
Contact Hours: 3 + 0
Prerequisites: FIRE A101 and FIRE A121 and [(MATH A105 or concurrent enrollment) or (MATH A107 or concurrent enrollment) or (MATH A108 or concurrent enrollment) or (MATH A109 or concurrent enrollment) or (MATH A172 or concurrent enrollment) or (MATH A200 or concurrent enrollment) or (MATH A201 or concurrent enrollment) or (MATH A272 or concurrent enrollment)].
Introduces the principles of the use of water in fire protection and the application of hydraulic principles to analyze and solve water supply problems.

FIRE A203 Hazardous Materials Chemistry I 3 CR
Contact Hours: 3 + 0
Prerequisites: FIRE A101 and FIRE A121 and [(MATH A105 or concurrent enrollment) or (MATH A107 or concurrent enrollment) or (MATH A108 or concurrent enrollment) or (MATH A109 or concurrent enrollment) or (MATH A127 or concurrent enrollment) or (MATH A200 or concurrent enrollment) or (MATH A201 or concurrent enrollment) or (MATH A272 or concurrent enrollment)].
Applies basic fire chemistry relating to the categories of hazardous materials, including problems of recognition, reactivity, and health encountered by firefighters.

FIRE A206 Building Construction for Fire Protection 3 CR
Contact Hours: 3 + 0
Prerequisites: FIRE A101 and FIRE A121.
Covers the principles of building construction that relate to fire and safety with an emphasis on firefighter safety. Demonstrates how the elements of construction and design are shown to be key factors when inspecting buildings, preplanning fire operations, and operating at emergencies.

FIRE A214 Fire Protection Systems 3 CR
Contact Hours: 3 + 0
Prerequisites: FIRE A101 and FIRE A105 and FIRE A121 and [MATH A105 or MATH A107 or MATH A108 or MATH A109 or MATH A172 or MATH A200 or MATH A201 or MATH A272].
Presents information relating to the features of design and operation of fire detection and alarm systems, heat and smoke control systems, special protection and sprinkler systems, water supply for fire protection and portable fire extinguishers.

FIRE A216 Methods of Instruction for Fire and Emergency Services 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Three years experience with a recognized/organized fire department or an emergency response organization involved in firefighting. Special Fees.
Satisfies the State requirements for both basic and advanced methods of instruction (MOI) specifically for firefighter training. Topics include instructional planning, methods and techniques of instruction, concepts of learning, communication, evaluation and testing, use of audiovisual aids and materials, roles and responsibilities of instructors, developing and modifying lesson plans, budgeting, scheduling, teaching in a high hazard environment, and managing other instructors.

FIRE A220 Legal Aspects of Emergency Services 3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A111.
Introduces the Federal, State, and local laws that regulate emergency services. Identifies national standards influencing emergency services, tort liability, and standard of care. Review of relevant court cases directly related to fire and emergency medical services.

FIRE A223 Fire Investigation II 3 CR
Contact Hours: 3 + 0
Prerequisites: FIRE A123. Special Fees
Provides advanced technical knowledge of rule of law, fire scene analysis, fire behavior, evidence collection and preservation, scene documentation, case preparation, and testifying.

FIRE A230 Fire Department Organizational Theory and Behavior 3 CR
Contact Hours: 3 + 0
Prerequisites: FIRE A101. Special Fees
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.

FREN - French

Offered through the College of Arts and Sciences
Administration/Humanities Building (ADM), Suite 287, 786-4030 www.uaa.alaska.edu/languages

FREN A101 Elementary French I 4 CR
Contact Hours: 4 + 0
Course Attributes: UAA GER Humanities Requirement. Special Fees.
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.

FREN A102 Elementary French II 4 CR
Contact Hours: 4 + 0
Prerequisites: FREN A101. Course Attributes: UAA GER Humanities Requirement. Special Fees.
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.

FREN A201 Intermediate French I 4 CR
Contact Hours: 4 + 0
Prerequisites: FREN A102. Course Attributes: UAA GER Humanities Requirement. Special Fees.
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.

FREN A202 Intermediate French II 4 CR
Contact Hours: 3 + 2
Prerequisites: FREN A201. Course Attributes: UAA GER Humanities Requirement. Special Fees.
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.
FREN A301 Advanced French I 4 CR
Contact Hours: 4 + 0
Prerequisites: FREN A202 with minimum grade of C.
Registration Restrictions: If prerequisite not met, students can gain entrance to course with departmental approval.
Course Attributes: UAA GER Humanities Requirement.
Special Fees.
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.

FREN A302 Advanced French II 4 CR
Contact Hours: 4 + 0
Prerequisites: FREN A301 with minimum grade of C.
Registration Restrictions: If prerequisite not met, students can gain entrance to course with departmental approval.
Course Attributes: UAA GER Humanities Requirement.
Special Fees.
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.

FREN A306 Advanced French Conversation and Composition 1-3 CR
Contact Hours: 1-3 + 0
Prerequisites: FREN A202.
Special Fees.
Special Note: May be offered in 1-, 2-, or 3-credit segments. Repeatable for credit with change of subtitle. Up to 3 credits may count toward a minor or major in languages with an emphasis in French.
Speaking and writing about French and Francophone countries, their peoples, customs and cultures.

FREN A310 Selected Topics in Advanced French 3 CR
Contact Hours: 3 + 0
Prerequisites: FREN A202.
Special Fees.
Special Note: May be repeated for credit with a different subtitle.
An advanced course for students interested in conversation, writing skills, cultural information about the French-speaking world. There will be a different topic each time the course is offered. Conducted in French.

FREN A432 Studies of Literature and Culture 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Reading ability in French equivalent to three years of college study.
Special Fees.
Intensive study of authors, literary movements, periods, and/or genres. Students will also analyze cultural material other than texts. The course is conducted in French and may be repeated for credit when topics vary.

GEO - Geomatics

Offered through the School of Engineering
Engineering Building (ENGR), Room 213, 786-1972
www.engr.uaa.alaska.edu/programs/geomatics

GEO A137 Principles of Mapping 3 CR
Contact Hours: 2 + 2
Registration Restrictions: Computer competency (see admission requirements) or instructor approval.
Special Note: Offered Fall Semesters.
Introduction to cartographic methods, design, and map reading. Basic map components, including projections, text, line work, and data symbolization. Projects will be completed using traditional and computer cartographic techniques. Mapping basics integral to all Geomatics courses and essential in the preparation of students from all disciplines for further mapping and GIS courses.

GEO A146 Surveying Computations 3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A108 with minimum grade of C.
Registration Restrictions: See admission requirements.
Special Fees.
Special Note: Offered Spring Semesters.
Introduction to Geomatic, subdivision, and boundary computations. Intersection of lines. Methods of adjusting Geomatic data. Design and determination of curvilinear and required areas. Adjustment of retracement surveys. Computations of circular curves. Introduction to the current industry standard hand held calculator.

GEO A155 Fundamentals of Surveying 3 CR
Contact Hours: 2 + 3
Prerequisites: MATH A108 with minimum grade of C.
Registration Restrictions: See admission requirements.
Special Fees.
Special Note: Offered Fall Semesters.
Introduction to Geomatics and survey measurement techniques, including the use of levels, theodolites, and total stations, and GPS. Methods of recording and reducing field data. Use of hand-held calculators to compute directions, survey errors, closures, adjustments, and area. Geomatics projects and field trips. Review of historical survey techniques and the Public Land Survey System. Introduction to horizontal curves.

GEO A157 Analytical and Digital Cartography 3 CR
Contact Hours: 2 + 2
Prerequisites: GEO A137.
Special Note: Offered Fall Semesters.
Introduction for Geomatics majors and non-majors to the principles of computer aided design and mapping. AutoCAD, Land Development Desktop, and class projects will be used to introduce the basics of digital cartography and provide a knowledge base essential for future Geomatics courses and career preparation.

GEO A158 Geomatics Computer Fundamentals 3 CR
Contact Hours: 2 + 2
Registration Restrictions: Computer competency (see admission requirements) or instructor approval.
Special Fees.
Special Note: Offered Spring Semesters.
Introduction to IBM compatible PCs - including both hardware and software components specifically directed to Geomatic applications. Topics covered include PC OS, word processing, spreadsheets, databases, graphing, image manipulation, text and graphic presentation, data and internet searches, HTML authoring, and resume preparation.

GEO A165 Advanced Surveying 3 CR
Contact Hours: 2 + 6
Prerequisites: GEO A155 with minimum grade of C.
Registration Restrictions: See admission requirements.
Special Fees.
Special Note: Offered Spring Semesters.

GEO A166 Advanced Surveying 3 CR
Contact Hours: 2 + 6
Prerequisites: GEO A155 with minimum grade of C.
Registration Restrictions: See admission requirements.
Special Fees.
Special Note: Offered Spring Semesters.
Methods of gathering survey data for civil surveys. Evaluation of survey data gathering methods. Geomatics applications for urban surveys. Construction staking for route surveys, small construction project. Platting and mapping techniques.

GEO A175 Elements of Photogrammetry 3 CR
Contact Hours: 2 + 2
Prerequisites: GEO A157.
Special Note: Offered Spring Semesters.
An intermediate level digital terrain cartography course for Geomatics majors and non-majors. Autodesk Land Development Desktop and CAD Overlay will be used to introduce AutoCAD Civil/Survey Software. Lectures and projects will include digital terrain modeling, alignments, cross-sections, volume computations, and provide a base graphic communications knowledge that is essential for success in future Geomatics courses and in professional employment.

GEO A248 Digital Terrain Cartography 3 CR
Contact Hours: 2 + 2
Prerequisites: GEO A157.
Special Note: Offered Spring Semesters.
Methods of gathering survey data for civil surveys. Evaluation of survey data gathering methods. Geomatics applications for urban surveys. Construction staking for route surveys, small construction project. Platting and mapping techniques.

GEO A256 Municipal and Civil Geomatics 4 CR
Contact Hours: 3 + 3
Prerequisites: MATH A200 and GEO A166.
Special Note: Offered Fall Semesters.
Methods of gathering survey data for civil surveys. Evaluation of survey data gathering methods. Geomatics applications for urban surveys. Construction staking for route surveys, small construction project. Platting and mapping techniques.

GEO A257 Elements of Photogrammetry 3 CR
Contact Hours: 2 + 2
Prerequisites: MATH A108 with minimum grade of C and GEO A157 with minimum grade of C.
Special Fees.
Special Note: Offered Fall Semesters.
Introduction to photogrammetric mapping including history, aerial cameras, optics, geometry of the aerial photograph, stereoscopes, parallax, and flight planning. Basic mathematics of photogrammetry and transformations. Techniques in the use of stereoscopes and photogrammetric plotters.
Course Descriptions

GEO A267  Boundary Law I  4 CR
Contact Hours: 4 + 0
Prerequisites: GEO A155.
Special Note: Offered Fall Semesters.
  Elements of boundary control and legal principles, boundary history, ownership, rights, interests, title and transfer of legal and real property, to positional systems, geodesy concepts, GPS site reconnaissance, instrumentation, data analysis methods, and visualization products associated with hydrographic surveying, chart publication, and related marine measurement practices of government and industry.

GEO A355  Land Development and Design  3 CR
Contact Hours: 2 + 2
Prerequisites: GEO A248 with minimum grade of C and GEO A267 with minimum grade of C.

GEO A358  Programming for Digital Cartography  3 CR
Contact Hours: 2 + 2
Prerequisites: ES A201 with minimum grade of C and GEO A157 with minimum grade of C.

GEO A359  Geodesy and Map Projections  3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A200.

GEO A365  Geomatic Adjustment and Analysis  4 CR
Contact Hours: 4 + 0
Prerequisites: MATH A202 and GEO A359.

GEO A366  Hydrographic Surveying  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Upper class undergraduate or graduate standing in either Geomatics or Civil Engineering, or instructor’s permission.
  Provides students with knowledge of and skills to apply physical principles, instrumentation, data analysis methods, and visualization products associated with hydrographic surveying, chart publication, and related marine measurement practices of government and industry.

GEO A435  Geomatics and Civil Design  3 CR
Contact Hours: 2 + 3
Prerequisites: MATH A200 with minimum grade of C and GEO A166 with minimum grade of C.
  Methods of gathering survey data for civil design. Geodesy overview. Global positioning systems (GPS) for positioning and direction. Elements of highway design and location, including horizontal, spiral, and vertical curves, super elevation, and earthwork. Geomatic design and location of utility systems. Geodetic and state plane coordinate systems. Elements of geographic information systems.

GEO A457  Boundary Law II  4 CR
Contact Hours: 4 + 0
Prerequisites: GEO A267 and ENGL A212.
  Procedures and sources for legal research, Alaska Easement Law, Alaska State Statutes and Administrative Code applicable to land surveying, current BLM procedures and regulations, surveying plating procedures, Defective Survey Act, lotted sections, floodplains and wetlands, water boundary case law, ALTA/ASCM survey procedures, writing and interpreting legal descriptions.

GEO A459  Geodetic Geomatics  3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A202 and GEO A359.
  Special Note: Offered Alternate Spring Semesters.

GEO A460  Geomatics Design Project  3 CR
Contact Hours: 2 + 2
Prerequisites: GEO A355 with minimum grade of C and GEO A359 with minimum grade of C.
  Course Attributes: UAA GER Integrative Capstone.
  Special Fees.
  Projects in geomatics. Research, design, data compilation, analyses, and mapping for a Geomatics project. Professional standards and ethical concerns for geomaticians.

GEO A466  Geopositioning  4 CR
Contact Hours: 3 + 3
Prerequisites: MATH A200 and GEO A359.
  Registration Restrictions: Computer competency (see admissions requirements).
  Special Fees.
  Special Note: Offered Spring Semesters.
  Introduction to positional systems, geodesy concepts, GPS site reconnaissance, network planning, data collection using static to real-time kinematic positioning methods, data processing, network adjustment, analysis of advantages and limitations of geopositioning technologies.

GEO A467  Analytical and Digital Photogrammetry  3 CR
Contact Hours: 2 + 2
Prerequisites: GEO A257.
  Special Fees.
  Special Note: Offered Alternate Spring Semesters.

GEO A490  Selected Advanced Topics in Geomatics  1-6 CR
Contact Hours: 1-6 + 2-12
Registration Restrictions: Faculty permission.
  Advanced theoretical or practical concepts in geomatics. Specific course content is determined by student needs, developments in technology, or licensing requirements.

GEOG - Geography

Offered through the College of Arts and Sciences
Beatrice McDonald Hall (BMH), Room 213, 786-6049
www.uaa.alaska.edu/ges

GEOG A101  Local Places/Global Regions: An Introduction to Geography  3 CR
Contact Hours: 3 + 0
Crosslisted with: INTL A101.
  Course Attributes: UAA GER Social Sciences Requirement.
  Registration Restrictions: Faculty permission.
  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.

GEOG A200  Alaskan Geography  3 CR
Contact Hours: 3 + 0
  Introductory geographical survey of Alaska. Emphasis will be on the high latitude Alaskan lands and their potential for future development.
GEOG A211  Earth Systems: The Science and Geography of the Natural Environment  3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A111 and MATH A105.
Crosslisted with: ENVI A211.
Course Attributes: UAA GER Natural Sciences Requirement.
Special Note: A student may apply no more than 3 credits from ENVI A202, GEOG A205, ENVK A211, or GEOG A211 toward the graduation requirements for a baccalaureate degree.

The earth and its geography are discussed as a system of systems with feedbacks and interrelationships. Study of natural systems, cycles, and flows and natural and human induced changes in these systems. Topics include basic ecology, weather and climate, resources and resource stress (air, water, oceans, soils), natural hazards. Uses local, Arctic, and other regional examples.

GEOG A211L  Earth Systems: The Science and Geography of the Natural Environment Laboratory  1 CR
Contact Hours: 0 + 3
Prerequisites: ENGL A111 and [ENVI A211 or GEOG A211] and [MATH A105 or MATH A107 or MATH A108 or MATH A109 or MATH A172 or MATH A200 or MATH A201 or MATH A272].
Crosslisted with: ENVI A211L.
Course Attributes: UAA GER Natural Sci Lab Only.
Special Fees.
Special Note: A student may apply no more than 1 credit from GEOG A205L, ENVI A211L, or GEOG A211L toward the graduation requirements for a baccalaureate degree.

Laboratory introducing students to the systematic acquisition of data and its analysis and interpretation in a manner consistent with the disciplines of environmental studies and geography. 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, weather and climate, resources and resource stress (air, water, oceans, soils), and natural hazards.

GEOG A344  The Slavic World  3 CR
Contact Hours: 3 + 0
Prerequisites: GEOG A101 or INTL A101.

Origin, diffusion, and developmental histories of the Slavic peoples. Focus on the geography of Central East Europe, the realm inhabited by the Eastern (Russians, Belarussians, and Ukrainians), Western (Polish, Czechs, and Slovaks), and Southern Slavs (Bulgarians and peoples of the former Yugoslav). Integration of region into the European Union and continued economic and political transition. Involvement of non-Slavic groups in the region also given consideration.

GEOG A345  Across This Land: The Historical Geography of North America  3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A131.
Crosslisted with: HIST A345.
Special Note: GEOG A205 recommended.

Explores the European settlement of North America (U.S. and Canada), the impact of geography on this settlement, and the impress of culture and political process on the land. A significant part of the course compares and contrasts the American and Canadian geographic experience and the creation of distinct regional cultures.

GEOG A390  Field Studies in Geography  1-3 CR
Contact Hours: 1-2 + 3-6
Registration Restrictions: Instructor's permission and a designated GEOG course.
Special Note: May be repeated twice with change in subtitle.

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.

GEOG A390A  Topics in Global Geography  3 CR
Contact Hours: 3 + 0
Prerequisites: GEOG A101 or INTL A101.
Class Standing Restriction: Must be Junior.
Registration Restrictions: Completion of Tier 1 (basic college-level skills) courses and junior standing.
Course Attributes: UAA GER Integrative Capstone.
Special Note: May be repeated twice with change of subtitle.

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.

GEOG A415  Anglo-Saxons and Vikings: History & Geography in Early Medieval North Atlantic  3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A101.
Crosslisted with: HIST A415.
Special Note: GEOG A205 recommended.

A study of Anglo-Saxon and Viking society, territorial expansion, and settlement from the 7th - 11th centuries. Focus on historical impacts on the human landscape, political arrangement, and the effects of climate and environmental modification on population growth and migration.

GEOG A443  Northwest Passage: The Changing Canadian North  3 CR
Contact Hours: 3 + 0
Prerequisites: GEOG A101 or INTL A101 or INTL A315.

Geography of and current issues in the Canadian North. Historical and political development of the Canadian North as a region. Current issues to include the sovereignty of the Northwest Passage, environmental impacts of mineral and other economic development, challenges to subsistence activities, cultural change and social challenges, and climate change and its overarching impact on the region.

GEOG A447  The Silk Road: Ideological, Cultural, and Economic Travels through Central Eurasia  3 CR
Contact Hours: 3 + 0
Prerequisites: GEOG A101 or INTL A101.

Study of Central Asian cultures and histories in the context of the Silk Road. The extended region as a mélange of cultural identities and histories, political economies, and ideological struggles. The interaction of the newly formed republics with China, Turkey, and Iran is also a significant concern of the course.

GEOL - Geological Sciences

Offered through the College of Arts and Sciences
ConocoPhillips IntegratedSciences Building (CPSB), Room 101, 786-4940
http://geology.uaa.alaska.edu

GEOL A104  Natural History of Alaska  3 CR
Contact Hours: 3 + 0
Crosslisted with: BIOL A104.
Special Note: Acceptable as elective credit only.
Surveys important biological, physical and geological features of Alaska, and their development over time. Includes study of major landforms, ecosystems, wildlife and people. Local area will be emphasized.

GEOL A111  Physical Geology  4 CR
Contact Hours: 3 + 3
Registration Restrictions: MATH A055 or higher
Course Attributes: UAA GER Natural Science w/ Lab.
Special Fees.
Introduction to physical geology. Study of earth, its materials, and processes affecting changes on and within. Laboratory training in use of topographic maps, and recognition of common rocks and minerals.

GEOL A115  Environmental Geology  3 CR
Contact Hours: 3 + 0
Registration Restrictions: MATH A055 or higher
Course Attributes: UAA GER Natural Sciences Requirement.

An introduction to the study of applied environmental geography 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.

GEOL A115L  Environmental Geology Laboratory  1 CR
Contact Hours: 0 + 3
Prerequisites: (GEOL A115 or concurrent enrollment).
Registration Restrictions: MATH A055 or higher
Course Attributes: UAA GER Natural Sciences Lab Only.
Special Fees.
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.

GEOL A178  Fundamentals of Oceanography  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Placement into MATH A105 or higher.
Crosslisted with: BIOL A178.
Course Attributes: UAA GER Natural Sciences Requirement.

Principles of oceanography, with emphasis on the ocean’s biological, physical, chemical, and geological processes, and how ocean processes affect the atmosphere.
GEOL A179  Fundamentals of Oceanography  1 CR
Contact Hours: 0 + 3
Registration Restrictions: Placement into MATH A105 or higher.
Crosslisted with: BIOL A179.
Course Attributes: UAA GER Natural Sciences Lab Only.
Special Fees.
Laboratory exercises designed to illustrate principles and concepts developed in BIOL A178/GEOL A178.

GEOL A190  Introductory Topics in Geology  1-3 CR
Contact Hours: 1-3 + 0
Special Note: May be repeated with change of topic.
Introductory study of a selected topic in geology.

GEOL A221  Historical Geology  4 CR
Contact Hours: 3 + 3
Prerequisites: GEOL A111.
Course Attributes: UAA GER Natural Science w/ Lab.
Special Fees.
History of earth through geologic time, emphasizing North America. 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.

GEOL A310  Professional Practices in Geology  3 CR
Contact Hours: 3 + 0
Prerequisites: GEOL A221 and [ENGL A211 or ENGL A212 or ENGL A213 or ENGL A214].
Major Restriction: Must be Geology major.
Registration Restrictions: BSGS majors only.
Introduction to workplace ethics, responsibilities, and expectations of geologists in a professional role. Practice in research methods, writing, and presentation techniques in the geosciences. Research design, proposal writing, resume and job applications, scientific writing, critical review, and oral presentation techniques.

GEOL A320  Volcanology  3 CR
Contact Hours: 3 + 0
Prerequisites: GEOL A221.
Special Fees.
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.

GEOL A321  Mineralogy  4 CR
Contact Hours: 3 + 3
Prerequisites: GEOL A221 and CHEM A105 and [MATH A105 or MATH A107 or MATH A108 or MATH A109 or MATH A172 or MATH A200 or MATH A201 or MATH A272].
Special Fees.
Crystallography including external form and internal order. Crystal chemistry, atomic structure, crystal structure, and compositional variation, nature and origin of physical properties of minerals. Mineral association, occurrence, and paragenesis. Introduction to X-ray crystallography and optical mineralogy. Laboratory includes determinative crystallography, optical mineralogy and systematic determinative mineralogy.

GEOL A322  Igneous and Metamorphic Petrology  4 CR
Contact Hours: 3 + 3
Prerequisites: GEOL A321.
Special Fees.
Identification and classification of igneous and metamorphic rocks, interpretation of textures, structures, and mineralogy of rocks; 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.

GEOL A325  Geology of Ore Deposits  3 CR
Contact Hours: 3 + 0
Prerequisites: GEOL A322.
Special Fees.
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.
Contact Hours: 3 + 0  
Prerequisites: CHEM A106 and GEOL A360.  
May be stacked with: GEOL A465.

Special Fees.

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.

GEOL A475  
Environmental Geophysics  
Contact Hours: 3 + 0  
Prerequisites: GEOL A111 and PHYS A124.

Special Fees.

Introduction to principles and application of environmental geophysics. Emphasis on shallow geophysical techniques useful to investigate environmental problems associated with near surface geologic settings. Includes surveys and applications of potential field, electrical, electromagnetic, and seismic methods.

GEOL A480  
Geologic Field Methods  
Contact Hours: 0 + 9  
Prerequisites: GEOL A322 and GEOL A335 and GEOL A452.

Special Fees.

Specific examples of environmental geochemistry  
including construction of bedrock geologic maps and cross sections. Emphasis on field note taking, geologic mapping, stratigraphic section measurement, and construction. Students required to complete several field projects, including written summary reports.

GEOL A481  
Alaskan Field Investigations  
Contact Hours: 0 + 9  
Prerequisites: GEOL A350 and GEOL A480.

Special Fees.

Specific examples of environmental geochemistry  
including construction of bedrock geologic maps and cross sections. Emphasis on field note taking, geologic mapping, stratigraphic section measurement, and construction. Students required to complete several field projects, including written summary reports.

GEOL A482  
Alaskan Field Investigations  
Contact Hours: 0 + 9  
Prerequisites: GEOL A480.

Special Fees.

Specific examples of environmental geochemistry  
including construction of bedrock geologic maps and cross sections. Emphasis on field note taking, geologic mapping, stratigraphic section measurement, and construction. Students required to complete several field projects, including written summary reports.

GEOL A483  
Advanced Topics in Geology  
Contact Hours: 1-4 + 0  
Prerequisites: GEOL A221.

Special Fees.

Specific examples of environmental geochemistry  
including construction of bedrock geologic maps and cross sections. Emphasis on field note taking, geologic mapping, stratigraphic section measurement, and construction. Students required to complete several field projects, including written summary reports.

GEOL A490  
Student Research  
Contact Hours: 1-3 + 0  
Registration Restrictions: Faculty permission.

Special Fees.

Specific examples of environmental geochemistry  
including construction of bedrock geologic maps and cross sections. Emphasis on field note taking, geologic mapping, stratigraphic section measurement, and construction. Students required to complete several field projects, including written summary reports.

GEOL A499  
Senior Thesis  
Contact Hours: 0 + 9  
Registration Restrictions: Senior standing. Faculty permission.

Special Fees.

Specific examples of environmental geochemistry  
including construction of bedrock geologic maps and cross sections. Emphasis on field note taking, geologic mapping, stratigraphic section measurement, and construction. Students required to complete several field projects, including written summary reports.

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Course Descriptions

GEOL A665  Isotope Geochemistry  3 CR
Contact Hours: 3 + 0
Prerequisites: CHEM A106 and GEOL A360.
Registration Restrictions: Graduate standing
May be stacked with: GEOL A465.
Special Fees.
- 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.

GEOL A690  Graduate Topics in Geology  1-4 CR
Contact Hours: 1-4 + 0
Special Note: May be repeated with change of topic.
- Intensive studies on narrowly defined topics in Geological Sciences. Emphasis on content as well as instructional techniques.

GEOL A698  Directed Research  1-6 CR
Contact Hours: 0 + 3-18
Registration Restrictions: Graduate standing and permission of thesis advisor.
- Thesis-specific research for interdisciplinary M.S. with emphasis in Geological Sciences. Research topic must be approved by thesis advisor and committee.

GER - German

Offered through the College of Arts and Sciences
Administration/Humanities Building (ADM) Suite 287, 786-4030
www.uaa.alaska.edu/languages

GER A101  Elementary German I  4 CR
Contact Hours: 4 + 0
Course Attributes: UAA GER Humanities Requirement.
- 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.

GER A102  Elementary German II  4 CR
Contact Hours: 4 + 0
Prerequisites: GER A101.
Course Attributes: UAA GER Humanities Requirement.
Special Fees.
- 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.

GER A105  Conversational Skills Maintenance I  1 CR
Contact Hours: 0 + 2
Registration Restrictions: Proficiency as after one semester of college-level or one year of high school study in German.
Grade Mode: Pass/No Pass.
May be stacked with: GER A205 and GER A305.
Special Fees.
- 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.

GER A201  Intermediate German I  4 CR
Contact Hours: 4 + 0
Prerequisites: GER A102.
Course Attributes: UAA GER Humanities Requirement.
Special Fees.
- 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.

GER A202  Intermediate German II  4 CR
Contact Hours: 4 + 0
Prerequisites: GER A201.
Course Attributes: UAA GER Humanities Requirement.
Special Fees.
- 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.

GER A205  Conversational Skills Maintenance II  1 CR
Contact Hours: 0 + 2
Registration Restrictions: Proficiency as after two semesters of college-level or two years of high school study in German.
Grade Mode: Pass/No Pass.
May be stacked with: GER A105 and GER A305.
Special Fees.
- 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.

GER A301  Advanced German I  4 CR
Contact Hours: 4 + 0
Prerequisites: GER A202 with minimum grade of C.
Registration Restrictions: If prerequisite not met, students can gain entrance to course with departmental approval.
Course Attributes: UAA GER Humanities Requirement.
Special Fees.
- 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.

GER A302  Advanced German II  4 CR
Contact Hours: 4 + 0
Prerequisites: GER A301 with minimum grade of C.
Registration Restrictions: If prerequisite not met, students can gain entrance to course with departmental approval.
Course Attributes: UAA GER Humanities Requirement.
Special Fees.
- 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.

GER A305  Conversational Skills Maintenance III  1 CR
Contact Hours: 0 + 2
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.
Special Fees.
- A maintenance and skills enhancement course at the advanced level, designed primarily to help students of German retain and to consolidate what they have learned. With the focus on oral communication, the course emphasizes speaking, listening comprehension and vocabulary building.

GER A310  Selected Topics in Advanced German  3 CR
Contact Hours: 3 + 0
Prerequisites: GER A202.
Special Fees.
- May be repeated once for credit.
- An advanced course for students interested in conversational practice, writing skills, and cultural information about the German-speaking world. There will be a different topic each time the course is offered, e.g., Austria, Germany today, Switzerland, contemporary women, conversation and composition, current events, film, and the media. Conducted in German.

GER A490  Selected Topics in German Literature  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Three years of college German or equivalent. Special Fees.
Special Note: Will be offered alternate semesters or years. May be repeated for credit if topic varies.
- 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. Conducted in German.
GIS - Geographic Information Systems

Offered through the School of Engineering
Engineering Building (ENGR), Room 201, 786-1900
www.engr.uaa.alaska.edu

GIS A123  Introduction to Geographic Information Systems (GIS)  1 CR
Contact Hours: 1 + .5
Registration Restrictions: Instructor approval.
Grade Mode: Pass/No Pass.
Special Fees.
Introduces key aspects of Geographic Information Systems (GIS). Basic data structures and functionalities will be explored. Introduction to software interface. Discussion of maps, coordinate systems, and metadata. Students will gain a brief working knowledge of a GIS.

GIS A124  Introduction to GIS and Remote Sensing  1 CR
Contact Hours: 1 + .5
Registration Restrictions: Instructor approval.
Grade Mode: Pass/No Pass.
Special Fees.
Introduces the integration of Geographic Information Systems (GIS) and Remote Sensing. Image data will be imported into a GIS and analytical applications will be explored.

GIS A125  GPS for GIS  1 CR
Contact Hours: 1 + 0
Registration Restrictions: Instructor approval.
Grade Mode: Pass/No Pass.
Special Fees.
Introduces the utility of Global Positioning Systems (GPS) and GPS dataloggers for the collection of accurate locations and other data during field operations, and the downloading and use of the GPS data in a Geographic Information System (GIS).

GIS A127  Introduction to Metadata for GIS  1 CR
Contact Hours: 1 + 0
Registration Restrictions: Instructor approval.
Grade Mode: Pass/No Pass.
Special Fees.
Introduces key aspects of GIS metadata, or the “data about data.” Topics include reading and writing metadata and understanding metadata standards and tools.

GIS A268  Elements of Geographic Information Systems (GIS)  4 CR
Contact Hours: 3 + 2
Registration Restrictions: Computer competency (see admission requirements) or instructor approval.
Special Fees.
Special Note: Offered Fall and Spring Semesters.
Introduction to basic concepts of GIS including common uses and technical concepts such as functionalities, data structures (raster and vector), data sources, metadata, databases, coordinate systems, geocoding, and spatial analysis. Investigation of system implementation, management, accuracy, and legal issues. Application of GIS analysis functions and standard query languages. Application of GIS to real-world problems.

GIS A295  Internship in Geographic Information Systems I  3 CR
Contact Hours: 0 + 15
Prerequisites: GIS A268 with minimum grade of C.
Grade Mode: Pass/No Pass.
Special Fees.
Enter-level professional experience in geographic information systems through an internship with a local employer. Typical entry-level tasks to be conducted for employer include: data entry, data coding and cleaning, importing and exporting data, creation of annotation, and map compilation.

GIS A366  Spatial Information Analysis and Modeling  3 CR
Contact Hours: 2 + 2
Prerequisites: GIS A268 with minimum grade of C.

GIS A367  GIS and Remote Sensing  3 CR
Contact Hours: 2 + 2
Prerequisites: GEO A167 with minimum grade of C and GIS A268 with minimum grade of C.
Special Fees.
Develops the students’ ability to use remotely sensed data within the framework of GIS. Covers basic physics theory required for the use of remotely sensing technology. Includes practical applications of the science using remotely sensed data, including the use of industry standard GIS software packages.

GIS A369  Land Information Systems  3 CR
Contact Hours: 2 + 2
Prerequisites: GIS A268 with minimum grade of C.
History and philosophy of land, surveying, and land information systems in North America and other regions. Land data systems. Overview of methods for describing and interpreting land descriptions as well as data acquisition, methods, design, and applications for LIS. Issues of accuracy assessment, public lands, and information.

GIS A370  GIS and Remote Sensing for Natural Resources  3 CR
Contact Hours: 2 + 2
Prerequisites: GEO A167 with minimum grade of C and GIS A367 with minimum grade of C.
Special Fees.
An investigation of natural resources and ecosystem management and the application of geomatic technologies for their assessment and interpretation. Data gathered from a variety of sources, including remote sensing, ground truthing, GPS, and databases, will be combined into a GIS and evaluated with image analysis software to explore management and land use planning strategies. Environmental impact assessments, environmental modeling, and rapid ecological assessment (REA) in decision making for natural resource planning and management.

GIS A375  GIS and Public Health  3 CR
Contact Hours: 2 + 2
Prerequisites: GIS A268 with minimum grade of C.
Special Fees.
Examines the use of geographic information systems (GIS) in the analysis of public health data. Students will develop GIS and cartographic skills through lectures, class work, and case studies, and specifically learn GIS operations that are essential in public health investigations and research.

GIS A433  GIS and the Marine Environment  3 CR
Contact Hours: 2 + 2
Prerequisites: GIS A268 with minimum grade of C and GIS A366 with minimum grade of C.
Investigation and integration of the physical, biological, political, and cultural aspects of the oceans, seas, and coastal zones, which comprise over 70% of the Earth’s surface. The essential processes, theories, and information necessary to apply Geomatics technologies to the seas. The application of Geographic Information Systems (GIS) mapping and analyses to marine environments.

GIS A458  Design and Management of Spatial Data  3 CR
Contact Hours: 2 + 2
Prerequisites: GIS A366 with minimum grade of C.
Spatial database system philosophy and concepts including decision making criteria, design, planning, implementation, and management. Discussion of spatial data standards, legal issues, and national spatial data policies. Project implementation and management.

GIS A460  GIS Senior Project  3 CR
Contact Hours: 0 + 9
Registration Restrictions: Students seeking a Bachelor of Science in Geomatics need senior standing in Geomatics program with all 300-level courses completed or instructor approval. Students seeking a Certificate in GIS must complete all core classes or instructor approval.
Special Fees.
Senior project in GIS (geographic information systems). Research, design, data compilation, analyses, and mapping. Professional standards and ethical concerns for GIS professionals.

GIS A468  Integration of Geomatic Technologies  3 CR
Contact Hours: 2 + 2
Prerequisites: GIS A268 with minimum grade of C and GEO A167 with minimum grade of C.
Integration of geomatic technologies: Global Positioning Systems (GPS), remote sensing, digital photogrammetry, and image processing for data acquisition and compilation of digital databases for Geographic Information Systems, mapping, and other special studies.

GIS A470  GIS for Facility Management and Transportation Systems  3 CR
Contact Hours: 2 + 2
Prerequisites: GIS A366 with minimum grade of C.
Facility management using GIS including dispatching, inventory, and maintenance. System design for industry: Data collection techniques and integration. GIS facility management applications including utilities (water, waste water, electricity, gas, telephone), airports, military installations, transportation systems, IT systems, property, and other building systems.
Course Descriptions

GIS A490: Selected Advanced Topics in GIS 1-6 CR
Contact Hours: 1-6 + 0
Registration Restrictions: Instructor approval.
Special Fees.
Advanced theoretical or practical concepts in GIS. Specific course content is determined by student needs, program needs, and developments in technology.

GIS A495: Internship in Geographic Information Systems II 3 CR
Contact Hours: 0 + 15
Prerequisites: GIS A268 with minimum grade of C and GIS A366 with minimum grade of C.
Grade Mode: Pass/No Pass.
Special Fees.
Advanced professional experience in geographic information systems through an internship with a local employer. Typical tasks to be conducted for employer include: data entry, data coding and cleaning, importing and exporting data, creation of annotation, georeferencing, rubbersheeting, spatial analyses, documentation of metadata, and map compilation.

GUID - Guidance

Offered through the Advising and Testing Center
University Center (UC), Room 112, 786-4500
www.uaa.alaska.edu/advising-testing

GUID A101: Introduction to Peer Advising 3 CR
Contact Hours: 3 + 0
Introduction to the peer advising model with emphasis on the information dissemination and paraprofessional counseling aspects. This course is the training class for the peer advising program.

GUID A104: Student Association Leadership I 1-3 CR
Contact Hours: 2 + 2
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: Survival Skills for College Students 3 CR
Contact Hours: 3 + 0
Special Fees.
Designed to increase student skills needed to reach educational objectives. Includes memory techniques, time management, library skills, lecture notes, goal setting and test taking. Techniques, skills, hints, aids, resources, ideas, methods and suggestions for student survival in college.

GUID A150A: Survival Skills/College 1 CR
Contact Hours: 1 + 0
Grade Mode: Pass/No Pass.
Offered only at Kenai Peninsula College.
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.

HCA - Health Care Assisting

Offered through Kenai Peninsula College
34820 College Drive, Soldotna, Alaska 99669, (907) 262-0330
www.kpc.alaska.edu

HCA A103: Personal Care Attendant 4 CR
Contact Hours: 2.5 + 3
Special Fees.
Special Note: Current immunizations, TB testing, and current CPR/First Aid certification are required for completion of the course.
Special Note: Upon successful completion, students are eligible to apply for a State of Alaska Personal Care Attendant (PCA) exam. Students successfully completing the exam are awarded a state-provided certification for PCA training.
Introduces basic personal care assisting skills and knowledge. Prepares entry-level health care workers to provide care in homes and facilities, and to become efficient health care team members.

HCA A105: Certified Nurse Aide 6-8 CR
Contact Hours: 4 + 6-8
Registration Restrictions: English placement: PRPE A086 or higher; Math placement: MATH A055 or higher.
Special Fees.
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.

HIST - History

Offered through the College of Arts and Sciences
Administration/Humanities Building (ADM), Room 147, 786-1539
www.uaa.alaska.edu/history

HIST A101: Western Civilization I 3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Humanities Requirement.
A survey of the developments in Western Civilization from its origins in the ancient Near East to 1650. The major social, political, economic, intellectual and cultural characteristics will be emphasized.

HIST A102: Western Civilization II 3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Humanities Requirement.
A survey of the developments in Western Civilization from 1650 to the present. The major social, political, economic, intellectual and cultural characteristics will be emphasized.

HIST A121: East Asian Civilization I 3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Humanities Requirement.
Provides a broad understanding of the historical, cultural, and social development of Chinese, Japanese, and Korean civilization from their prehistoric origins through approximately 1600 (the decline of the Ming Dynasty in China, the successful unification of Japan under the Tokugawa, and the end of the Japanese invasions of Korea).

HIST A122: East Asian Civilization II 3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Humanities Requirement.
Provides a broad understanding of the historical, cultural, and social development of East Asian civilization from approximately 1600 (the rise of the Qing Dynasty in China, the successful unification of Japan under the Tokugawa, and the revival of the Yi Dynasty in Korea) through the twentieth century.

HIST A131: History of United States I 3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Humanities Requirement.
A chronological overview of United States history from Reconstruction to the present. Examines social, political, and economic forces that have shaped the country during the period. Students will be introduced to primary sources and interpretations in American history.

HIST A132: History of United States II 3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Humanities Requirement.
A chronological overview of United States history from Reconstruction to the present. Examines social, political, and economic forces that have shaped the country during the period. Students will be introduced to primary sources and interpretations in American history.

HIST A225: Ancient History 3 CR
Contact Hours: 3 + 0
Registration Restrictions: HIST A101 recommended.
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.

HIST A226: Medieval History 3 CR
Contact Hours: 3 + 0
Registration Restrictions: HIST A101 recommended.
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.

HIST A237: American Civil War 3 CR
Contact Hours: 3 + 0
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 CR
Contact Hours: 3 + 0
African-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.
### Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>HIST A239</td>
<td>Black History II</td>
<td>3 CR</td>
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<tr>
<td></td>
<td>Contact Hours: 3 + 0</td>
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<td></td>
<td>Prerequisites: HIST A102</td>
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<tr>
<td></td>
<td>Afro-American history from 1865 to present. Impact of technology, changing social and economic conditions, and international scene on Black Americans. Consideration of leaders, organizations, concepts and issues that affect blacks and society at large.</td>
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<tr>
<td>HIST A244</td>
<td>Studies in Film History</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td></td>
<td>May be stacked with: HIST A444.</td>
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<td></td>
<td>Special Fees.</td>
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<td></td>
<td>Special Note: May be repeated once for credit with a change of subtitle.</td>
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<td></td>
<td>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.</td>
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<tr>
<td>HIST A257A</td>
<td>The Alaska-Yukon Gold Rush</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>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.</td>
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<tr>
<td>HIST A261</td>
<td>Russian History</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td></td>
<td>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.</td>
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<tr>
<td>HIST A306</td>
<td>The Roman Empire</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td></td>
<td>Prerequisites: HIST A101 and HIST A225.</td>
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<td></td>
<td>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.</td>
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<tr>
<td>HIST A310</td>
<td>Renaissance/Reformation Europe</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td></td>
<td>Prerequisites: HIST A101.</td>
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<td></td>
<td>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.</td>
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<tr>
<td>HIST A312</td>
<td>Early Modern Europe: 1600-1789</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: HIST A102.</td>
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<td>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.</td>
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<tr>
<td>HIST A314</td>
<td>Nineteenth Century Europe</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td></td>
<td>Prerequisites: HIST A102.</td>
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<td>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 siecle culture; and daily life.</td>
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<tr>
<td>HIST A316</td>
<td>Twentieth Century Europe</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: HIST A102.</td>
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<td>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 globalization—and how both elites and ordinary people responded to a changing world.</td>
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<tr>
<td>HIST A320</td>
<td>The Rise, Fall, and Reinvention of the Samurai</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: HIST A212 and HIST A231.</td>
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<td>An analysis of 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 the “spirit of the samurai” was used in Japan’s modernization.</td>
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<tr>
<td>HIST A321</td>
<td>Modern China</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td></td>
<td>Prerequisites: HIST A121 or HIST A122.</td>
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<td>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.</td>
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<tr>
<td>HIST A322</td>
<td>Modern Japan</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: HIST A121 or HIST A122.</td>
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<td>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.</td>
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<tr>
<td>HIST A323</td>
<td>Communist China</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: HIST A122 and HIST A321.</td>
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<td>Analysis of the historical origins, rise, struggles, and eventual triumph of the Chinese Communist Party in taking control of China in 1949. Examines the wrenching upheavals of the People’s Republic under Mao Zedong and its transformation under Deng Xiaoping from 1949 through the 1990s. The principal focus will be on the constant reinvention of Chinese communism to face perceived challenges in China’s modernization, sometimes with spectacular results and at other times with disastrous consequences.</td>
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<tr>
<td>HIST A325</td>
<td>Northeast Asia in 21st Century</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Registration Restrictions: Junior standing. Completion of GER Tier 1 (basic college-level skills) courses. Six credits of Tier 2 GEOG, HIST, or PS courses. Crosslisted with: INTL A325 and PS A325. Course Attributes: UAA GER Integrative Capstone.</td>
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<td>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.</td>
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<tr>
<td>HIST A330</td>
<td>Russia in East Asia</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: HIST A102 or HIST A121.</td>
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<td>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 geo-political interests in the region.</td>
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<tr>
<td>HIST A341</td>
<td>History of Alaska</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: HIST A132.</td>
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<td></td>
<td>Registration Restrictions: HIST A132 equivalent accepted with instructor permission. Course Attributes: UAA GER Humanities Requirement. 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.</td>
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<tr>
<td>HIST A345</td>
<td>Across This Land: The Historical Geography of North America</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: HIST A131.</td>
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<td>Crosslisted with: GEOG A345.</td>
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<td>Special Note: GEOG A205 recommended.</td>
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<td>Explores the European settlement of North America (U.S. and Canada), the impact of geography on this settlement, and the impress of culture and political process on the land. A significant part of the course compares and contrasts the American and Canadian geographic experience and the creation of distinct regional cultures.</td>
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<tr>
<td>HIST A355</td>
<td>Major Themes in US History</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: HIST A131 and HIST A132.</td>
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<td>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.</td>
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<tr>
<td>HIST A360</td>
<td>Modern Economic History</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: HIST A102 and ECON A201.</td>
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<td>Crosslisted with: ECON A360.</td>
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<td>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.</td>
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</tbody>
</table>
### Course Descriptions

**HIST A377**  
**Historiography: The Uses and Abuses of History**  
Contact Hours: 3 + 0  
Prerequisites: [HIST A101 and HIST A102] or [HIST A131 and HIST A132].
  
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.

**HIST A381**  
**American Women’s History to 1870**  
Contact Hours: 3 + 0  
Prerequisites: HIST A131.
  
Explores the nature of American women’s history and how women’s lives in North America have changed over time. Major topics include the impact of the economy, family, sexuality, the community, and politics from the 17th century through the Civil War, and the rise of the women’s movement.

**HIST A382**  
**American Women’s History Since 1870**  
Contact Hours: 3 + 0  
Prerequisites: HIST A132.
  
Explores the nature of American women’s history from the Civil War to the present focusing on the political, economic, and social conditions of the past one hundred years which have shaped women’s lives in the U.S. Readings will center on autobiographical sources as well as scholarly articles and books. The class will be run as a seminar with introductory lectures or comments for each weekly topic.

**HIST A390A**  
**Themes in World History**  
Contact Hours: 3 + 0  
Prerequisites: GEOG A101 and [HIST A101 or HIST A102 or HIST A121 or HIST A122 or HIST A131 or HIST A132].
  
Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses and junior standing.
  
Course Attributes: UAA GER Integrative Capstone.
  
Special Note: May be repeated once for credit with a change of subtitle.

**HIST A401**  
**The History of Warfare**  
Contact Hours: 3 + 0  
Prerequisites: HIST A101 and HIST A102.
  
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.

**HIST A402**  
**The Second World War**  
Contact Hours: 3 + 0  
Prerequisites: HIST A102 or HIST A122.
  
The origins of the war in Europe and Asia. The grand strategies of the belligerents, the principal military operations, the relationship between science and war, and the mobilization of societies and economies for total war. Wartime diplomacy and the postwar settlements are also emphasized.

**HIST A411**  
**History of Modern Germany**  
Contact Hours: 3 + 0  
Prerequisites: HIST A102.
  
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 reunified Germany.

**HIST A415**  
**Anglo-Saxons and Vikings: History & Geography in Early Medieval North Atlantic**  
Contact Hours: 3 + 0  
Prerequisites: HIST A101.
  
Crosslisted with: GEOG A415.
  
Special Note: GEOG A205 recommended.
  
A study of Anglo-Saxon and Viking society, territorial expansion, and settlement from the 7th-11th centuries. Focus on historical impacts on the human landscape, political arrangement, and the effects of climate and environmental modification on population growth and migration.

**HIST A418**  
**Tudor and Stuart England**  
Contact Hours: 3 + 0  
Prerequisites: HIST A101.
  
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.

**HIST A423**  
**Medieval Russian History**  
Contact Hours: 3 + 0  
Prerequisites: HIST A101.
  
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.

**HIST A424**  
**Imperial Russian History**  
Contact Hours: 3 + 0  
Prerequisites: HIST A102.
  
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.

**HIST A425**  
**History of the Soviet Union**  
Contact Hours: 3 + 0  
Prerequisites: HIST A102.
  
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.

**HIST A427**  
**Post-Soviet Culture and Society**  
Contact Hours: 3 + 0  
Prerequisites: HIST A102.
  
Registration Restrictions: Completion of all Tier I GER (basic college-level skills) courses; and Junior standing. Prerequisite HIST A102 or any RUSS prefix course.
  
Crosslisted with: RUSS A427.
  
Course Attributes: UAA GER Integrative Capstone.
  
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.

**HIST A431**  
**America: Colonies and Revolution**  
Contact Hours: 3 + 0  
Prerequisites: HIST A131.
  
An American history course that covers the period 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.

**HIST A434**  
**Early National Period, 1800-1850**  
Contact Hours: 3 + 0  
Prerequisites: HIST A131.
  
Examines the political, economic, social, and cultural developments in American history from 1800-1850.

**HIST A437**  
**Slavery and the Civil War**  
Contact Hours: 3 + 0  
Prerequisites: HIST A131.
  
Explores political, economic, ideological, social and cultural aspects of slavery in the ante-bellum United States, and the causes, progress, and consequences of the American Civil War.

**HIST A440**  
**The American West Since 1850**  
Contact Hours: 3 + 0  
Prerequisites: HIST A131 and HIST A132.
  
Study of major topics in Western American history, including economic, political, social, and cultural themes, and the historiography of the American West.

**HIST A444**  
**Advanced Studies in Film History**  
Contact Hours: 3 + 0  
Registration Restrictions: Junior standing.
  
May be stacked with: HIST A244.
  
Special Note: May be repeated once for credit with a change of subtitle. Only 3 credits of HIST A444 may be applied to either a major or minor in history. Advanced studies in selected topics in motion picture history. Topics range from genre studies (musicals, comedies, science fiction) to special areas of film history (animation, special effects, major stars and studios, significant directors). Subtitle varies.
HIST A451  Gilded Age and Progressive Era America, 1877-1917  3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A132.
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.

HIST A452  America in War and Peace, 1917-1945  3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A132.
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.

HIST A453  America in the Cold War Era, 1945-1992  3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A132.
Examines the second half of the twentieth century as the United States developed global “superpower” status. Focuses on America's increasingly international role as well as the domestic, cultural and political impact of Cold War policies. Explores how American people and their representatives acted and reacted during the era of McCarthyism, the Civil Rights movement, Watergate, nuclear arms build-up, Vietnam, and Reaganesian.

HIST A477  Senior Seminar  3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A377.
Registration Restrictions: Junior standing.
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.

HIST A478  Studies in Early American History  3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A131.
Special Note: May be repeated twice for credit with a change of subtitle.
An examination of selected fundamental topics in early American history. Areas will be studied as student need and faculty expertise indicate. Subtitle varies.

HIST A479  Studies in Modern American History  3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A131 and HIST A132.
Special Note: May be repeated twice for credit with a change of subtitle.
Specific areas will be treated as student need and faculty expertise indicate. Subtitle varies.

HIST A486  Studies in Modern Europe  3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A102.
Special Fees: Special Note: May be repeated twice for credit with a change of subtitle.
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.

HIST A690  Studies in History  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
Special Note: May be repeated for credit with a change in subtitle.
An examination of an aspect of history from the perspective of a major field in the discipline.

HLTH - Health
Offered through the Community & Technical College
Allied Health Sciences Building (AHS), Room 161, 786-4894
www.uaa.alaska.edu/ctc/programs/alliedhealth

HLTH A101  Introduction to Health Occupations  3 CR
Contact Hours: 2 + 2
Special Fees: Introduces basic knowledge and skills of health care occupations including principles of infection control, medical office procedures, general patient care, professionalism, cardiovascular resuscitation and first aid. Provides laboratory component for development of associated clinical skills. Includes introduction to health care facilities and careers in health care.

HNRS - Honors
Offered through the University Honors College
Edward and Cathryn Rasmuson Hall (RH), Room 115, 786-1086
www.uaa.alaska.edu/honors

HNRS A191  Freshman Honors Tutorial  1 CR
Contact Hours: 1 + 0
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. 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.
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.

HNRS A192  Honors Seminar: Enduring Books  3 CR
Contact Hours: 3 + 0
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.
Course Attributes: UAA GER Humanities Requirement. Special Note: May be repeated once for credit under a different subtitle. May be used only once for GER Humanities.
Honors seminar focusing on the directed reading of a single book of enduring significance.

HNRS A209  Participatory Action Research  3 CR
Contact Hours: 3 + 0
Registration Restrictions: 3 credits of Written Communication GER with a minimum grade of C and Oral Communication GER with a minimum grade of C. Quantitative Skills GER is recommended. Requires instructor permission.
Participatory action research (PAR) is a faculty-student collaborative process of inquiry and action for change in response to organizational or community problems. Overview of the PAR process, plus examination of the democratizing and emancipatory power of PAR.

HNRS A291  Sophomore Honors Tutorial  1 CR
Contact Hours: 1 + 0
Prerequisites: HNRS A191 and HNRS A192.
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. 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.
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.

HNRS A292  Honors Seminar in Social Science  3 CR
Contact Hours: 3 + 0
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.
Course Attributes: UAA GER Social Sciences Requirement. Special Note: May be repeated once for credit under a different subtitle.
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 methods and skills, including the collection and analysis of both quantitative and qualitative data. Students will gain considerable experience communicating both orally and in writing.

HNRS A309  Interdisciplinary Team-Based Research Methods  3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A200 with minimum grade of C or MATH A272 with minimum grade of C.
Registration Restrictions: Registration limited to students admitted to the University Honors College, or to students who obtain permission to register from the University Honors College.
Examines the principles and methods of conducting research in a collaborative, team-based environment. Under the supervision of the instructor, students from different disciplines will be placed into teams that must work together to solve a complex systems problem requiring collaboration across disciplines. The instructor will guide the teams to formulate a research plan, illustrate how to perform data analysis and experimental methodology, and provide guidance on effective team management. May include guest lecturers for different application areas.
HNRS A310  Community Service: Theory and Practice  3 CR
Contact Hours: 1 + 6
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.

Explores questions of service, community, and self, and includes guided
volunteer service with a cultural organization, social service organization, or
government agency.

HNRS A390  Special Topics Honors Seminar  3 CR
Contact Hours: 3 + 0
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 required.

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.

HNRS A391  Junior Honors Tutorial  1 CR
Contact Hours: 1 + 0
Prerequisites: HNRS A291 and HNRS A292.
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.

Special Note: Subtitle varies. Concurrent registration is required in the associated
course whose title is the same as the subtitle of HNRS A391.

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.

HNRS A392  Honors Thesis Seminar  1 CR
Contact Hours: 1 + 0
Prerequisites: HNRS A192 and HNRS A292 and HNRS A310.
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.

In-depth application of discipline research skills to a particular problem.
Develops an understanding of research problems and research methods used by
different disciplines.

HNRS A410  Senior Honors Seminar  6 CR
Contact Hours: 6 + 0
Registration Restrictions: Registration limited to students admitted to University
Honors College, and to students who have permission to register from the
University Honors College.

Course Attributes: UAA GER Integrative Capstone.

Special Note: The course extends over both fall and spring semesters earning six
credit hours credit thereby satisfying the three hour GER Integrative Capstone
Course.

HNRS A499  Honors Thesis  3 CR
Contact Hours: 0 + 6
Prerequisites: HNRS A392.
Registration Restrictions: Senior Standing. Permission from the University Honors
College and approval by a faculty member acting as thesis advisor.

Special Note: May be repeated for a maximum of six credits.

Independent research under faculty supervision, including formulation of
research topic, research and analysis, and defense.

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HS - Health Sciences

Offered through the College of Health & Social Welfare
Diplomacy Building (DPL), Room 404, 786-6565
http://health.uaa.alaska.edu/dept

HS A220  Core Concepts in the Health Sciences  3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Social Sciences Requirement.
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
medical, psychological, socio-cultural, economic and environmental factors related
to health status and prevention of illness at the individual and the community
levels. Addresses the history, goals and population health outcomes at the
community, state and national levels.

HS A326  Introduction to Epidemiology  3 CR
Prerequisites: HS A220.
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.

HS A370  Medical Sociology  3 CR
Contact Hours: 3 + 0
Prerequisites: SOC A101.
Crosslisted with: SOC A370.
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.

HS A433  Health Education: Theory and Practice  3 CR
Contact Hours: 3 + 0
Crosslisted with: NS A433.
Introduction to the principles, methods and resources used in health
education. Examines psychosocial and cultural determinants of health behavior
and their role in the development of effective health education strategies. Explores
organizational, societal and professional issues influencing health education for
individuals, groups and communities.

HS A463  Physician Assistant Clinical Clerkship I  12 CR
Contact Hours: 0 + 4
Registration Restrictions: MEDEX 469. Acceptance into the University of
Washington MEDEX Northwest Physician Assistant Program or by instructor
permission.
Grade Mode: Pass/No Pass.

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.

HS A464  Physician Assistant Clinical Clerkship II  12 CR
Contact Hours: 0 + 4
Prerequisites: HS A463.
Registration Restrictions: Acceptance into the University of Washington MEDEX
Northwestern Physician Assistant Program.
Grade Mode: Pass/No Pass.

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.

HS A465  Physician Assistant Family Practice Clerkship I  12 CR
Contact Hours: 0 + 4
Registration Restrictions: MEDEX 464. Acceptance into the University of
Washington MEDEX Northwest Physician Assistant Program.
Grade Mode: Pass/No Pass.

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.
Physician Assistant Family Practice 12 CR

Contact Hours: 0 + 4

Registration Restrictions: MEDEX 465. Acceptance into the University of Washington MEDEX Northwest Physician Assistant Program.

Grade Mode: Pass/No Pass.

The second part of a two-course sequence that encompasses the treatment of patients of all age groups. Focus is on health maintenance, preventive care, and the psychosocial aspects of illnesses as they relate to the patient and her/his family. Students will develop the skills necessary to evaluate, manage, and monitor common health complaints and problems.

Selected Topics: Health Care Issues in Alaska 1-6 CR

Contact Hours: 1-6 + 0

Registration Restrictions: Successful completion of MEDEX NW first year courses or instructor permission.

Provides specialized course content for health care professionals in Alaska. Topics covered will be of special interest to practitioners in both rural and urban community health, emphasizing the interrelatedness of the two.

Health Issues in Alaska 3 CR

Contact Hours: 3 + 0

Prerequisites: HS A463 or HS A465.

Major Restriction: Must be Health Sciences major.

Registration Restrictions: Health Sciences Physician Assistant Track Major or instructor permission.

Course Attributes: UAA GER Integrative Capstone.

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.

Public Health and Society 3 CR

Contact Hours: 3 + 0

Level Restriction: Must be Graduate - UAA level.

Registration Restrictions: Admission to MPH Program or faculty permission.

Special Fees.

Incorporates behavioral and social science concepts in analyzing a variety of public health issues nationally, in Alaska and the northern regions. Presents how socioeconomic status, culture, race/ethnicity, age, and gender relate to health and disease outcomes and the quality of life. Provides knowledge on health promotion and disease prevention interventions.

Environmental and Occupational Health 3 CR

Contact Hours: 3 + 0

Registration Restrictions: Admission to MPH Program or faculty permission.

Special Fees.

Provides an overview 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 personal and community health, emphasizing the interrelatedness of the two.

Health Services Administration 3 CR

Contact Hours: 3 + 0

Level Restriction: Must be Graduate - UAA level.

Registration Restrictions: Admission to MPH program or faculty permission.

Special Fees.

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.

Circumpolar Health Issues 3 CR

Contact Hours: 3 + 0

Registration Restrictions: Admission to MPH Program or faculty permission.

Special Fees.

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. The overall goal of this course is for students to develop and demonstrate 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. Opportunity to explore these issues within an Alaskan context will be provided in assignments.

Biostatistics for Health Professionals 3 CR

Contact Hours: 3 + 0

Registration Restrictions: Graduate standing or instructor permission.

Undergraduate statistics course with a grade of C or better.

Crosslisted with: NS A625.

Special Fees.

Principles of statistical reasoning and quantitative skills for analyzing health data. Topics include the binomial, Poisson, and normal distributions, the treatment of rates, measures of location and dispersion, and testing of statistical hypotheses. Both descriptive and inferential statistics are illustrated in mortality and morbidity problem sets requiring manual or computer assisted calculations. The comparison of methodological techniques and the choice of appropriate statistical methods to answer health research questions are stressed. This course is designed to enhance rather than substitute for statistical knowledge gained at the undergraduate level.

Biostatistics for Health Professionals Lab 1 CR

Contact Hours: 0 + 3

Prerequisites: (HS A625 or concurrent enrollment) or (NS A625 or concurrent enrollment).

Registration Restrictions: Grade of C or better in undergraduate research and statistics. Graduate status or faculty permission.

Grade Mode: Pass/No Pass.

Crosslisted with: NS A625L.

Introduction to statistical analysis using the Statistical Package for the Social Sciences (SPSS) computer program. Focuses on creating a database, evaluating these data for entry errors, identifying statistical test assumptions, and computing descriptive and inferential statistics.

Principles of Epidemiology 3 CR

Contact Hours: 3 + 0

Level Restriction: Must be Graduate - UAA level.

Registration Restrictions: Graduate standing or instructor permission.

Crosslisted with: NS A626.

Special Fees.

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.

Program Evaluation 3 CR

Contact Hours: 3 + 0

Registration Restrictions: Successful completion of MSW foundation requirements or admission as advanced standing, or graduate standing in Health Sciences.

Crosslisted with: SWK A628.

Special Fees.

Theory and practice of agency or community-based research and evaluation. Course topics include commonly used evaluation models and research designs, politics and ethics of conducting and using research in an applied setting, communicating findings.

Public Health Research Tools and Methods 4 CR

Contact Hours: 3 + 2

Prerequisites: HS A625 and HS A626.

Registration Restrictions: Admission to MPH program or faculty permission.

Special Fees.

Introduces basic principles and methods of health-related research from its conception to analysis and evaluation. Provides an overview of quantitative and qualitative methods. Requires certificate of completion of UAA-approved Human Subjects Research Education Course. Lab sessions provide basic hands-on training of a select quantitative and/or qualitative analytical software.

Public Health Emergencies and Disasters 3 CR

Contact Hours: 3 + 0

Level Restriction: Must be Graduate - UAA level.

Registration Restrictions: Admission to MPH Program or faculty permission.

Special Fees.

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. Includes topics on geophysical and weather-related problems, infectious diseases, war, and related concerns. Addresses prevention and public health interventions, including preparedness, response, and recovery strategies, as well as social, political, legal, and ethical challenges.

Selected Topics in Public Health 1-4 CR

Contact Hours: 1+4 + 0

Registration Restrictions: Department permission.

Special Fees.

Special Note: May be repeated for credit with different subtitles.

Focuses on special, emerging, current, local, and other topics in public health.
**HUM - Humanities**

*Offered through the College of Arts and Sciences*

**Social Sciences Building (SSB), Room 343, 786-6049*

[http://liberalstudies.uaa.alaska.edu](http://liberalstudies.uaa.alaska.edu)

**HUM A211**  
**Introduction to Humanities I**  
3 CR  
Contact Hours: 3 + 0  
Prerequisites: ENGL A111.  
Registration Restrictions: 3 credits of Fine Arts GER  
Course Attributes: UAA GER Humanities Requirement.  
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.

**HUM A212**  
**Introduction to Humanities II**  
3 CR  
Contact Hours: 3 + 0  
Prerequisites: ENGL A211 or ENGL A212 or ENGL A213 or ENGL A214.  
Registration Restrictions: 3 credits of Fine Arts GER  
Course Attributes: UAA GER Humanities Requirement.  
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.

**HUM A220**  
**Film as/and Literature**  
3 CR  
Contact Hours: 3 + 0  
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.

**HUM A250**  
**Myths and Contemporary Culture**  
3 CR  
Contact Hours: 3 + 0  
Prerequisites: COMM A111 and ENGL A111.  
Course Attributes: UAA GER Humanities Requirement.  
Explores the transmission of myths which affect contemporary cultures. Surveys myths featured in literature, the fine arts, the performing arts, folk-ways and popular culture. Examines how individual values, historical change, and cross cultural contact have influenced both the resilience and transformation of these myths.

**HUMS - Human Services**

*Offered through the College of Health & Social Welfare*

*Professional Studies Building (PSB), Room 212, 786-6437*

[http://hums.ualaska.edu](http://hums.ualaska.edu)

**HUMS A101**  
**Introduction to Human Services**  
3 CR  
Contact Hours: 3 + 0  
Special Fees.  
Special Note: Offered Fall and Spring Semesters.  
Overview of human services. Includes traditional and contemporary helping approaches, plus characteristics, values, and professional roles of human service workers. Covers human service consumers, their problems and functioning, helping systems and strategies, environmental change processes, and legal and ethical issues.

**HUMS A106**  
**Introduction to Social Welfare**  
3 CR  
Contact Hours: 3 + 0  
Prerequisites: SOC A101.  
Crosslisted with: SWK A106.  
Course Attributes: UAA GER Social Sciences Requirement.  
Analyzes social inequality and the American social welfare state. Traces historical evolution of government and non-government response to the provision of basic needs, opportunities, and rights for its citizenry, especially vulnerable populations. Investigates historical and persisting dilemmas--ethic, political, cultural, and economic--explicit and implicit, in achieving social justice. Assists in understanding of social welfare problems and solutions.

**HUMS A107**  
**History and Systems of Human Services**  
3 CR  
Contact Hours: 3 + 0  
Introduces the historical foundations of the human service profession focusing upon formative legislation and service delivery systems both historic and current.

**HUMS A121**  
**Advocating for Victims of Domestic Violence and Sexual Assault**  
3 CR  
Offered only at Matanuska-Susitna College.  
Focuses on developing the skills and knowledge needed to be an effective advocate for victims of domestic violence and sexual assault. Provides historical perspective, identifies physical, sexual and emotional abuse that defines battering. Explains cycle of violence, power and control issues and why women stay in abusive relationships. Identifies five stages of living without violence (denial, self-blame, help seeking, ambivalence and living violence free lives). Discusses ways of helping victims become survivors.

**HUMS A122**  
**Substance Abuse as a Contemporary Problem**  
3 CR  
Contact Hours: 3 + 0  
Introduction to current issues in addictions with emphasis on understanding alcohol and other drug use in historical, social, cultural, legal, and public health/policy contexts.

**HUMS A123**  
**Public Education and Prevention in Substance Abuse**  
3 CR  
Contact Hours: 3 + 0  
Special Fees.  
Special Note: Offered Spring Semesters.  
Use of community organization knowledge and skills for development of educational and preventive programs in substance abuse.

**HUMS A124**  
**Introduction to Physiology and Pharmacology of Substance Abuse**  
3 CR  
Contact Hours: 3 + 0  
Prerequisites: PSY A111.  
An introduction to basic knowledge about psychopharmacological properties and effects of psychoactive substances. Focus will be given to understanding the relationship between infectious diseases and substance use/abuse.

**HUMS A153**  
**Human Relations**  
3 CR  
Contact Hours: 3 + 0  
Crosslisted with: PSY A153.  
Special Fees.  
A survey of human relations to include communication, problem solving, interaction, relationship, choice and change skills.

**HUMS A155**  
**Human Relations in the Workplace**  
3 CR  
Contact Hours: 3 + 0  
Special Fees.  
A survey of communication, problem solving and interaction skills as applied to the world of work.

**HUMS A185**  
**Introduction to Field Work**  
3 CR  
Contact Hours: 3 + 0  
Essential elements of field experience learning in a Human Service setting, including the foundations of ethical decision making. Students will complete all documents necessary to enroll in HUMS A295A.

**HUMS A223**  
**Introduction to Paraprofessional Counseling I**  
3 CR  
Contact Hours: 3 + 0  
Special Fees.  
Special Note: Offered Fall and Spring Semesters.  
Focuses on systematic approach to effective helping and helping skills which fall into the following skill categories: skills for understanding, skills for comfort and crisis intervention, and skills for positive action.
HUMS A224 Conflict and Collaborative Systems 3 CR
Contact Hours: 3 + 0
Prerequisites: HUMS A223 and (HUMS A324 or concurrent enrollment).
Provides a social constructionist framework for understanding interpersonal conflict. Focuses on the human and emotional aspects of conflict and includes the influence of gender and culture. Pragmatic as well as theoretical, this course presents communication and conflict resolution models to help manage and/or resolve conflict.

HUMS A226 Intervention Continuum in Substance Abuse Counseling 3 CR
Contact Hours: 3 + 0
Prerequisites: HUMS A122 and HUMS A223.
Presents a continuum of interventions used in substance abuse counseling, to include screening and placement criteria, motivational interviewing, aftercare and relapse planning, documentation, and confidentiality.

HUMS A240 Geriatric Lifestyle Assessment 3 CR
Contact Hours: 3 + 0
Prerequisites: HUMS A101 or SOC A110.
Provides a holistic overview of the assessment of the older adult. Examines tools and techniques used to assess an older person's functional, cognitive, social and psychosocial strengths and challenges. Explores strategies necessary to develop care plans for optimizing an individual's capabilities and quality of life.

HUMS A256 Groups and Organizations 3 CR
Contact Hours: 3 + 0
Introduces social, organizational and work-group behavior within a human service context.

HUMS A290 Selected Topics in Alcohol and Drug Counseling .5-3 CR
Contact Hours: .5-3 + 0
Grade Mode: Pass/No Pass.
Prerequisites: Provides the most current education in the area of substance abuse counseling. Specific topics will vary.

HUMS A295A Human Services Practicum I 3 CR
Contact Hours: 1 + 9
Prerequisites: (ENGL A111 or concurrent enrollment) and HUMS A101 and HUMS A223.
Registration Restrictions: GER Oral Communication
Special Fees.
Students placed in a community Human Services agency will examine agency structure and functioning, professional relationships, and interagency networks to apply their knowledge of entry level helping skills with agency clientele while participating in a weekly class seminar to facilitate the integration of human service knowledge and theory with practical field application.

HUMS A295B Human Services Practicum II 3 CR
Contact Hours: 1 + 9
Prerequisites: ([ENGL A211 or concurrent enrollment] or [ENGL A212 or concurrent enrollment]) and HUMS A295A.
Special Fees.
Emphasizes increasing responsibilities for providing direct client services. Students will access problems and plan interventions within the placement agency, while participating in a weekly class seminar structured to facilitate the integration of human service knowledge and theory with practical field application.

HUMS A321 Diversity Issues in Human Services Practice 3 CR
Contact Hours: 3 + 0
Prerequisites: HUMS A101 and HUMS A223 and HUMS A295A.
Using a framework of self-awareness, this course will focus on the range of human diversity and the historical and current responses to it. It will help students incorporate the relevant needs of diverse groups in their professional practice.

HUMS A322 Service Coordination in Human Services Practice 3 CR
Contact Hours: 3 + 0
Prerequisites: HUMS A101 and HUMS A223 and HUMS A295A.
Introduction to the fundamentals of service coordination across disciplines. Using an empowerment and strengths based framework, course focuses on the functions of service delivery, including assessment, planning, and implementation, utilizing the concepts of collaboration, ethics, and diversity.

HUMS A324 Introduction to Paraprofessional Counseling II 3 CR
Contact Hours: 3 + 0
Prerequisites: HUMS A223.
Special Note: Offered Fall and Spring Semesters.
Focuses on 11 major paraprofessional counseling skill clusters. Course emphasis will be skill performance in a direct service context.

HUMS A333 Alternative Dispute Resolution 3 CR
Contact Hours: 3 + 0
Prerequisites: [HUMS A223 or PSY A223] and [HUMS A324 or PSY A324].
Special Fees.
Special Note: Offered Fall Semesters.
A conceptual framework in Alternative Dispute Resolution (ADR) with particular 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. A comparison of the adversarial and collaborative dispute resolution systems as a theoretical backdrop.

HUMS A334 Family Mediation 3 CR
Contact Hours: 3 + 0
Prerequisites: HUMS A225 and HUMS A224 and HUMS A324 and HUMS A333.
Trains students in advanced mediation skills for resolving family conflict. Different models of mediation are presented, evaluated, and practiced. Current issues in Alaska family mediation are covered.

HUMS A350 Men and Masculinity 3 CR
Contact Hours: 3 + 0
Prerequisites: SOC A101 or PSY A111.
Special Fees.
Special Note: Offered Fall Semesters.
Examines perspectives on masculinity and male sex role from historical, cultural and social-psychological perspectives with focus on males as clients in the human services setting. Examines the dynamics of male socialization and its influence on men in areas such as family and work, sexuality, and physical and mental health. Attention given to implications for prevention and human service delivery.

HUMS A390 Selected Topics in Human Service Practice 3 CR
Contact Hours: 3-3 + 0
Prerequisites: HUMS A101.
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 CR
Contact Hours: 3 + 0
Prerequisites: HUMS A101 and HUMS A223.
Special Fees.
Special Note: Offered Spring Semesters.
Addresses the issues related to aging adults who misuse alcohol, drugs, prescription medications, and other substances. Emphasis will be placed on identification, assessment, and intervention strategies.

HUMS A414 Rural Treatment Strategies for Human Service Professionals 3 CR
Contact Hours: 3 + 0
Prerequisites: HUMS A101.
Special Fees.
Special Note: Offered Spring Semesters.
Focuses upon human service work in rural settings. Development of relevant knowledge and skills in the following areas: cultural issues, the addiction process and their impact on the individual, the family, and the community. Prevention and treatment of substance abuse strategies are presented focusing upon the human service worker as a change agent.

HUMS A416 Substance Abuse and the Older Adult 3 CR
Contact Hours: 3 + 0
Prerequisites: HUMS A124 and HUMS A223.
Addresses the issues related to aging adults who misuse alcohol, drugs, prescription medications, and other substances. Emphasis will be placed on identification, assessment, and intervention strategies.

HUMS A417 Substance Abuse Counseling for Human Service Professionals 3 CR
Contact Hours: 3 + 0
Prerequisites: HUMS A122 and HUMS A123 and HUMS A223.
Special Fees.
Special Note: Offered Fall Semesters.
Develops advanced counseling theory and skills specifically required by human service professionals in substance abuse treatment. Includes client assessment, diagnosis, and treatment planning. Substance abuse treatment strategies will be compared and contrasted.
HUMS A424  Advanced Counseling for Human Service Professionals  3 CR
Contact Hours: 3 + 0
Prerequisites: HUMS A223 and HUMS A324.
Special Fees.
Special Note: Offered Spring Semesters.
Comparative counseling systems and theories appropriate in the human service context are presented. Cognitive, affective, behavioral systems will be presented as approaches in a variety of human service settings including education, family and community, rehabilitation, and mental health.

HUMS A434  Group Facilitation for Human Service Professionals  3 CR
Contact Hours: 3 + 0
Prerequisites: HUMS A223 and HUMS A324.
Special Fees.
Advanced facilitation skills appropriate for group work to include goal setting, reciprocation, task identification, and personal growth. Presents a theoretical case in both group dynamics and group leadership. Contemporary ethical and managerial issues are included.

HUMS A461  Crisis Intervention  3 CR
Contact Hours: 3 + 0
Prerequisites: HUMS A101 and HUMS A223 and HUMS A324.
Special Fees.
A systematic and social approach to causes and treatment of human crises. Covers characteristics of crises, intervention strategies, and specific techniques for resolving various crisis situations. Students are expected to research, analyze, and compare community crisis support services.

HUMS A495A  Human Services Practicum III  3 CR
Contact Hours: 1 + 9
Prerequisites: HUMS A295A with minimum grade of C and HUMS A295B with minimum grade of C.
Registration Restrictions: Admission to Human Services Bachelor Degree Program.
Special Fees.
Placement in an agency will provide 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.

HUMS A495B  Human Services Practicum IV  3 CR
Contact Hours: 1 + 9
Prerequisites: HUMS A495A with minimum grade of C.
Registration Restrictions: Declared Human Services major, admission to Bachelor of Human Services Degree, Practicum IV status approval.
Course Attributes: UAA GER Integrative Capstone.
Special Fees.
This is the Integrative Capstone course for the Bachelor's of Human Services degree. The course builds and expands upon material presented in Human Services Practica III using theoretical frameworks from other required Human Service coursework. Students gain increasing levels of responsibility in the provision of direct client services in community-based settings.

HUMS A610  Program Evaluation in Applied Settings  3 CR
Contact Hours: 3 + 0
Prerequisites: STAT A252.
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: B.H.S. or equivalent degree in related field and acceptance into the Graduate Certificate in Advanced Human Service Systems.
Prior coursework in research methodology required.
Examines conceptual, methodological, and administrative factors related to the process of program evaluation in applied settings.

HUMS A630  Family and Community Systems  3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: B.H.S. or equivalent degree in related field and acceptance into the Graduate Certificate in Advanced Human Service Systems.
Provides a complex systems approach to human service delivery. Through the frameworks of diversity and social justice, the course examines contemporary and changing service delivery perspectives and intervention techniques.

HUMS A640  Contemporary Issues in Rehabilitation  3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: B.H.S. or equivalent degree in related field and acceptance into the Graduate Certificate in Advanced Human Service Systems.
Provides an overview of the historical, philosophical, and legal basis of rehabilitation systems and services. Examines the role of rehabilitation systems, the rehabilitation process, public and private organizational systems, and societal trends in rehabilitation.
JPC - Journalism & Public Communications

Offered through the College of Arts and Sciences
Professional Studies Building (PSB), Room 203, 786-4180
http://jpc.uaa.alaska.edu

JPC A101 Media and Society 3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Social Sciences Requirement.
Describes the evolution of newspapers, magazines, photography, film, radio, television, Internet, and development of telecommunications and information technologies in the last 100 years. Emphasis on social, cultural, political, and economic effects of media.

JPC A201 Reporting and Writing News 3 CR
Contact Hours: 2 + 2
Prerequisites: ENGL A211 with minimum grade of C or ENGL A212 with minimum grade of C or ENGL A213 with minimum grade of C or ENGL A214 with minimum grade of C.
Registration Restrictions: Keyboarding ability.
Examines principles and practices of reporting and writing news in the 21st century. Examines development of news form and structure. Foundation course concentrates on basics of reporting processes and news writing. Writing under deadline using Associated Press Style Book and Briefing on Media Law and computers.

JPC A202 First Amendment and Media Ethics 3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A211 with minimum grade of C or ENGL A212 with minimum grade of C or ENGL A213 with minimum grade of C or ENGL A214 with minimum grade of C.
Examines the history of First Amendment and implications for media ethics. Foundation course emphasizes principles and practices of First Amendment law and media ethics.

JPC A203 Writing and Producing for Electronic Media 3 CR
Contact Hours: 2 + 2
Prerequisites: JPC A201 and JPC A202.
Examines the principles and practices of writing and producing for radio, television, and Web. Foundation course emphasizes news writing, commercial, public service, and narrative copy, as well as visual and aural elements in electronic media.

JPC A204 Information Gathering 3 CR
Contact Hours: 2 + 2
Prerequisites: JPC A201 and JPC A202.
Examines information gathering process used by journalists and other mass communicators. Foundation course emphasizes principles and practices of interviewing, research of government documents, computerized databases, and business documents for news stories and research for media-related decision making.

JPC A205 Digital Imaging 3 CR
Contact Hours: 2 + 2
Prerequisites: JPC A101.
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 A206 Copy Editing 3 CR
Contact Hours: 2 + 2
Prerequisites: JPC A201.
Examines copy editing concepts and terminology. Emphasis on principles and practices of copy editing as applied to print, broadcast, and online journalism. Copy editing against deadlines.

JPC A211 Visual Literacy 3 CR
Contact Hours: 2 + 2
Prerequisites: JPC A101.
Examines copy editing concepts and terminology. Emphasis on principles and practices of copy editing as applied to print, broadcast, and online journalism. Copy editing against deadlines.

JPC A212 History of Alaska Media 3 CR
Contact Hours: 3 + 0
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 A213 Movies and the First Amendment 3 CR
Contact Hours: 3 + 0
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 A214 Documentary Filmmakers and Filmmaking 3 CR
Contact Hours: 3 + 0
Examines cinematography and filmmaking techniques of significant American and international documentary filmmakers.

JPC A342 Photojournalism 3 CR
Contact Hours: 2 + 2
Prerequisites: JPC A204.
Examines photographic 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.

JPC A343 Radio News Reporting 3 CR
Contact Hours: 2 + 2
Prerequisites: JPC A204.
Examines the history and development of radio news reporting and radio industry. Emphasis on principles and practices of professional radio news reporting, story research, writing, announcing, sound editing and radio news production. Students produce radio news stories for student and professional media.
JPC A344 Television News Reporting 3 CR
Contact Hours: 2 + 2
Prerequisites: JPC A204.
Analyzes the history and development of television news reporting and the television industry. Emphasis on principles and practices of television news reporting, story research, writing, shooting, and editing. Students produce television news stories for Webcast and cable television.

JPC A345 Web Design 3 CR
Contact Hours: 2 + 2
Prerequisites: JPC A213.
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.

JPC A346 Magazine Writing 3 CR
Contact Hours: 2 + 2
Prerequisites: JPC A204.
Analyzes writing strategies and techniques for contemporary magazines. Emphasis on professional principles and practices of persuasive communications strategies and techniques for mass audiences using contemporary media.

JPC A363 Research Methods for Strategic Communications 3 CR
Contact Hours: 3 + 0
Prerequisites: JPC A204.
Analyzes empirical research methods for strategic communications. Emphasis on research objectives, quantitative and qualitative methods, sample selection, questionnaire design, analysis procedures, reporting and presenting results. Legal and ethical issues are examined.

JPC A366 Planning and Writing for Strategic Communications 3 CR
Contact Hours: 3 + 0
Prerequisites: JPC A363.
Analyzes strategic planning processes and techniques of creative and persuasive message preparation for strategic communication. Emphasis on principles and practices of planning and writing for print and electronic media for advertising, public relations, sales promotion, and marketing.

JPC A368 Commercial Photography 3 CR
Contact Hours: 3 + 0
Prerequisites: JPC A213 and JPC A342.
Analyzes contemporary commercial photography. Emphasis on use of staging, lighting, and photographic techniques for advertising, public relations, and integrated marketing for commercial clients.

JPC A369 Design for Publications 3 CR
Contact Hours: 2 + 2
Prerequisites: JPC A213 and JPC A363.
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.

JPC A382 Digital Audio Production 3 CR
Contact Hours: 2 + 2
Prerequisites: JPC A203 and JPC A204.
Analyzes digital audio production. Emphasis on professional principles and practices of signal processing, multi-track mixing, layering, synchronization and digital editing techniques. Students produce digital audio programs for various markets.

JPC A383 TV Studio Production 3 CR
Contact Hours: 2 + 2
Prerequisites: JPC A204.
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.

JPC A384 Digital Video Production 3 CR
Contact Hours: 2 + 2
Prerequisites: JPC A343 or JPC A344.
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.

JPC A385 Scriptwriting for Film and Television 3 CR
Contact Hours: 2 + 2
Prerequisites: JPC A204.
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.

JPC A403 Communications and Media Research 3 CR
Contact Hours: 3 + 0
Prerequisites: JPC A204 and STAT A252.
Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses and junior standing.
Course Attributes: UAA GER Integrative Capstone.
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.

JPC A404 Global Media and Communications Systems 3 CR
Contact Hours: 3 + 0
Prerequisites: JPC A204.
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.

JPC A405 Communications and Media Theories 3 CR
Contact Hours: 3 + 0
Prerequisites: JPC A204.
Emphasis on historical and contemporary theories of public communications, public opinion, audience, evolving technologies, and social influences of communications and media.

JPC A413 Communications Law 3 CR
Contact Hours: 3 + 0
Crosslisted with: JUST A413.
Legal rights, privileges, and regulations of press, radio, television, and films; libel, contempt, copyright, rights of privacy; and decisions of regulatory bodies.

JPC A442 Web Journalism 3 CR
Contact Hours: 2 + 2
Prerequisites: JPC A204 and JPC A345.
Evaluates development of Web journalism. Applies ethical principles and professional practices of online reporting using text, images, graphics, voice, music, and video to communicate with Web news users.

JPC A443 Advanced Reporting 3 CR
Contact Hours: 2 + 2
Prerequisites: JPC A204.
Registration Restrictions: JPC junior or senior status.
Applies ethical principles and advanced professional principles and practices of in-depth, investigative, and enterprise reporting to contemporary topics for print, radio, television, and World Wide Web.

JPC A444 Specialty Reporting 3 CR
Contact Hours: 3 + 0
Prerequisites: JPC A204.
Special Note: May be taken twice for credit with permission of Department Chair.
Evaluates specialty reporting such as sports, environmental, medical and health, business, or transportation reporting. Applies ethical principles and advanced professional principles and practices of reporting to special topics. Students report for print, radio, television, or Web.

JPC A445 Design for Print I 3 CR
Contact Hours: 2 + 2
Prerequisites: JPC A204 and JPC A213.
Evaluates the use of design for magazine production. Emphasis on magazine writing, design, layout, typography, production, electronic distribution, and prepress. Class will produce True North, a general interest color magazine.

JPC A446 Design for Print II 3 CR
Contact Hours: 2 + 2
Prerequisites: JPC A203 or JPC A204 and JPC A213.
Evaluates the use of design for magazine production. Emphasis on magazine writing, design, layout, typography, production, electronic distribution and prepress. Class will produce Alaska Media Review, a professional interest magazine.
JPC A462 Corporate Communications 3 CR  
Contact Hours: 3 + 0  
Prerequisites: JPC A363.  
Evaluates corporate communication. Applies professional principles and practices of strategic communications, internal communications, message design, advertising, public relations, integrated marketing communications, and new communication technologies in corporations.

JPC A463 Crisis Communications 3 CR  
Contact Hours: 3 + 0  
Prerequisites: JPC A363.  
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.

JPC A464 Development Communications 3 CR  
Contact Hours: 3 + 0  
Prerequisites: JPC A363.  
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.

JPC A465 Strategic Communications Campaigns I 3 CR  
Contact Hours: 3 + 0  
Prerequisites: JPC A363.  
Evaluates strategic communications campaigns. Part I of a two-semester sequence. Applies ethical principles and professional practices of qualitative and quantitative research, planning, strategic analysis, and evaluations to a strategic communications campaign. Students develop a strategic communications campaign for business or nonprofit organization.

JPC A466 Strategic Communications Campaigns II 3 CR  
Contact Hours: 3 + 0  
Prerequisites: JPC A465.  
Evaluates strategic communications campaigns. Part II of a two-semester sequence. Applies ethical principles and research methods, planning, production of campaign materials, working with clients, production houses, and "pitch" presentations. Students develop a strategic communications campaign for business or nonprofit organization.

JPC A482 TV Post-Production 3 CR  
Contact Hours: 2 + 2  
Prerequisites: JPC A382 or JPC A383.  
Evaluates television segments and programs in non-studio locations. Applies ethical principles and professional principles and practices of design and creation of a variety of broadcast content, including titles, IDs, graphics for sports and news, live video, and text animation.

JPC A483 Broadcast Graphics 3 CR  
Contact Hours: 2 + 2  
Prerequisites: JPC A382 or JPC A383.  
Evaluates design elements, software, and hardware used in professional broadcast graphics. Applies ethical practices and professional principles and practices of design and creation of a variety of broadcast content, including titles, IDs, graphics for sports and news, live video, and text animation.

JPC A484 Documentary Film Production I 3 CR  
Contact Hours: 3 + 0  
Prerequisites: JPC A314 and JPC A482.  
Evaluates history and development of documentary film. Part I of a two-semester sequence. Applies ethical principles and professional principles and practices of documentary film production, including idea development, research, script treatment, production logistics, and budget.

JPC A485 Documentary Film Production II 3 CR  
Contact Hours: 3 + 0  
Prerequisites: JPC A484.  
Evaluates history and development of documentary film. Part II of a two-semester sequence. Applies ethical principles and professional practices of documentary production, including field production, editing, post-production, and marketing to various distribution outlets, including film festivals.

JPC A486 Independent Film Production I 3 CR  
Contact Hours: 3 + 0  
Prerequisites: JPC A482.  
Evaluates history and development of independent film. Part I of a two-semester sequence. Applies professional principles and practices of digital film idea development, research, script treatment, logistics, and budget for independent short film production.

JPC A487 Independent Film Production II 3 CR  
Contact Hours: 3 + 0  
Prerequisites: JPC A486.  
Evaluates history and development of independent film. Part II of a two-semester sequence. Applies professional principles and practices of independent film production, including studio and field production, editing, post-production, and marketing to various distribution outlets, including film festivals.

JPC A490 Selected Topics in Journalism and Public Communications 3 CR  
Contact Hours: 3 + 0  
Prerequisites: JPC A204.  
Registration Restrictions: Junior or senior standing. Special Note: May be taken twice for credit with a change of subtitle.  
Analyzes, develops, and applies professional principles and practices to changing landscape of contemporary journalism and media.

JPC A492 JPC Senior Seminar 3 CR  
Contact Hours: 3 + 0  
Prerequisites: JPC A204.  
Registration Restrictions: Junior or senior status; GPA of 3.5 or better in JPC courses.  
Seminar discussion and advanced research in topics current to media industry. Students' portfolio work will be reviewed by faculty committee.

JPC A495 JPC Practica and Internships 1-6 CR  
Contact Hours: 0 + 3-18  
Prerequisites: JPC A204.  
Registration Restrictions: Junior or senior status; 3.0 GPA in JPC courses; and permission of JPC Media Advisor or JPC Director of Internships. Special Note: May be repeated for up to 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.

JPN - Japanese

Offered through the College of Arts and Sciences Administration/Humanities Building (ADM) Suite 287, 786-4030 www.uaa.alaska.edu/languages

JPN A101 First Year Japanese I 4 CR  
Contact Hours: 4 + 0  
Course Attributes: UAA GER Humanities Requirement. Special Fees. 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.

JPN A102 First Year Japanese II 4 CR  
Contact Hours: 4 + 0  

JPN A201 Second Year Japanese I 4 CR  
Contact Hours: 4 + 0  
Prerequisites: JPN A102. Course Attributes: UAA GER Humanities Requirement. Special Fees. Intermediate course for students with basic knowledge of Japanese. Enhances listening, speaking, reading, and writing skills for effective communication at the second year level. Students critically examine diverse cultural perspectives. Course conducted in Japanese.

JPN A202 Second Year Japanese II 4 CR  
Contact Hours: 4 + 0  
**Course Descriptions**

**JPN A290** Selected Topics in Japanese Culture 1 CR
Contact Hours: 0 + 2
Prerequisites: JPN A101.
Special Fees.
Special Note: May be repeated twice for credit, but not more than one credit can be applied to Language major.

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.

**JPN A301** Advanced Japanese I 4 CR
Contact Hours: 4 + 0
Prerequisites: JPN A202 with minimum grade of C.
Registration Restrictions: If prerequisite not met, students can gain entrance to course with departmental approval.
Course Attributes: UAA GER Humanities Requirement.
Special Fees.
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.

**JPN A302** Advanced Japanese II 4 CR
Contact Hours: 4 + 0
Prerequisites: JPN A301 with minimum grade of C.
Registration Restrictions: If prerequisite not met, students can gain entrance to course with departmental approval.
Course Attributes: UAA GER Humanities Requirement.
Special Fees.
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.

**JPN A310** Selected Topics in Advanced Japanese 3 CR
Contact Hours: 3 + 0
Prerequisites: JPN A202.
Special Fees.
Special Note: May be repeated for credit.
An advanced course for students interested in improving their communicative skills in spoken and written Japanese and in deepening their understanding of the Japanese people and culture. Each time the course is offered, different but closely related topics such as history and geography, politics and economy, education and technology, performing arts and films, traditions and modern trends, will be selected and emphasized.

**JPN A350** Business Japanese 3 CR
Contact Hours: 3 + 0
Prerequisites: JPN A202.
Special Fees.
Special Note: Class will be conducted in Japanese and English.
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.

**JUST - Justice**

Offered through the College of Health & Social Welfare
Consortium Library (LIB), Room 213, 786-1810
http://justice.uaa.alaska.edu

**JUST A110** Introduction to Justice 3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Social Sciences Requirement.
Special Note: This course is a prerequisite to most Justice courses.
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.

**JUST A200** Introduction to Research Methods 3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110.
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. Students will participate in exercises that develop their capacity to critically evaluate research designs routinely employed in Justice research and program evaluations.

**JUST A201** Justice Data Analysis 3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110.
Introduces basic descriptive statistics and data presentation strategies.
Covers measures of central tendency, variation, and strength of association. Data presentation will focus on production and interpretation of tables, graphs, and maps.

**JUST A210** Principles of Corrections 3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110 or JUST A251.
An introduction to the basic concepts of probation and parole; the use of authority in corrective services; institutional methods; a study of popular and professional concepts in corrections.

**JUST A211** Introduction to Restorative Justice 3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110.
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.

**JUST A221** Justice Organization and Management 3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110.
Special Note: Offered Fall and Spring Semesters.
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.

**JUST A241** Business Law I 3 CR
Contact Hours: 3 + 0
Crosslisted with: BA A241.
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.

**JUST A242** Business Law II 3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A241 or BA A241.
Crosslisted with: BA A242.
Continuation of Business Law I. Covers topics such as sales and leases, negotiable, debtor-creditor relations, agency, business organizations, and property protection.

**JUST A250** Development of Law 3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110.
Examines the philosophy and development of law in the U.S. and Alaska. Explores constitutional history, the law of group status, and concepts of distributive justice.

**JUST A251** Crime and Delinquency 3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110 or SOC A101.
Crosslisted with: SOC A251.
Course Attributes: UAA GER Social Sciences Requirement.
Theoretical perspectives on the causes, consequences, and control of crime and delinquency. Survey of 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.

**JUST A255** Criminal Investigation 3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110.
Fundamentals of investigation. Crime scene search and recording, collection and preservation of physical evidence, and scientific aids. Modus operandi, sources of information, interviews and interrogations, follow-up, and case preparation.

**JUST A310** Introduction to Forensic Science 3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110 or PARL A101.
Registration Restrictions: Junior standing.
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.
JUST A320  Crime Prevention  3 CR  
Contact Hours: 3 + 0  
Examination of crime prevention strategies and concepts not usually found in law enforcement efforts. The legal, moral and ethical considerations and problems of human and environmental manipulation are explored in an interdisciplinary context. Emphasizes new and innovative approaches to preventing criminal behavior.

JUST A330  Justice and Society  3 CR  
Contact Hours: 3 + 0  
Prerequisites: JUST A110.  
Course Attributes: UAA GER Social Sciences Requirement.  
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.

JUST A340  Family Law  3 CR  
Contact Hours: 3 + 0  
Prerequisites: JUST A110 or PARL A101.  
Crosslisted with: PARL A340.  

JUST A343  Constitutional Law  3 CR  
Contact Hours: 3 + 0  
Prerequisites: JUST A110 or PS A101.  
Crosslisted with: PS A343.  
An introduction to American constitutional law through a study of selected Supreme Court cases. Among the topics considered are judicial review; separation of powers; property, commerce, and taxation; liberties guaranteed by the Bill of Rights; equal protection; and privacy. Comparisons are made with the Alaska Constitution.

JUST A344  Courts and Civil Liberties  3 CR  
Contact Hours: 3 + 0  
Prerequisites: JUST A343 or PS A343.  
Intensive study of the development of political and civil rights with particular emphasis on the period since 1937. Focuses on cases and literature of the Supreme Court and considers various influences on judicial decision making.

JUST A350  Contemporary Correctional Issues  3 CR  
Contact Hours: 3 + 0  
Prerequisites: JUST A110.  
Special Note: Attendance on field trips is required.  
A survey course designed to acquaint the student with policy formulation problems related to both traditional and modern concepts of correctional programming. The roles of the executive, legislative, and judicial branches of government in determining correctional policy will be examined. Policy issues in both pre-trial and post-conviction facilities will be covered and the trend toward privatization of correctional facilities and programs will be discussed.

JUST A352  Substantive Criminal Law  3 CR  
Contact Hours: 3 + 0  
Prerequisites: JUST A110 or PARL A101.  
Crosslisted with: PARL A352.  
Special Note: Offered Fall Semesters.  
Study of elements, purposes, and functions of substantive criminal law. Includes casebook study of general law of crimes and defenses with concentration on Alaska cases and statutes in Alaska Criminal Code. Historical and philosophical concepts are covered.

JUST A354  Criminal Procedure  3 CR  
Contact Hours: 3 + 0  
Prerequisites: JUST A110 or PARL A101.  
Crosslisted with: PARL A354.  
Special Note: Offered Spring Semesters.  
Emphasis upon legal limitations of police and right of people to be secure from government under protection of federal and Alaska constitutions. Concentration on laws of arrest, search and seizure, wiretapping, electronic surveillance, and exclusionary rule. Interrogations and confessions, lineups and other pretrial identification procedures, right to counsel, trial by jury, entrapment, and double jeopardy. Study of cases decided by U.S. and Alaska Supreme Courts, along with applicable Alaska Statutes and Alaska Rules of Criminal Procedure.

JUST A360  Justice Processes  3 CR  
Contact Hours: 3 + 0  
Prerequisites: JUST A110.  
Special Note: Offered Fall and Spring Semesters.  
Study of processes and issues in police, court and correctional agency operations. Definition of goals; organizational design and development, organizing and managing financial, personnel and management processes; budget, union, communication, record; community-based programs; inspection, and program assessment. Contemporary administrative process problems.

JUST A365  Comparative Justice Systems  3 CR  
Contact Hours: 3 + 0  
Justice systems are examined on a global basis, in contrast with American justice systems, as a basis for a comparative approach to present-day national and international problems in crime and the administration of justice. Varying approaches--continental, Anglo-American and eastern--to policing, corrections, legal systems and social order are reviewed and evaluated.

JUST A366  Alcohol and Crime  3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: Junior standing.  
Examines the relationship between alcohol use and a variety of criminal behaviors including assault, homicide, and drunken driving. Special consideration is given to legislative and environmental approaches for preventing the negative consequences of alcohol use.

JUST A385  Urban Police Problems  3 CR  
Contact Hours: 3 + 0  
Prerequisites: JUST A110.  
Exploration of a variety of contemporary problems and issues related to the provision of urban police services. Issues considered may include alternatives to arrest, patrol methods, police officer-citizen relations, job stress, and use of deadly force.

JUST A398  Individual Research  1-4 CR  
Contact Hours: 1-4 + 3-12  
Registration Restrictions: Junior standing, 6 credits writing courses, faculty permission.  
Participation in Justice Center research projects or use of Center data bases. Students learn to formulate hypotheses, collect and enter data, and perform computer analyses. Students will review the literature on similar projects and submit a final research paper.

JUST A400  Advanced Research Methods  3 CR  
Contact Hours: 3 + 0  
Prerequisites: JUST A200 and JUST A201.  
Advanced social science research methods, focusing on specific sampling and data collection strategies, i.e., focus group, telephone survey, cluster vs. stratified sampling, etc. Evaluates the potential use of official statistics such as police and census data. Students will be expected to select appropriate samples and create appropriate data collection instruments and protocols.

JUST A401  Inferential Data Analysis in Justice  3 CR  
Contact Hours: 3 + 0  
Prerequisites: JUST A200 and JUST A201.  
Special Note: Recommend completion of GER Quantitative Skills requirement.  
Advanced social science research focusing on inferential data analysis. Provides an in-depth understanding of the logic and application of inferential techniques, particularly of multivariate models. Students will formulate and implement an analysis plan with real criminal justice data.

JUST A410  Cinematic Images of Justice  3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: Junior standing.  
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 media. Attention given to each component of the justice system. Impact of fictionalized events and justice system action/reaction will be juxtaposed with the reality of the justice system. Concepts such as equality, privacy, police brutality, gangs, and prison life will be viewed against the background of political economics and legal reality.

JUST A413  Communications Law  3 CR  
Contact Hours: 3 + 0  
Crosslisted with: JPC A413.  
Special Fees.  
Legal rights, privileges, and regulations of press, radio, television, and films, libel, contempt, copyright, rights of privacy, and decisions of regulatory bodies.

JUST A440  Police Administration  3 CR  
Contact Hours: 3 + 0  
Prerequisites: JUST A110 and JUST A221.  
Focuses on critical issues and situations faced by police executives. Among the areas studied are decision making, organizational strategies and services mixes, citizen complaint systems, change strategies and models, information systems, personnel management, financial administration and productivity measurement.

JUST A444  Terrorism and the Rule of Law  3 CR  
Contact Hours: 3 + 0  
Prerequisites: JUST A110 and JUST A250.  
Selected case studies in modern terrorism are examined. Focuses on the relationship between civil liberties and laws and social policies intended to address terrorism.
JUST A445  Probation, Parole and Community Corrections  3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A210.
Study of community-based alternatives to incarceration for adult and juvenile offenders. The purposes, operations and organization of probation and parole agencies and the decision making responsibilities of probation and parole officers will be examined. Private and public community residential programs will be analyzed.

JUST A451  Research and Policymaking  4 CR
Contact Hours: 3 + 3
Prerequisites: JUST A110 and STAT A252.
Registration Restrictions: Upper-class standing.
Special Note: Laboratory is required. Offered Fall and Spring Semesters.

JUST A455  Rural Justice  3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110.

JUST A460  Justice in Crisis  3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A200 and JUST A201 and JUST A221 and JUST A250 and JUST A251 and JUST A330 and JUST A360.

JUST A463  Biobehavioral Criminology  3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A200 and JUST A201 and JUST A221 and JUST A250 and [JUST A251 or SOC A251] and JUST A330 and JUST A360.

JUST A475  Juvenile Procedure  3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A203 or SOC A203.
A practical clinical course providing comprehensive coverage of the Alaska children's code and juvenile law procedures.

JUST A480  Correctional Systems Management  3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110 and JUST A251.
Focuses on the management of correctional rehabilitation. Probation, imprisonment, parole and community-based corrections concepts are explored in-depth. Legal aspects of correctional administration, prisoner rights, and judicial involvement in penal systems. Correctional decision making processes, participatory management and citizen involvement are assessed. International comparisons of correctional systems are utilized to explore organizational and management options.

JUST A488  Research Practicum  1-6 CR
Contact Hours: 0 + 3-18
Prerequisites: JUST A200 and JUST A201.
Registration Restrictions: Faculty permission required.
The application of research skills to the study of a problem in the justice field. Involves field research and related independent study.

JUST A490  Contemporary Justice Issues  1-6 CR
Contact Hours: 1-6 + 0
Prerequisites: JUST A110.
Registration Restrictions: Junior standing.
Special Note: May be repeated once for credit with a change in subtitle.

JUST A495  Internship  1-6 CR
Contact Hours: 0 + 5-3
Registration Restrictions: Approval by internship coordinator.
Grade Mode: Pass/No Pass.
Special Note: Offered Fall and Spring Semesters.

JUST A498  Individual Research  1-4 CR
Contact Hours: 1-4 + 3-12
Registration Restrictions: Research methods course, faculty permission.
Participation in Justice Center research projects current literature, collect data, formulate and test hypotheses, analyze data, and complete a final research paper.

JUST A625  Seminar in Criminal Violation  3 CR
Contact Hours: 3 + 0
Special Note: Offered Alternate Fall Semesters.
An advanced criminology seminar which will explore the application of various theories of crime causation to specific kinds of criminal violation. Students will use criminological theory in an effort to explain different types of criminal behavior and to assess both methods of prevention and potential treatment of the violator. Topics will include: crimes of violence, crimes against the public order, organized crime, white collar crime, etc.

JUST A630  Justice Administrative Theory and Practice  3 CR
Contact Hours: 3 + 0
Special Note: Offered Alternate Spring Semesters.
An advanced seminar to study policy development and the application of theory and research in the administration of justice organizations. Theories, practices, innovations and administrative strategies will be explored.

JUST A640  Corrections Theory and Research  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
Special Note: Offered as Demand Warrants.
Theoretical foundation of correctional practice explored through reading of classic texts. Development and testing of hypotheses on rehabilitation, retribution, and incapacitation.

JUST A650  Policing Theory and Research  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
Special Note: Offered Alternate Spring Semesters.
Social science research on policing explored through readings on police use of force, domestic violence, and community policing. Development of proposals for empirical tests of hypotheses derived from the literature.

JUST A670  Administrative Law  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
Special Note: Offered Spring Semesters.
Legal guidelines for adoption, enforcement, and adjudication of violations of agency regulations at federal, state, and local levels as exercised by public sector management. Legislative, executive, and judicial controls on agency actions. Research project required.

KOR - Korean

Offered through the College of Arts and Sciences
Administration/Humanities Building (ADM), Suite 287, 786-4030
www.uaa.alaska.edu/languages

KOR A101  First Year Korean I  4 CR
Contact Hours: 4 + 0
Special Fees:
An introductory course for students with no previous knowledge of the Korean language. Develops listening, speaking, reading, and writing skills in Korean for effective communication at the elementary level. Introduces basic cross-cultural perspectives. Course conducted in Korean.
LAT - Latin

Offered through the College of Arts and Sciences
Administration/Humanities Building (ADM), Suite 287, 786-4030
www.uaa.alaska.edu/languages

LAT A101 Elementary Latin I 3 CR
Contact Hours: 3 + 0
Special Fees:
Introductory course for students with no previous knowledge of the Classical Latin language. Develops reading and writing skills in Latin for effective communication at the elementary level. Introduces historical perspectives. Course conducted in English.

LAT A102 Elementary Latin II 3 CR
Contact Hours: 3 + 0
Prerequisites: LAT A101.
Special Fees:
Continuation of LAT A101. Further develops elementary reading and writing skills in Classical Latin for effective communication. Enhances appreciation of historical perspectives. Course conducted in English.

LGOP - Logistics Operations

Offered through the College of Business & Public Policy
Edward & Cathryn Rasmuson Hall (RH), Room 309, 786-4100
www.chpp.uaa.alaska.edu

Students taking any ACCT, BA, CIS, ECON, LGOP, LOG, or PADM course will be charged a single lab fee of $25 for the semester. Applies to Elmendorf Air Force Base or Fort Richardson classes only when specifically noted on UAAOnline. Does not apply to Chugiak-Eagle River classes.

LGOP A110 Logistics, Information Systems and Customer Service 3 CR
Contact Hours: 3 + 0
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 CR
Contact Hours: 3 + 0
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 CR
Contact Hours: 3 + 0
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 CR
Contact Hours: 3 + 0
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 CR
Contact Hours: 3 + 0
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.

LING - Linguistics

Offered through the College of Arts and Sciences
Professional Studies Building (PSB), Room 212, 786-4355
http://english.uaa.alaska.edu

LING A101 The Nature of Language 3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Humanities Requirement.
A beginning course in the study of language. Introduction to systematic analysis of human language and description of its grammatical structure, distribution, diversity, and historical development.

LING A201 Intermediate Grammar 3 CR
Contact Hours: 3 + 0
An intermediate course in the descriptive analysis of syntax and related aspects of word-formation. Practice in traditional and contemporary methods of syntactic analysis, sentence structure and diagramming, in English.

LOG - Logistics

Offered through the College of Business & Public Policy
Edward & Cathryn Rasmuson Hall (RH), Room 203, 786-4100
www.chpp.uaa.alaska.edu

Students taking any ACCT, BA, CIS, ECON, LGOP, LOG, or PADM course will be charged a single lab fee of $25 for the semester. Applies to Elmendorf Air Force Base or Fort Richardson classes only when specifically noted on UAAOnline. Does not apply to Chugiak-Eagle River classes.

LOG A378 Foundations of Logistics and Supply Chain Management 3 CR
Contact Hours: 3 + 0
Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.
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.

LOG A415 Purchasing Management 3 CR
Contact Hours: 3 + 0
Prerequisites: LOG A378 with minimum grade of C.
Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.
Study of purchasing activities and cost management techniques. Discusses reverse auctions, contracting, and ethics in purchasing.

LOG A416 International Logistics and Transportation Management 3 CR
Contact Hours: 3 + 0
Prerequisites: LOG A378 with minimum grade of C and LOG A379 with minimum grade of C.
Registration Restrictions: College of Business and Public Policy majors must be admitted to the upper-division standing.
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.

LOG A417 Materials Management 3 CR
Contact Hours: 3 + 0
Prerequisites: LOG A378 with minimum grade of C.
Registration Restrictions: College of Business and Public Policy majors must be admitted to the upper-division standing.
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.

LOG A495 Internship in Global Logistics and Supply Chain Management 3 CR
Contact Hours: 0 + 9
Prerequisites: LOG A378 with minimum grade of B.
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.
Grade Mode: Pass/No Pass.
Special Fees:
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.
Course Descriptions

LOG A601  Supply Chain Management Systems  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Acceptance into Graduate Certificate Program or department approval.
Special Fees.
Examines the changes in supply chain management systems and networks in today's complex, global market. Focuses on the interaction of system demands for purchasing and materials management; the interaction of ethical, contractual, and legal elements; the impact of strategic decisions; and the impact of supply network functional activities.

LOG A602  Logistics  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Acceptance into Graduate Certificate Program or department approval.
Special Fees.
Examines the principles and practices of global supply chain and logistics management. Focuses on logistics integration and how global organizations can gain a sustainable competitive advantage by implementing programs of total logistics management into their organizations.

LOG A603  Measurement in Supply Chains  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Acceptance into Graduate Certificate Program or department approval.
Special Fees.
Examines the metrics and tools needed to create value by logistics within the global supply chain. Focuses on complexity factors and their impact on the creation of this value. Conducts performance analysis using simulation analysis, assumption-based planning, project management techniques, and activity-based cost accounting.

LOG A604  Radio Frequency Identification  3 CR
Contact Hours: 3 + 0
Prerequisites: LOG A601 and LOG A602 and LOG A603.
Registration Restrictions: Acceptance into Graduate Certificate Program or department approval.
Special Fees.
Explores how Radio Frequency Identification (RFID) is revolutionizing supply chain management systems and logistics systems. Focuses on how to design, develop and integrate logistics information systems to appraise the value of experimental RFID technology compared to more traditional technologies.

LOG A605  Transportation Systems Management  3 CR
Contact Hours: 3 + 0
Prerequisites: LOG A601 and LOG A602 and LOG A603.
Registration Restrictions: Acceptance into Graduate Certificate Program or department approval.
Special Fees.
Examines the management of passenger transportation systems in the travel industry. Focuses on different forms of transportation as they relate to travel industry management and policy.

LOG A606  Lean Operations  3 CR
Contact Hours: 3 + 0
Prerequisites: LOG A601 and LOG A602 and LOG A603.
Registration Restrictions: Acceptance into Graduate Certificate Program or department approval.
Special Fees.
Examines the concepts of lean operations and shows through examples, case studies, simulations, and hands-on projects how organizations can reduce the wastes that adversely impact profitability and performance. Focuses on value-stream mapping, synchronized flow, pull systems, and any current reengineering concepts that may be appropriate, such as kanban systems, the 5Ss, quick change-over, theory of constraints, and total productive maintenance.

LOG A607  Radio Frequency Capstone  3 CR
Contact Hours: 3 + 0
Prerequisites: LOG A604.
Registration Restrictions: Acceptance into Graduate Certificate Program or department approval.
Special Fees.
Demonstrate mastery of the knowledge and skills expected of someone who is a supply chain management professional through completion of a business case development project using radio frequency identification or RFID.

LOG A608  Travel/Transportation Capstone  3 CR
Contact Hours: 3 + 0
Prerequisites: LOG A605.
Registration Restrictions: Acceptance into Graduate Certificate Program or department approval.
Special Fees.
Examines an organization with an in-depth analysis of a strategic problem, issue, or opportunity facing that organization. Focuses on integration of concepts learned in other courses applied to a selected field study project.

LOG A609  Supply Chain Quality Capstone  3 CR
Contact Hours: 3 + 0
Prerequisites: LOG A606.
Registration Restrictions: Acceptance into Graduate Certificate Program or department approval.
Special Fees.
Examines approaches that organizations can take to work with their suppliers to assist them in all facets of improvement with the objective of becoming a preferred supplier. Focuses on concepts, such as supplier total quality, six-sigma quality, project management skills, quality standard and supplier selection and development.

LOG A661  Supply Chain Strategic Planning  6 CR
Contact Hours: 6 + 0
Registration Restrictions: Admission to the Master of Science, Global Supply Chain Management Program
Special Fees.
Study of supply chain management as corporate strategy within a globally competitive environment. Theories of strategy and the principles of financial accounting are used to evaluate various supply chain systems. Logistical processes within supply chains are assessed in terms of their structure and efficiency.

LOG A662  Supply Chain Knowledge Management  6 CR
Contact Hours: 6 + 0
Prerequisites: LOG A661.
Registration Restrictions: Admission to the Master of Science, Global Supply Chain Management Program
Special Fees.
Study of theories, information systems, and practices used to share information and knowledge within the community of practitioners operating in a global supply chain. Challenges and opportunities associated with applying information technology to supply chain systems are evaluated.

LOG A663  International Supply Chain Management and Marketing Strategies  6 CR
Contact Hours: 6 + 0
Prerequisites: LOG 661.
Registration Restrictions: Admission to Master of Science, Global Supply Chain Management Program.
Special Fees.
Study of logistical activities of international businesses. Sourcing, manufacturing, marketing, and transportation are assessed in a cross-border, cross-cultural context. The impacts of import-export practices, foreign direct investment, and trade policy on supply chain management are determined and evaluated.

LOG A664  Supply Chain Management Leadership  6 CR
Contact Hours: 6 + 0
Prerequisites: LOG A661.
Registration Restrictions: Admission to Master of Science, Global Supply Chain Management Program.
Special Fees.
Study of the human factors involved in effective supply chain management. Techniques for motivation, human resource management, evaluation of organizational culture and change, leadership, and negotiation are developed and assessed.

LOG A665  Supply Chain Measurement  6 CR
Contact Hours: 6 + 0
Prerequisites: LOG A662.
Registration Restrictions: Admission to Master of Science, Global Supply Chain Management Program.
Special Fees.
Study of the tools needed to measure and sell the value created by logistics throughout the supply chain. An evaluation of factors of complexity and their impact on the creation of value. Physical valuation will be determined through the techniques of supply chain modeling and computer-based simulation. Financial valuation will be determined through activity-based cost accounting and capital budgeting techniques.

LOG A678  Strategic Logistics and Global Supply Chain Management  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Completion of MBA foundation course requirements.
Graduate standing or instructor's permission.
Introductory study of the roles logistics and supply chain management play in a company's strategic planning in both domestic and global markets, for the MBA generalist.
Course Descriptions

LS - Library Science
Offered through the College of Arts and Sciences
Consortium Library Reference Desk, 786-1848
http://consortiumlibrary.org

LS A101 Library Resources and Information Retrieval 1 CR
Contact Hours: 1 + 0
An introduction to academic library research with an emphasis on electronic resources.

LS A21 Library Research in the 21st Century 3 CR
Contact Hours: 3 + 0
Covers traditional and electronic library sources, the Internet as a research tool, and the critical and ethical uses of information.

LSIC - Liberal Studies Integrated Core
Offered through the College of Arts and Sciences
Beatrice McDonald Hall (BMH), Room 213, 786-6049
http://liberalstudies.uaa.alaska.edu

LSIC A231 Truth, Beauty, and Goodness 3 CR
Contact Hours: 3 + 0
Prerequisites: (ENGL A111 or concurrent enrollment).
Croslisted with: PHIL A231.
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.

LSIC A33 Power, Authority, and Governance 3 CR
Contact Hours: 3 + 0
Prerequisites: LSSS A111.
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.

LSIC A332 Science, Technology, and Culture 3 CR
Contact Hours: 3 + 0
Prerequisites: LSIC A202 and LSSS A111 and LSIC A231 and (LSSS A311 or concurrent enrollment).
An Advanced Learning Community approach to the study of issues in the natural sciences, social sciences, humanities, and performing and fine arts, using readings, lectures, in-depth small group discussion and activities outside of class. Class will have different focus each year. A writing and speaking intensive course.

LSIC A392 Seminar in Liberal Studies 1 CR
Contact Hours: 1 + 0
Prerequisites: COMM A111 and ENGL A111.
An Advanced Learning Community approach to the study of issues in the natural sciences, social sciences, humanities, and performing and fine arts, using readings, lectures, in-depth small group discussion and activities outside of class. Class will have different focus each year. A writing and speaking intensive course.

LSIC A488A Capstone Project I: Design and Research 3 CR
Contact Hours: 3 + 0
Prerequisites: LSIC A311 and LSIC A312 and LSIC A331 and LSIC A332.
Registration Restrictions: Completion of 9 credits of Liberal Studies disciplinary concentrations. Completion of GER Tier 1 (basic college-level skills) courses. Course Attributes: UAA GER Capstone.
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 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.

LSIC A488B Capstone Project II: Analysis and Presentation 3 CR
Contact Hours: 3 + 0
Prerequisites: LSIC A488A with minimum grade of C.
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.

LSIS - Liberal Studies Integrated Sciences
Offered through the College of Arts and Sciences
Beatrice McDonald Hall (BMH), Room 213, 786-6049
http://liberalstudies.uaa.alaska.edu

LSIS A101 Discoveries in Science 1 CR
Contact Hours: 1 + 0
Course Attributes: UAA GER Natural Sciences Requirement.
Lecture series covering famous scientists and their discoveries. Historical and societal factors that laid the framework for each discovery and how these discoveries were accepted in their time. How the discoveries affect modern science and society. Scientists from different disciplines will present lectures and lead discussions.

LSIS A102 Origins: Earth-Solar System-Life 5 CR
Contact Hours: 3 + 6
Prerequisites: (LSIS A101 or concurrent enrollment) and [MATH A105 or MATH A107 or MATH A109 or MATH A172 or MATH A200 or MATH A201 or MATH A227].
Course Attributes: UAA GER Natural Science w/ Lab.
Special Fees.
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.

LSIS A201 Life on Earth 5 CR
Contact Hours: 3 + 6
Prerequisites: LSIS A102 and (MATH A107 or concurrent enrollment).
Course Attributes: UAA GER Natural Science w/ Lab.
Special Fees.
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.

LSIS A202 Concepts and Processes: Natural Sciences 5 CR
Contact Hours: 3 + 6
Prerequisites: LSIS A201 and MATH A107.
Course Attributes: UAA GER Natural Science w/ Lab.
Special Fees.
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.

LSSS - Liberal Studies Social Sciences
Offered through the College of Arts and Sciences
Beatrice McDonald Hall (BMH), Room 213, 786-6049
http://liberalstudies.uaa.alaska.edu

LSSS A111 Cultural Foundations of Human Behavior 3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Social Sciences Requirement.
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.

LSSS A31 People, Places, and Ecosystems 3 CR
Contact Hours: 3 + 0
Prerequisites: STAT A252 and LSSS A111 and [LSSS A201 or BIOL A102]..
Examines historical and current relationships between humans and their surrounding environments, both natural and constructed. Considers the coevolution of human societies and the biosphere, the idea of place, and the challenges of living in today's human-dominated ecosystems. Uses workshops and short field trips to collect and examine data about human-environment relationships from several social science perspectives. Requires extensive writing and multidisciplinary analysis.

LSSS A312 Individuals, Groups, and Institutions 3 CR
Contact Hours: 3 + 0
Prerequisites: (ANTH A250 or concurrent enrollment) and LSSS A111.
Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses.
Course Attributes: UAA GER Integrative Capstone.
The study of how individuals influence and are influenced by groups and institutions. Emphasis on individuals' roles in groups and institutional activities, group and institutional influence on people's lives, and dynamics in the formation and change of institutions.

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Course Descriptions

MA - Medical Assisting

**Offered through the Community & Technical College**

**Allied Health Sciences Building (AHS), Room 161, 786-6928**

[www.uaa.alaska.edu/ctc/programs/alliedhealth/ma](http://www.uaa.alaska.edu/ctc/programs/alliedhealth/ma)

**MA A101** Medical Terminology 3 CR
- **Contact Hours:** 3 + 0
- 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 CR
- **Contact Hours:** 3 + 0
- Prerequisites: MA A101 with minimum grade of C.
- 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.

**MA A120** Medical Office Procedures 4 CR
- **Contact Hours:** 3 + 2
- Special Fees.
- 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 A120A** Medical Office Procedures A: Legal and Ethical Issues in Medical Assisting 2 CR
- **Contact Hours:** 2 + 0
- Special Fees.
- Prerequisites: MA A120A and MA A120B satisfy the requirement for MA A120.
- Introduces medical law and ethics for medical office personnel and allied health professionals. Includes medicolegal terminology, confidentiality of medical information, HIPAA regulations, informed consent requirements, and recommendations for prevention of professional liability claims.

**MA A120B** Medical Office Procedures B: An Introduction to Administrative Duties 2 CR
- **Contact Hours:** 1 + 2
- Special Fees.
- Prerequisites: MA A120A and MA A120B satisfy the requirement for MA A120.
- Introduces administrative and business aspects of the medical office and administrative duties of medical assistants. Includes general office duties, telephone and reception procedures, appointment scheduling, essentials of medical records, and financial record keeping for the medical office.

**MA A140** Medical Transcription I 2-3 CR
- **Contact Hours:** 1 + 3-6
- Prerequisites: (MA A101 with minimum grade of C or concurrent enrollment). Registration Restrictions: 45 wpm keyboarding in Windows Word processing.
- Special Fees.
- Special Note: Two (2) credits of this course are required for the Medical Assisting AAS degree. Students wishing to specialize in medical transcription may wish to register for three (3) credits, which requires the transcription of additional medical reports.
- Provides instruction in the machine transcribing of physicians' medical dictation. Introduces the use of transcription equipment, formatting of various medical reports, and transcription techniques and guidelines. Includes the transcribing of medical reports.

**MA A220** Coding for the Medical Office 3 CR
- **Contact Hours:** 3 + 0
- Prerequisites: MA A101 and BIOL A100 or [BIOL A111 and BIOL A112]. Special Fees.
- Presents 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.

**MA A230** Billing and Insurance for the Medical Office 3 CR
- **Contact Hours:** 2 + 2
- Prerequisites: CIS A105 and MA A220. Special Fees.
- Examines health care reimbursement issues including the fundamentals of medical billing and the reimbursement process, computerized patient accounting, and the submission and management of medical insurance claims.

**MA A240** Medical Transcription II 3 CR
- **Contact Hours:** 1 + 4
- Prerequisites: MA A140 with minimum grade of C.
- Special Fees.
- Advanced and complex machine transcription from various medical specialties.

**MA A250** Clinical Procedures I 4 CR
- **Contact Hours:** 3 + 2
- Special Fees.
- 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 CR
- **Contact Hours:** 3 + 2
- Prerequisites: MA A250 with minimum grade of C.
- Special Fees.
- Clinical duties of medical assisting. Includes minor office surgery, administration of medications, CLIA-waived laboratory procedures, venipuncture, electrocardiography and emergency procedures.

**MA A295** Medical Office Externship 5 CR
- **Contact Hours:** .5 + 15
- Grade Mode: Pass/No Pass.
- Special Fees.
- Special Note: A grade of C or better in all courses required for the nontranscripted departmental Certificate of Completion in Medical Assisting.
- 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.

**MATH - Mathematics**

**Offered through the College of Arts and Sciences**

**Social Sciences Building (SSB), Room 154, 786-1744**

[www.math.uaa.alaska.edu](http://www.math.uaa.alaska.edu)

Each student enrolled in MATH A050 through MATH A205, MATH A250 or MATH A272 on campus will be charged a Math Lab Fee as noted below.

**MATH A050A** Basic Mathematics 1 CR
- **Contact Hours:** 1 + 0
- Special Fees.
- Special Note: MATH A050A, A050B, A050C combined are equivalent to MATH A054.
- Includes addition, subtraction, multiplication, and division (the four basic operations) on whole numbers, fractions and decimals, and a discussion of order of operations. Computation involving ratios, proportion, and percent is also included. The topic of math anxiety is dealt with throughout the course.

**MATH A050B** Review of Mathematical Concepts 1 CR
- **Contact Hours:** 1 + 0
- Registration Restrictions: MATH A050A or Placement Test.
- Special Fees.
- Special Note: MATH A050A, A050B, A050C combined are equivalent to MATH A054.
- Includes a review of elementary geometry (area, perimeter, and volume calculations), the Pythagorean Theorem, similar and congruent triangles, order of operations, and an introduction to mathematical expressions using variables.

**MATH A050C** Introduction to Equations 1 CR
- **Contact Hours:** 1 + 0
- Registration Restrictions: MATH A050B or Placement Test.
- Special Fees.
- Special Note: MATH A050A, A050B, A050C combined are equivalent to MATH A054.
- Explores mathematical expressions using real numbers, exponents, and radicals. Also included is an overview of properties of equalities, solving equations, inequalities, elementary word problems, and the four operations on polynomials.
MATH A054  Prealgebra  3 CR
Contact Hours: 3 + 0
Special Fees.
Special Note: MATH A050A, A050B, A050C combined are equivalent to MATH A054.

Basic concepts of prealgebra mathematics. Includes arithmetic operations and applications, whole numbers, integers, fractions, decimals, ratio and proportion, percent, geometry and measures, exponents, algebraic expressions, polynomials, solution of simple equations, and introduction to graphing and statistics.

MATH A055  Elementary Algebra  3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A054 with minimum grade of C.
Registration Restrictions: If prerequisite is not satisfied, appropriate SAT or ACT scores or approved UAA Placement Test required.
Special Fees.

Beginning algebra course. Includes operations with signed numbers and polynomials, factoring, exponents, radicals, algebraic fractions, solution of linear equations, systems of equations, linear inequalities, and quadratic equations. Basic graphing.

MATH A060  Essential Mathematics  4 CR
Contact Hours: 4 + 0
Special Fees.
Special Note: Equivalent to MATH A054 and MATH A055. Credit will not be given for both MATH A054 and MATH A060. Placement test not required.

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.

MATH A101  Technical Mathematics  3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A055.
Special Note: This course will not satisfy the Mathematics requirement for the Associate of Arts Degree.

Includes algebraic operations, factoring, rational expressions, exponents, quadratic equations, logarithms, systems of equations, geometry, right-triangle trigonometry, and measurement and tolerances. Emphasis on problem-solving and applications.

MATH A105  Intermediate Algebra  3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A055 with minimum grade of C or MATH A060 with minimum grade of C.
Registration Restrictions: If prerequisite is not satisfied, appropriate SAT or ACT scores or approved UAA Placement Test required.
Special Fees.
Special Note: Presumes a solid foundation in elementary algebra.

Covers sets, properties of real numbers, exponents and radicals, solution of first and second-degree equations and inequalities. Also covers word problems, fundamental operations with polynomials, factoring, special products, rationals, expressions, functions, conic sections, Cartesian graphing of first and second-degree equations and inequalities, systems of equations, and introduction to logarithmic and exponential functions.

MATH A107  College Algebra  4 CR
Contact Hours: 4 + 0
Prerequisites: MATH A105 with minimum grade of C.
Registration Restrictions: If prerequisite is not satisfied, appropriate SAT or ACT scores or approved UAA Placement Test required.
Course Attributes: UAA GER Quantitative Skill Requirement.
Special Fees.
Special Note: A student may apply no more than 7 credits from any combination of MATH A107, A108 and A109 toward the graduation requirements for any baccalaureate degree.

Covers equations and inequalities, function theory, solution of equations greater than second degree, determinants and matrices, systems of equations and inequalities, exponential and logarithmic function, graphs and equations of conic sections, including applications of all these topics; binomial theorem; sequences and series; mathematical induction and combinatoric notation.

MATH A108  Trigonometry  3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A107 with minimum grade of C.
Registration Restrictions: If prerequisite is not satisfied, appropriate SAT or ACT scores or approved UAA Placement Test required.
Course Attributes: UAA GER Quantitative Skill Requirement.
Special Fees.

Special Note: A student may apply no more than 7 credits from any combination of MATH A107, A108 and A109 toward the graduation requirements for any baccalaureate degree.

Covers angular measure and trigonometric functions, fundamental trigonometric identities, composite angle identities, and graphs of trigonometric functions. Also includes complex numbers, DeMoivre's theorem, solution of right and oblique triangles, solution of trigonometric equations, inverse trigonometric functions and vectors. Provides calculation practice helpful for physics, engineering and survey technology courses.

MATH A109  Precalculus  6 CR
Contact Hours: 6 + 0
Prerequisites: MATH A105 with minimum grade of B.
Registration Restrictions: If prerequisite is not satisfied, appropriate SAT or ACT scores or approved UAA Placement Test required.
Course Attributes: UAA GER Quantitative Skill Requirement.
Special Fees.
Special Note: Intensive course designed for students who intend to take the calculus sequence (MATH A200, A201, A202). A student may apply no more than seven credits from any combination of MATH A107, A108 and A109 towards the graduation requirements for any baccalaureate degree.

Intensive course covering polynomial, rational, exponential, logarithmic and trigonometric functions, composite and inverse functions, conic sections, matrices and determinants, solutions of equations and inequalities, vectors, complex numbers, DeMoivre's theorem, polar coordinates, parametric and polar graphs, sequences and series, binomial theorem, and mathematical induction.

MATH A172  Applied Finite Mathematics  3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A105 with minimum grade of C.
Registration Restrictions: If prerequisite is not satisfied, appropriate SAT or ACT scores or approved UAA Placement Test required.
Course Attributes: UAA GER Quantitative Skill Requirement.
Special Fees.

Covers linear and quadratic equations and inequalities, algebra of matrices, introductory linear programming, exponential and logarithmic functions. Applications emphasizing the relationships of these mathematical concepts to quantitative decision making in the managerial and social sciences.

MATH A200  Calculus I  4 CR
Contact Hours: 4 + 0
Prerequisites: MATH A107 with minimum grade of C and MATH A108 with minimum grade of C.
Registration Restrictions: If prerequisite is not satisfied, appropriate SAT, ACT, or AP scores or approved UAA Placement Test required.
Course Attributes: UAA GER Quantitative Skill Requirement.

Special Fees.

A first course in calculus covering limits, including those with indeterminate form; and derivatives of algebraic and transcendental functions. Applications of derivatives including curve sketching, rates of change, and Newton's Method. Definite and indefinite integrals, including integration by substitution.

MATH A201  Calculus II  4 CR
Contact Hours: 4 + 0
Prerequisites: MATH A200 with minimum grade of C.
Course Attributes: UAA GER Quantitative Skill Requirement.

Special Fees.

Covers integration techniques and applications; sequences and series, including convergence tests; curves in the plane and polar coordinates.

MATH A202  Calculus III  4 CR
Contact Hours: 4 + 0
Prerequisites: MATH A201 with minimum grade of C.
Special Fees.

Vectors, partial differentiation and multiple integration. Green's Theorem, Stokes' Theorem and the Divergence Theorem.

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MATH A205 Communicating Mathematical Ideas 3 CR
Contact Hours: 3 + 0
Prerequisites: EDSE A212 with minimum grade of C or PSY A245 with minimum grade of C.
Registration Restrictions: Department Approval. Minimum grade of C in GER Quantitative Skills course.
Special Fees: Special Note: MATH A205 with a minimum grade of C is required to meet State of Alaska Teacher Certification standards. MATH A205 does not satisfy the General Education Quantitative Skills requirement.

MATH A215 Introduction to Mathematical Proofs 3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A201.
Study of logic, sets, relations, functions, cardinality, and an introduction to mathematical proof techniques.

MATH A231 Introduction to Discrete Mathematics 3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A107.
Registration Restrictions: If prerequisite is not satisfied, appropriate SAT, ACT, or AP scores or approved UAA placement test required.
Special Fees: Logic in its connections with mathematical proof, set theory, Boolean algebra, and combinatorial circuits; techniques of counting; elements of graph theory. Additional topics related to the mathematics of computing may include graph and tree traversal, finite automata, and the basics of complexity and formal languages.

MATH A272 Applied Calculus 3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A107 with minimum grade of C or MATH A172 with minimum grade of C or MATH A270 with minimum grade of C.
Course Attributes: UAA GER Quantitative Skill Requirement.
Special Fees: Covers functions and graphs, differentiation, exponential and logarithmic functions, antiderivatives and integration, functions of several variables. Applications of these mathematical concepts.

MATH A302 Ordinary Differential Equations 3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A202.
Special Fees: Nature and origin of differential equations, first order equations and solutions, linear differential equations with constant coefficients, systems of equations, power series solutions, operational methods, Laplace Transform methods and applications.

MATH A303 Introduction to Modern Algebra 3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A202 and MATH A215.
Introduction to sets, groups, rings and fields.

MATH A305 Introduction to Geometries 3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A202 and MATH A215.
Euclidean and non-Euclidean plane geometry and topics selected from affine geometry and projective geometry.

MATH A306 Discrete Methods 3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A200 and [MATH A215 or MATH A231].
Graph theoretical and combinatorial problem solving. Discrete models for applied problems are introduced and algorithmic as well as closed form solution techniques are applied.

MATH A314 Linear Algebra 3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A202.
Special Fees: Linear equations, finite dimensional vector spaces, matrices, determinants, linear transformations, and characteristic values. Inner product spaces.

MATH A321 Analysis of Several Variables 3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A202 and MATH A314.
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.

MATH A324 Advanced Calculus 3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A202 and MATH A215.
Investigations of the limit concept with special reference to functions on the real line. Topics include continuous functions and their properties, sequences and series, differentiation and integration of functions.

MATH A371 Stochastic Processes 3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A201 and STAT A307.
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.

MATH A407 Mathematical Statistics I 3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A202 and STAT A307.
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.

MATH A408 Mathematical Statistics II 3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A407.
Topics include sampling distributions, order statistics, point estimation, maximum likelihood estimators, consistency, unbiasedness, mean square error, Cramer-Rao lower bound, asymptotics of statistics, sufficient statistics, uniformly minimal variance and unbiased (UMVU) estimators, confidence intervals and hypotheses testing, lemma of Neyman Pearson, and statistical decision theory.

MATH A440 Introduction to Complex Analysis 3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A202.
Analytic functions, Cauchy's Theorem, sequences and series, integration and residues.

MATH A420 History of Mathematics 3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A202 and MATH A215.
Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses and junior standing. In addition to MATH prerequisites, one 100-level GER HIST prefix course is required.
Course Attributes: UAA GER Integrative Capstone.

MATH A422 Partial Differential Equations 3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A302.
Analysis and solution of partial differential equations. Initial and boundary value problems for elliptic, hyperbolic and parabolic types will be classified and solved. Additional topics will be selected by faculty member teaching the course.

MATH A423 Advanced Engineering Mathematics 3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A302.
Special Note: Course does not satisfy Mathematics Major requirements.
A practical review of mathematics for engineers. Includes partial differential equations, vector and matrix analysis, Fourier analysis, and complex analysis.

MATH A426 Numerical Methods 3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A201.
Special Fees: Introduction to numerical methods and software packages to solve applied problems. Topics include matrices with emphasis on using them to solve systems of linear equations, methods of solving non-linear equations, techniques to interpolate and approximate functions, methods of numerical differentiation and integration, and numerical methods to solve ordinary and partial differential equations. MATLAB and Mathematica will be used to solve applied problems with these techniques.

MATH A490A Selected Topics in Pure Mathematics 1-3 CR
Contact Hours: 1-3 + 0
Prerequisites: MATH A215 and MATH A314.
Registration Restrictions: Instructor permission required.
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.

Advanced topics in mathematics selected as continuations of, or complements to, the content of upper-division undergraduate mathematics courses. Emphasis on theoretical developments.
MECH - Mechanical Technology

Offered through Kenai Peninsula College
156 College Road, Soldotna, Alaska, 99669, (907) 262-0330
www.kpc.alaska.edu

MECH A101  Introduction to Machine Shop  4 CR
Contact Hours: 2 + 4
Offered only at Kenai Peninsula College.
The fundamentals of safe machine shop practice including the operation of the lathe, vertical mill, bandsaw, drill press, grinders, cut-off saw, and radial drill. Precision measurement, single point threading and off-hand drill sharpening are taught with emphasis on repair work.

MECH A102  Intermediate Machine Shop  4 CR
Contact Hours: 2 + 4
Prerequisites: MECH A101.
Offered only at Kenai Peninsula College.
A continuation of safe shop fundamentals to include metallurgy, gears, fits, broaching, tapers, indexing and dividing, rotary table, multiple lead threads, carbide tools, and finishes. The use of machinery as required for machine repair. More complex projects will be completed by the student.
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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>MEDT A101</td>
<td>Phlebotomy Procedures</td>
<td>3 CR</td>
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<tr>
<td>MEDT A102</td>
<td>Urinalysis for Clinical Assistants</td>
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<td>MEDT A103</td>
<td>Hematology for Clinical Assistants</td>
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<td>MEDT A104</td>
<td>Clinical Chemistry for Clinical Assistants</td>
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<td>MEDT A105</td>
<td>Microbiology for Clinical Assistants</td>
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<td>MEDT A106</td>
<td>Waived Testing</td>
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<td>MEDT A107</td>
<td>Bacteriology for Clinical Assistants</td>
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<td>MEDT A108</td>
<td>Clinical Microbiology</td>
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<td>MEDT A109</td>
<td>Basic Techniques in Laboratory Medicine</td>
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<td>MEDT A110</td>
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<td>MEDT A201</td>
<td>Advanced Machine Shop</td>
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<td>MEDT A202</td>
<td>Clinical Chemistry</td>
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<td>MEDT A203</td>
<td>Clinical Microbiology</td>
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<td>MEDT A204</td>
<td>Basic Techniques in Laboratory Medicine</td>
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<td>MECH A115</td>
<td>Gasoline Engine Rebuilding</td>
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<td>MECH A116</td>
<td>Offset Machining</td>
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<td>MECH A117</td>
<td>Mill Practice</td>
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<td>MECH A118</td>
<td>Advanced Milling</td>
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<td>Computer Numerical Control Mill</td>
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<td>Offset Mill</td>
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<td>Advanced Offset Machining</td>
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<td>MECH A138</td>
<td>Clinical Assistant</td>
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MEDT A204  Hematology and Coagulation  6 CR
Contact Hours: 3 + 6
Prerequisites: BIOL A111 with minimum grade of C and BIOL A112 with minimum grade of C and [CHEM A103 with minimum grade of C and CHEM A105L with minimum grade of C or CHEM A105 with minimum grade of C and CHEM A105L with minimum grade of C] and [CHEM A104 with minimum grade of C or CHEM A321 with minimum grade of C] and MEDT A132 with minimum grade of C.
Registration Restrictions: Departmental approval.

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.

MEDT A206  Immunology and Blood Banking  6 CR
Contact Hours: 3 + 6
Prerequisites: BIOL A111 with minimum grade of C and BIOL A112 with minimum grade of C and [CHEM A103 with minimum grade of C and CHEM A105L with minimum grade of C or CHEM A105 with minimum grade of C and CHEM A105L with minimum grade of C] and [CHEM A104 with minimum grade of C or CHEM A321 with minimum grade of C] and MEDT A132 with minimum grade of C.
Registration Restrictions: Departmental approval.
Special Fees.

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, immunologically related diseases, transplantation, and principles of antigen-antibody based tests.

MEDT A208  Urine and Body Fluid Analysis  3 CR
Contact Hours: 2 + 2
Prerequisites: BIOL A111 with minimum grade of C and BIOL A112 with minimum grade of C and [CHEM A103 with minimum grade of C and CHEM A105L with minimum grade of C or CHEM A105 with minimum grade of C and CHEM A105L with minimum grade of C] and [CHEM A104 with minimum grade of C or CHEM A321 with minimum grade of C] and MEDT A132 with minimum grade of C.
Registration Restrictions: Departmental approval.
Special Fees.

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.

MEDT A250  Cultural Diversity in Health Care  1 CR
Contact Hours: 1 + 0
Registration Restrictions: Departmental approval.
Grade Mode: Pass/No Pass.

Examines community, personal and family relationships, and education through the lenses of cross-cultural holistic health and healing practices. Brings the student into a direct relationship with health care consumers from various cultural backgrounds.

MEDT A295  Medical Technology Practicum  12 CR
Contact Hours: 0 + 36
Prerequisites: MEDT A202 with minimum grade of C and MEDT A203 with minimum grade of C and MEDT A204 with minimum grade of C and MEDT A206 with minimum grade of C and MEDT A208 with minimum grade of C.
Registration Restrictions: Departmental approval
Special Fees.

Applies knowledge and skills acquired in medical laboratory technology (MEDT) courses to laboratory testing at a clinical facility. Supervised by UAA faculty and clinical laboratory personnel.

MEDT A301  Clinical Molecular Biology  4 CR
Contact Hours: 3 + 3
Prerequisites: BIOL A112 with minimum grade of C and MATH A107 with minimum grade of C and [CHEM A104 with minimum grade of C or CHEM A321 with minimum grade of C].
Registration Restrictions: Departmental approval.
Special Fees.

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.

MEDT A302  4 CR
Contact Hours: 4 + 0
Prerequisites: (PHIL A302 or concurrent enrollment).
Registration Restrictions: MLT program director and faculty approval. Completion of GER Tier 1 (basic college-level skills) courses and junior standing.
Course Attributes: UAA GER Integrative Capstone.

Applies educational and management principles to laboratory medicine and allied health science professions. Prepares future laboratory managers to function in a culturally diverse and technologically dynamic environment. Topics include education, process, and teaching methods. Managerial components incorporate planning, directing, and evaluating. Designed for students with an educational or working background in a health care field.

MEDT A303  Advanced Clinical Microbiology  6 CR
Contact Hours: 3 + 6
Prerequisites: MEDT A203 with minimum grade of C.
Registration Restrictions: Departmental approval
Special Fees.

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.

MEDT A401  Introduction to Research  2 CR
Contact Hours: 2 + 0
Prerequisites: (CIS A305 or concurrent enrollment) and STAT A252.
Registration Restrictions: Departmental approval

Applies research and presentation methods to current topics in medical technology.

MEDT A402  Medical Technology Honors: Quality Assessment Project  3 CR
Contact Hours: 2 + 2
Prerequisites: MEDT A302 with minimum grade of C and (MEDT A401 with minimum grade of C or concurrent enrollment).
Major Restriction: Must be Medical Technology major.
Registration Restrictions: Departmental approval

Grade Mode: Pass/No Pass.

Applies basic research techniques and quality assessment principles to address a quality care issue.

MEDT A405  Medical Technology Practicum  12 CR
Contact Hours: 0 + 36
Prerequisites: MEDT A202 with minimum grade of C and MEDT A204 with minimum grade of C and MEDT A206 with minimum grade of C and MEDT A208 with minimum grade of C and MEDT A301 with minimum grade of C and MEDT A302 with minimum grade of C and MEDT A303 with minimum grade of C.
Registration Restrictions: Departmental approval
Special Fees.

Integrates knowledge and applies skills acquired in medical laboratory technology (MEDT) courses to laboratory testing at a clinical facility. Supervised by UAA faculty and clinical laboratory personnel.

MILS A101  Leadership and Personal Development  3 CR
Contact Hours: 3 + 0
Corequisite: MILS A150.

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, Officerichess, 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.

MILS A102  Introduction to Tactical Leadership  3 CR
Contact Hours: 3 + 0
Corequisite: MILS A101.

Offers 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.
MILS A150  Army ROTC Leadership and Physical Training Laboratory  1 CR

Contact Hours: 0 + 4
Registration Restrictions: MILS A101 or A102 or A201 or A202 or A301 or A302 or A401 or A402.
Grade Mode: Pass/No Pass.

Special Fees: 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.

MILS A201  Foundations of Leadership  3 CR

Contact Hours: 3 + 0
Prerequisites: MILS A102.
Corequisite: MILS A150.

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.

MILS A202  Foundations of Tactical Leadership  3 CR

Contact Hours: 3 + 0
Prerequisites: MILS A201.
Corequisite: MILS A150.

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.

MILS A301  Adaptive Team Leadership  3 CR

Contact Hours: 3 + 0
Prerequisites: MILS A202.
Registration Restrictions: Restricted to contracted ROTC cadets only.
Corequisite: MILS A150.

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 student's leadership attributes and actions. Develops leadership and critical thinking abilities.

MILS A302  Applied Team Leadership  3 CR

Contact Hours: 3 + 0
Prerequisites: MILS A301.
Registration Restrictions: Restricted to contracted ROTC cadets only.
Corequisite: MILS A150.

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.

MILS A401  Adaptive Leadership  3 CR

Contact Hours: 3 + 0
Prerequisites: MILS A302.
Registration Restrictions: Restricted to contracted ROTC cadets only.
Corequisite: MILS A150.

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.

MILS A402  Leadership in a Complex World  3 CR

Contact Hours: 3 + 0
Prerequisites: MILS A401.
Registration Restrictions: Restricted to contracted ROTC cadets only.
Corequisite: MILS A150.

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.

MT - Marine Technology

Offered through Kenai Peninsula College
156 College Road, Soldotna, Alaska 99669, (907) 262-0330
www.kpc.alaska.edu

MT A101  Boating Safety and Essential Navigation  1 CR

Contact Hours: 1 + 0
Grade Mode: Pass/No Pass.
Special Note: Swimming attire or change of clothing is needed. Encouraged to bring Personal Floatation Device and immersion suit.

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).

MT A231  Vessel Commercial License Preparation  3 CR

Contact Hours: 3 + 0
Grade Mode: Pass/No Pass.
Offered only at Kenai Peninsula College.
Preparation for passing the USCG license exam for motor boat operator of uninspected passenger vessels, and master, inland and near coastal.

MTP - Massage Therapy Program

Offered through the Community and Technical College
Allied Health Sciences Building (AHS), Room 169, 786-4930
www.uaa.alaska.edu/ctc/programs/alliedhealth/massage

MTP A154  Professional Communication and Documentation for Massage Therapists  2 CR

Contact Hours: 1 + 2
Prerequisites: (MTP A151 with minimum grade of C or concurrent enrollment).

Examines standards for, and provides practice in documentation, professional communication and record management in a professional setting.

MUS - Music

Offered through the College of Arts and Sciences
Fine Arts Building (ARTS), Room 302, 786-1595
http://music.uaa.alaska.edu

MUS A102  Concert Chorus I  2 CR

Contact Hours: 2 + 0
Registration Restrictions: Admission by audition only.
Special Fees.
Special Note: May be repeated once for credit.
Performance-oriented large chorus. Established community organization for singers who read music, demonstrate secure rhythm and pitch, and produce acceptable vocal sound.

MUS A103  Matanuska-Susitna College Community Band  2 CR

Contact Hours: 2 + 0
Registration Restrictions: Play a concert band instrument or read music well enough to quickly learn one.
Grade Mode: Pass/No Pass.
Offered only at Matanuska-Susitna College.
Special Note: Age group ranges from 10-80. Experience ranges from basic to professional.
Structured, established concert band.

MUS A111  Fundamentals of Music  3 CR

Contact Hours: 3 + 0

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 CR

Contact Hours: 3 + 0
Prerequisites: MUS A111.

Registration Restrictions: Ability to read music in treble and bass clef in all keys.
Elementary study of harmony and melody; formation of scales, modes, intervals, chords, inversions, and simple harmonic progressions. Writing and harmonizing of melodic lines.
MUS A115 Jazz Theory I 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Ability to read music, theory background, basic ability on an instrument.
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.

MUS A116 Jazz Theory II 3 CR
Contact Hours: 3 + 0
Prerequisites: MUS A115.
Application of skills obtained in MUS 115. Modulation, sequence, transposition, arranging, and voicing are studied, with compositions performed by lab groups. Copyright preparation is discussed.

MUS A121 Music Appreciation 3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Fine Arts Requirement.
Special Note: Music majors may not use this course towards their GER-Fine Arts requirement.
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.

MUS A124 History of Jazz 3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Fine Arts Requirement.
History and development of jazz from its early heritage to the present, emphasizing representative styles and individual or group contributors. Recordings, guest artists, and possible field trips enhance regular classroom activities.

MUS A131 Music Theory I 3 CR
Contact Hours: 3 + 0
Corequisite: MUS A133.
Organization of musical materials with emphasis on diatonic functional harmony. Introduction to part writing and keyboard skills.

MUS A132 Music Theory II 3 CR
Contact Hours: 3 + 0
Prerequisites: MUS A131.
Corequisite: MUS A134.
Continuation of MUS A131, emphasizing part writing and melody harmonization. Introduction of non-harmonic tones and modulation and development of practical keyboard skills.

MUS A133 Sightsinging and Ear Training I 2 CR
Contact Hours: 2 + 0
Corequisite: MUS A131.
The development of skills in hearing and reading music. The course features the study of intervals and chords and common metrical patterns.

MUS A134 Sightsinging & Ear Training II 2 CR
Contact Hours: 2 + 0
Prerequisites: MUS A133.
Corequisite: MUS A132.
Continuation of MUS A133, emphasizing rhythmic, melodic and harmonic dictation.

MUS A140 Fingerstyle Guitar I 2 CR
Contact Hours: 2 + 0
Special Note: Students must furnish their own 6-string acoustic or classical guitar.
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.

MUS A141 Fingerstyle Guitar II 2 CR
Contact Hours: 2 + 0
Prerequisites: MUS A140.
Registration Restrictions: Audition required for students who have not completed MUS A140, demonstrating ability to notate melodies on the guitar in C Major and A minor and acquaintance with fingerstyle technique and the concept of alternating bass.
Continuation of MUS A140 and development of music reading skills using standard treble staff notation. Introduces barre chords, bass runs, ornamentation, and Major and minor scale studies in the first and second positions. Solo examples from traditional, classical, and contemporary literature and fingerstyle patterns in simple and compound time.

MUS A142 Guitar Chord Theory 2 CR
Contact Hours: 2 + 0
Registration Restrictions: Ability to read music on the treble staff. May be taken concurrently with MUS A141.
Special Note: Instrument required.
One-semester theory course for guitar students. Includes analysis and construction of scales, intervals, chords, and key centers. Develops transcription skills, assignment of chords to melodies, harmonization, and eartraining. Hands-on exercises focus on practical application to the instrument.

MUS A150 Piano Class I 1 CR
Contact Hours: 1 + 0
Special Fees.

MUS A152 Voice Class I 1 CR
Contact Hours: 1 + 0
Registration Restrictions: Ability to match pitches.
Special Fees.
Special Note: Ability to read music not a prerequisite.
Study and practice of basic fundamentals of singing and song interpretation, stressing attitude and correct practice habits. Introduces and expands general knowledge of singing: mechanism, technique, repertoire, and performance practices.

MUS A154A Functional Piano I 1 CR
Contact Hours: 0 + 2
Prerequisites: (MUS A111 or concurrent enrollment).
May be stacked with: MUS A154B, MUS A154C, MUS A154D.
Special Note: May be repeated for a maximum of 4 credits.
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.

MUS A154B Functional Piano II 1 CR
Contact Hours: 0 + 2
Prerequisites: MUS A154A.
Grade Mode: Pass/No Pass.
May be stacked with: MUS A154A, MUS A154C, MUS A154D.
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.

MUS A154C Functional Piano III 1 CR
Contact Hours: 0 + 2
Prerequisites: MUS A154B.
Grade Mode: Pass/No Pass.
May be stacked with: MUS A154A, MUS A154B, MUS A154D.
Intended for music majors who demonstrate enough piano ability to potentially pass all six components of the piano proficiency exam.
Components: 1) a memorized performance of a Bach Two-Part Invention or a Clementi Sonata; 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.

MUS A154D Functional Piano IV 1 CR
Contact Hours: 0 + 2
Prerequisites: MUS A154C.
Grade Mode: Pass/No Pass.
May be stacked with: MUS A154A, MUS A154B, MUS A154C.
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 Sonata; 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.

MUS A155 Functional Piano II 1 CR
Contact Hours: 1 + 0
Prerequisites: MUS A154.
Continuation of MUS A154, using simple literature, sight-reading exercises, major scales and cadences, and simple tunes with primary triads.
Course Descriptions

MUS A161 Private Lessons 1-2 CR
Contact Hours: 1-2 + 0
Registration Restrictions: Departmental approval. Enrollment concurrent with appropriate master class.
Special Fees.
Special Note: Bachelor of Music majors enroll for 2 credits.

MUS A162 Private Lessons 1-2 CR
Contact Hours: 1-2 + 0
Prerequisites: MUS A161.
Registration Restrictions: Departmental approval. Enrollment concurrent with appropriate master class.
Special Fees.
Special Note: Bachelor of Music majors enroll for 2 credits.

MUS A163 Private Lessons (Non-Major) 1-2 CR
Contact Hours: 1-2 + 3-6
Special Fees.
Private lessons in brass, guitar, harpsichord, organ, percussion, piano, strings, voice, and woodwinds for non-majors.

MUS A164 Private Lessons (Non-Major) 1-2 CR
Contact Hours: 1-2 + 3-6
Special Fees.
Continuation of MUS A163.

MUS A202 Concert Chorus II 2 CR
Contact Hours: 2 + 0
Registration Restrictions: Admission by audition only.
Special Fees.
Special Note: May be repeated once for credit.
Performance-oriented large chorus. Established community organization for singers who read music, demonstrate secure rhythm and pitch, and produce acceptable vocal sound.

MUS A215 Music of Alaska Natives and Indigenous Peoples of Northern Regions 3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A111.
Crosslisted with: AKNS A215.
Course Attributes: UAA GER Fine Arts Requirement.
Special Note: AKNS A201 or MUS A111 recommended.
Explores the music of Alaska Natives and Indigenous Peoples of Northern regions by group, including influences from Euro-American music.

MUS A221 History of Music I 3 CR
Contact Hours: 3 + 0
Prerequisites: MUS A121 or MUS A131.
Course Attributes: UAA GER Fine Arts Requirement UAA GER Humanities Requirement.
Special Note: BA music majors may not use this course towards their GER-Fine Arts or CAS Humanities sequence requirements.
Music before 1750. Explores stylistic developments and structure from Antiquity through Medieval, Renaissance, and Baroque eras within their historical context.

MUS A222 History of Music II 3 CR
Contact Hours: 3 + 0
Prerequisites: MUS A121 or MUS A131.
Course Attributes: UAA GER Fine Arts Requirement UAA GER Humanities Requirement.
Special Note: BA music majors may not use this course towards their GER-Fine Arts or CAS Humanities sequence requirements.
Western Art music since 1750. Stylistic developments and structure through Classical, Romantic, and 20th Century eras within their historical context. Also covers World Music topics, with attention to the Music of the North (Alaska Native).

MUS A231 Music Theory III 3 CR
Contact Hours: 3 + 0
Prerequisites: MUS A132.
Corequisite: MUS A233.
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.

MUS A232 Music Theory IV 3 CR
Contact Hours: 3 + 0
Prerequisites: MUS A231.
Corequisite: MUS A234.
Continuation of MUS A231. Features borrowed chords and other types of chromatic harmonies. Surveys 20th Century harmony.

MUS A233 Sightsinging and Ear Training III 2 CR
Contact Hours: 2 + 0
Prerequisites: MUS A134.
Corequisite: MUS A231.
Develops advanced skills in hearing and reading music. Features modulation, chromaticism and complex rhythmic patterns.

MUS A234 Sightsinging and Ear Training IV 2 CR
Contact Hours: 2 + 0
Prerequisites: MUS A233.
Corequisite: MUS A232.
Continuation of MUS A233.

MUS A240 Fingerstyle Guitar III 2 CR
Contact Hours: 2 + 0
Prerequisites: MUS A141 and MUS A142.
Registration Restrictions: Faculty permission.
Continuation of MUS A241. Intermediate skills including ornamentation, notereading in the second position, and moving bass lines. Development of solo technique with repertoire selected from classical and contemporary composers. Fingerstyle syncopated rhythms and blues and flamenco studies.

MUS A241 Fingerstyle Guitar IV 2 CR
Contact Hours: 2 + 0
Prerequisites: MUS A142 and MUS A240.
Registration Restrictions: Faculty permission required.
Continuation of MUS A240. Review of second position and introduction of notereading in the 4th and 5th positions. Intermediate solo repertoire including examples from the Latin American composers. Fingerstyle technique using extended chords in barre positions and pattern modulation.

MUS A242 Solo Fingerstyle Guitar 2 CR
Contact Hours: 2 + 0
Prerequisites: MUS A142 and MUS A240.
Registration Restrictions: Faculty permission required.
Special Note: May be repeated twice for credit.
Performance-oriented course for the intermediate guitarist. Focuses upon rehearsal and memorization techniques using literature appropriate to each student's level of instrumental mastery. Continues notereading studies in all positions and exercises in small ensemble performance.

MUS A261 Private Lessons 1-2 CR
Contact Hours: 1-2 + 0
Prerequisites: MUS A162.
Registration Restrictions: Departmental approval. Enrollment concurrent with appropriate master class.
Special Fees.
Special Note: Bachelor of Music majors enroll for 2 credits.
Continuation of MUS A162.

MUS A262 Private Lessons 1-2 CR
Contact Hours: 1-2 + 0
Prerequisites: MUS A261.
Registration Restrictions: Departmental approval. Enrollment concurrent with appropriate master class.
Special Fees.
Special Note: Bachelor of Music majors enroll for 2 credits.
Continuation of MUS A261.

MUS A263 Private Lessons (Non-Major) 1-2 CR
Contact Hours: 1-2 + 3-6
Special Fees.
Continuation of MUS A264.

MUS A264 Private Lessons (Non-Major) 1-2 CR
Contact Hours: 1-2 + 3-6
Special Fees.
Continuation of MUS A263.

MUS A280 Basic Conducting 2 CR
Contact Hours: 2 + 0
Prerequisites: MUS A131.
Introduction to principles of conducting. Explores time-beating, use of left hand, score reading, and transposition as it relates to conducting.

MUS A301A University Singers 1 CR
Contact Hours: 2 + 0
Registration Restrictions: By audition.
Grade Mode: Pass/No Pass.
May be stacked with: MUS A301B.
Special Fees.
Special Note: May be repeated for credit. Elective credit for the non music major.
Rehearsal and performance of literature for large choral ensemble, including works from the Renaissance to the present day.
MUS A301B University Singers 2 CR
Contact Hours: 2 + 0
Registration Restrictions: By audition.
May be stacked with: MUS A301A.
Special Fees.
Special Note: May be repeated for credit. Ensemble credit for vocal majors.
Rehearsal and performance of literature for large choral ensemble, including works from the Renaissance to the present day.

MUS A302A Chamber Music and Accompanying 1 CR
Contact Hours: 1 + 3
Registration Restrictions: By audition.
Grade Mode: Pass/No Pass.
May be stacked with: MUS A302B.
Special Note: May be repeated for credit. Advanced vocalists and instrumentalists are also encouraged to enroll.
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.

MUS A302B Chamber Music and Accompanying 2 CR
Contact Hours: 2 + 0
Registration Restrictions: By audition.
May be stacked with: MUS A302A.
Special Note: May be repeated for credit. Advanced vocalists and instrumentalists are also encouraged to enroll.
Ensemble course for pianists. Covers the art of accompanying singers and instrumentalists and relevant skills such as sight-reading and score-reading.

MUS A303A University Wind Ensemble 1 CR
Contact Hours: 2 + 0
Registration Restrictions: By audition.
Grade Mode: Pass/No Pass.
May be stacked with: MUS A303B.
Special Note: May be repeated for credit.
In-depth rehearsal and performance of original band music and transcriptions from Renaissance up to and including 20th century literature. Ensemble for the non music major.

MUS A303B University Wind Ensemble 2 CR
Contact Hours: 2 + 0
Registration Restrictions: By audition.
May be stacked with: MUS A303A.
Special Note: May be repeated for credit.
In-depth rehearsal and performance of original band music and transcriptions from Renaissance up to and including 20th century literature. Ensemble course for wind and percussion majors.

MUS A307A University Sinfonia 1 CR
Contact Hours: 2 + 0
Registration Restrictions: By audition.
Grade Mode: Pass/No Pass.
May be stacked with: MUS A307B.
Special Note: May be repeated for 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.

MUS A307B University Sinfonia 2 CR
Contact Hours: 2 + 0
Registration Restrictions: By audition.
May be stacked with: MUS A307A.
Special Note: May be repeated for 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 string majors.

MUS A313 Opera Workshop 2 CR
Contact Hours: 2 + 0
Registration Restrictions: By audition
Special Fees.
Special Note: May be repeated for credit. Only 4 credits of MUS A313 may be applied to the Bachelor of Music degrees.
Rehearsal and performance of selected operas, operettas and musical theatre. Meets the small ensemble requirement for music majors.

MUS A331 Form and Analysis 3 CR
Contact Hours: 3 + 0
Prerequisites: MUS A232.
Registration Restrictions: Completion of GER Tier I (basic college-level skills) courses and junior standing.
Course Attributes: UAA GER Integrative Capstone.
Structural principles of music of the 18th and 19th centuries.

MUS A361 Private Lessons 2 CR
Contact Hours: 2 + 0
Prerequisites: MUS A262.
Registration Restrictions: Departmental approval. Enrollment concurrent with appropriate master class.
Special Fees.
Continuation of MUS A262.

MUS A362 Private Lessons 2 CR
Contact Hours: 2 + 0
Prerequisites: MUS A361.
Registration Restrictions: Departmental approval. Enrollment concurrent with appropriate master class.
Special Fees.
Continuation of MUS A361.

MUS A363 Private Lessons (Non-Major) 1-2 CR
Contact Hours: 1-2 + 3-6
Special Fees.
Continuation of MUS A264.

MUS A364 Private Lessons (Non-Major) 1-2 CR
Contact Hours: 1-2 + 3-6
Special Fees.
Continuation of MUS A363.

MUS A365 Chamber Ensemble 1 CR
Contact Hours: 1 + 0
Prerequisites: MUS A162.
Registration Restrictions: Faculty approval.
Special Note: May be repeated for credit 3 times.
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.

MUS A371 Brass Methods and Techniques 2 CR
Contact Hours: 2 + 0
Prerequisites: MUS A132.
Special Fees.
Special Note: Student must be able to read music fluently while holding/performing on the brass instruments.
Instruction in the brass instruments. The course is part of the teacher training program.

MUS A372 Woodwind Methods and Techniques 2 CR
Contact Hours: 2 + 0
Prerequisites: MUS A132.
Special Fees.
Special Note: Student must be able to read music fluently while holding/performing on the woodwind instruments.
Instruction in the woodwind instruments. The course is part of the teacher training program.

MUS A373 String Methods and Techniques 2 CR
Contact Hours: 2 + 0
Prerequisites: MUS A132.
Special Fees.
Special Note: Student must be able to read music fluently while holding/performing on the string instruments.
Instruction in the stringed instruments of the orchestra and guitar. The course is part of the teacher training program.

MUS A374 Voice Methods and Techniques 2 CR
Contact Hours: 2 + 0
Prerequisites: MUS A132.
Special Note: Student must be able to sing and read music fluently.
Instruction in musical use of the voice. The course is part of the teacher training program.

MUS A375 Percussion Methods and Techniques 2 CR
Contact Hours: 2 + 0
Registration Restrictions: Student must be able to read music fluently while holding/performing on the percussion instruments.
Special Fees.
Instruction in the percussion instruments. The course is part of the teacher training program.
Course Descriptions

MUS A376 Elementary Music Methods and Techniques 2 CR
Contact Hours: 2 + 0
Prerequisites: MUS A132.
Special Fees.
Special Note: Students must be able to sing and read music fluently and be able to hold and perform various instruments.
Introduction to elementary music instruments, philosophies, and techniques. The course is part of the Bachelor of Music with Emphasis in Music Education program.

MUS A381 Choral Conducting 2 CR
Contact Hours: 2 + 0
Prerequisites: MUS A232 and MUS A280.
Principles of conducting and interpreting choral music.

MUS A382 Instrumental Conducting 2 CR
Contact Hours: 2 + 0
Prerequisites: MUS A232 and MUS A280.
Principles of conducting and interpreting instrumental music.

MUS A405A University Jazz Ensemble 1 CR
Contact Hours: 2 + 0
Registration Restrictions: By audition.
Grade Mode: Pass/No Pass.
May be stacked with: MUS A405B.
Special Fees.
Special Note: Students must be able to sing and read music fluently and be able to hold and perform various instruments.
Study and performance of traditional repertoire, Latin and 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.

MUS A405B University Jazz Ensemble 2 CR
Contact Hours: 2 + 0
Registration Restrictions: By audition.
May be stacked with: MUS A405A.
Special Fees.
Special Note: May be repeated for 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.

MUS A407 Jazz Combo 2 CR
Contact Hours: 2 + 0
Prerequisites: MUS A162.
Registration Restrictions: By audition.
Special Note: May be repeated for credit.
Rehearsal and performance of combo jazz styles. Music selected from a variety of styles and eras including swing, rock, fusion and pop. Elective for music majors.

MUS A408A University Percussion Ensemble 1 CR
Contact Hours: 2 + 0
Registration Restrictions: By audition.
Grade Mode: Pass/No Pass.
May be stacked with: MUS A408B.
Special Note: May be repeated for 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.

MUS A408B University Percussion Ensemble 2 CR
Contact Hours: 2 + 0
Registration Restrictions: By audition.
May be stacked with: MUS A408A.
Special Note: May be repeated for credit.
Study and performance of percussion chamber music including 20th century literature for percussion as well as transcriptions of earlier music. Elective for music majors.

MUS A409A University Guitar Ensemble 1 CR
Contact Hours: 2 + 0
Registration Restrictions: By audition. Recommended: prior ensemble or solo recital experience.
Grade Mode: Pass/No Pass.
May be stacked with: MUS A409B.
Special Fees.
Special Note: May be repeated for credit.
Study and performance of traditional repertoire, Latin and 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 non music majors.

MUS A409B University Guitar Ensemble 2 CR
Contact Hours: 2 + 0
Registration Restrictions: By audition. Recommended prior ensemble or solo recital experience.
May be stacked with: MUS A409A.
Special Fees.
Special Note: May be repeated seven times for credit.
Study and performance of traditional repertoire, Latin and European folk music, and popular and classical themes arranged for two or more guitars.
Provides experience in sightreading and refines practice and memorization skills, stylistic interpretation, and stage delivery. Ensemble credit for guitar majors.

MUS A421 Music in the Baroque Period 3 CR
Contact Hours: 3 + 0
Prerequisites: MUS A222 and MUS A232.
Special Note: BA music majors must first pass MUS 154 and the functional piano exam by jury before enrolling in this course.
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.

MUS A422 Music in the Classical Period 3 CR
Contact Hours: 3 + 0
Prerequisites: MUS A222 and MUS A232.
Special Note: BA music majors must first pass MUS 154 and the functional piano exam by jury before enrolling in this course.
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.

MUS A423 Music in the Romantic Period 3 CR
Contact Hours: 3 + 0
Prerequisites: MUS A222 and MUS A232.
Special Note: BA music majors must first pass MUS 154 and the functional piano exam by jury before enrolling in this course.
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.

MUS A424 Music in the 20th Century 3 CR
Contact Hours: 3 + 0
Prerequisites: MUS A222 and MUS A232.
Special Note: BA music majors must first pass MUS A154 and the functional piano exam by jury before enrolling in this course.
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.

MUS A431 Counterpoint 3 CR
Contact Hours: 3 + 0
Prerequisites: MUS A232.
Study of the contrapuntal techniques of the 16th and 18th centuries. Features writing in appropriate vocal and instrumental forms.

MUS A432 Orchestration 3 CR
Contact Hours: 3 + 0
Prerequisites: MUS A232.
Principles and practices of composing and transcribing music for various instrumental ensembles, including band and orchestra.

MUS A461 Private Lessons 2 CR
Contact Hours: 2 + 0
Prerequisites: MUS A362.
Registration Restrictions: Departmental approval. Enrollment concurrent with appropriate master class.
Special Fees.
Continuation of MUS A362.

MUS A462 Private Lessons 2 CR
Contact Hours: 2 + 0
Prerequisites: MUS A461.
Registration Restrictions: Departmental approval. Enrollment concurrent with appropriate master class.
Special Fees.
Continuation of MUS A461.
MUS A466  String and Wind Master Class  1 CR
Contact Hours: 1 + 0
Registration Restrictions: Departmental approval. Enrollment concurrent with appropriate level of juried private lessons. One of the following: MUS A161, A162, A261, A262, A361, A362, A461, or A462.
Special Fees.
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.
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.

MUS A467  Piano Master Class  2 CR
Contact Hours: 2 + 0
Registration Restrictions: Departmental approval. Enrollment concurrent with appropriate level of juried private lessons. One of the following: MUS A161, A162, A261, A262, A361, A362, A461, or A462.
Special Fees.
Special Note: Mandatory each semester for BM, Performance degree; 8 credits minimum required for BM, Music Education Emphasis and BA; Music degrees. May be repeated for a maximum of 16 credits.
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.

MUS A468  Voice Master Class  2 CR
Contact Hours: 2 + 0
Registration Restrictions: Departmental approval. Enrollment concurrent with appropriate level of juried private lessons. One of the following: MUS A161, A162, A261, A262, A361, A362, A461, or A462.
Special Fees.
Special Note: Mandatory each semester for BM, Performance majors; 8 credits minimum required for BM, Music Education Emphasis and BA, Music degrees. May be repeated for a maximum of 16 credits.
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.

MUS A469  Guitar Master Class  2 CR
Contact Hours: 2 + 0
Registration Restrictions: Departmental approval. Enrollment concurrent with appropriate level of juried private lessons. One of the following: MUS A161, A162, A261, A262, A361, A362, A461, or A462.
Special Note: Mandatory each semester for BM, Performance majors; 8 credits minimum required for BM Music Education Emphasis and BA, Music degrees. May be repeated for a maximum of 16 credits.
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.

MUS A603  Wind Ensemble Performance Projects  2 CR
Contact Hours: 1 + 4
Registration Restrictions: Completion of baccalaureate degree in music and audition.
Development and implementation of standards based curricular performance projects for band. Students participate in University Wind Ensemble for lab experience.

MUS A668A  Methods for Teaching Music I, K-12  3 CR
Contact Hours: 3 + 0
Prerequisites: EDFN A601 and EDFN A602 and EDFN A603.
Registration Restrictions: Admission to the Master of Arts in Teaching Program; departmental approval required.
Corequisite: EDFN A695C.
Special Note: Concurrent enrollment in internship is required.
Provides students with the fundamentals of standards-based curriculum planning and assessment for the diverse student population in secondary classrooms. Includes an overview of the content areas typically taught in K-12 music curriculum. Integrates technology, health enhancement, literacy, and education for special populations.

MUS A668B  Methods for Teaching Music II, K-12  3 CR
Contact Hours: 3 + 0
Prerequisites: MUS A668A and EDFN A695C.
Registration Restrictions: Admission to the Master of Arts in Teaching Program; departmental approval required.
Corequisite: EDFN A695D.
Special Note: Concurrent enrollment in internship is required.
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.

NS - Nursing Sciences

Offered through the College of Health & Social Welfare
Professional Studies Building (PSB), Room 103, 786-4550
http://nursing.uaa.alaska.edu

NS A204  Technology and Nursing Informatics  3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A111 and ENGL A213 and [PHIL A101 or PHIL A201] or ENGL A120.
Registration Restrictions: Admission to Clinical Nursing Major or RN licensure in the State of Alaska.
Corequisite: NS A216 and NS A300.
Special Fees.

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.

NS A205  Nursing Informatics  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Admission to clinical major and/or RN Licensure in the State of Alaska.
Special Fees.

Concepts and applications of nursing informatics in health care organizations. Explore electronic resources available to clients and nurses.

NS A216  Pathophysiology  4 CR
Contact Hours: 4 + 0
Prerequisites: BIOL A112 with minimum grade of C and CHEM A104 with minimum grade of C and CHEM A104L with minimum grade of C.
Registration Restrictions: Admission to Clinical Nursing major or RN licensure in State of Alaska.
Corequisite: NS A204 and NS A300.
Special Fees.
Special Note: Offered Fall and Spring Semesters.

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.

NS A300  Foundations of Nursing I: Roles, Processes, and Trends  4 CR
Contact Hours: 4 + 0
Prerequisites: ENGL A111 and ENGL A213 and [PHIL A101 or PHIL A201] or ENGL A120.
Corequisite: NS A204 and NS A216.
Special Fees.

Examines the implications of historical events and contemporary trends on the profession of nursing. Nursing roles and the nursing process are examined with an emphasis on promoting health and preventing disease.

NS A303  Foundations of Nursing II: Therapeutics  3 CR
Contact Hours: 3 + 0
Prerequisites: NS A204 and NS A216 and NS A300.
Corequisite: NS A303L and NS A309.
Special Fees.

Examines the implications of historical events and contemporary trends on the profession of nursing. Nursing roles and the nursing process are examined with an emphasis on promoting health and preventing disease.

NS A303L  Foundations of Nursing II: Laboratory  5 CR
Contact Hours: 0 + 15
Prerequisites: NS A204 and NS A216 and NS A300.
Corequisite: NS A303 and NS A309.
Grade Mode: Pass/No Pass.
Special Fees.

Application of the nursing process and basic therapeutic nursing intervention in the laboratory and selected clinical settings.
**Course Descriptions**

**NS A305**  
**Health Assessment of Individuals**  
2 CR  
Contact Hours: 2 + 0  
Prerequisites: (NS A205 or concurrent enrollment).  
Major Restriction: Must be Nursing Science major.  
Registration Restrictions: Admission to the clinical major and RN licensure in the state of Alaska.  
Corequisite: NS A305L.  
Special Note: Offered only in Fall semester.  
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.

**NS A305L**  
**Health Assessment of Individuals Laboratory**  
1 CR  
Contact Hours: 0 + 3  
Prerequisites: NS A205.  
Special Fees.  
Laboratory experience to apply knowledge and skills introduced in NS A305.

**NS A308**  
**Dimensions of Professional Nursing Practice**  
3 CR  
Contact Hours: 3 + 0  
Prerequisites: NS A204.  
Special Fees.  
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.

**NS A309**  
**Pharmacology in Nursing**  
3 CR  
Contact Hours: 3 + 0  
Prerequisites: NS A204 with minimum grade of C and NS A216 with minimum grade of C.  
Registration Restrictions: Admission to NS, Nursing Science major, or RN licensure in State of Alaska.  
Special Fees.  
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.

**NS A313**  
**Health Disruptions I**  
3 CR  
Contact Hours: 3 + 0  
Prerequisites: NS A204 with minimum grade of C and NS A216 with minimum grade of C and NS A300 with minimum grade of C and NS A303 with minimum grade of C.  
Registration Restrictions: Admission to clinical major and RN licensure in the state of Alaska.  
Corequisite: NS A313L.  
Major Restriction: Must be Nursing Science major.  
Focuses on episodic health disruptions 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.

**NS A313L**  
**Health Disruptions I Laboratory**  
3 CR  
Contact Hours: 0 + 9  
Prerequisites: NS A204 with minimum grade of C and NS A216 with minimum grade of C and NS A300 with minimum grade of C and NS A303 with minimum grade of C and NS A303L with minimum grade of P and NS A309 with minimum grade of C.  
Major Restriction: Must be Nursing Science major.  
Corequisite: NS A313L.  
Grade Mode: Pass/No Pass.  
Special Fees.  
Clinical experience introducing 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. Nursing therapeutics focus on nursing management of the individual and the family within the acute care setting.

**NS A314**  
**Health I for Registered Nurses**  
2 CR  
Contact Hours: 2 + 0  
Prerequisites: NS A205 with minimum grade of C and NS A308 with minimum grade of C.  
Major Restriction: Must be Nursing Science major.  
Registration Restrictions: Admission to clinical major and RN licensure in the state of Alaska.  
Corequisite: NS A314L and NS A417.  
Special Note: Offered only in Spring semester.  
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.

**NS A314L**  
**Health I for Registered Nurses Laboratory**  
2 CR  
Contact Hours: 0 + 6  
Prerequisites: NS A205 with minimum grade of C and NS A308 with minimum grade of C.  
Major Restriction: Must be Nursing Science major.  
Registration Restrictions: Admission to the clinical major and RN licensure in the state of Alaska.  
Corequisite: NS A314.  
Grade Mode: Pass/No Pass.  
Special Fees.  
Special Note: Offered only in Spring semester.  
Provides clinical experience to build skills and reinforce student learning in NS A314.

**NS A315**  
**Health I: Nursing Therapeutics**  
3 CR  
Contact Hours: 2 + 2  
Prerequisites: NS A204 with minimum grade of C and NS A216 with minimum grade of C and NS A300 with minimum grade of C and NS A303 with minimum grade of C and NS A303L with minimum grade of P and NS A309 with minimum grade of C.  
Major Restriction: Must be Nursing Science major.  
Corequisite: NS A315L.  
Emphasizes health states and risk factors in individuals and families across the lifespan that are amenable to health promotion and illness prevention efforts, achieving and maintaining healthy lifestyles, as well as self-management of health.

**NS A315L**  
**Health I: Nursing Therapeutics Laboratory**  
3 CR  
Contact Hours: 0 + 9  
Prerequisites: NS A204 with minimum grade of C and NS A216 with minimum grade of C and NS A300 with minimum grade of C and NS A303 with minimum grade of C and NS A303L with minimum grade of P and NS A309 with minimum grade of C.  
Corequisite: NS A315.  
Grade Mode: Pass/No Pass.  
Special Fees.  
Provides clinical experience to build skills and reinforce student learning in NS A315.

**NS A400**  
**Nursing Research**  
3 CR  
Contact Hours: 3 + 0  
Prerequisites: NS A303 with minimum grade of C and NS A303L with minimum grade of P and NS A313 with minimum grade of C and NS A313L with minimum grade of P and NS A315 with minimum grade of C and NS A315L with minimum grade of P and PHIL A302 with minimum grade of C.  
Registration Restrictions: Prior completion of a statistics course.  
Special Fees.  
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.

**NS A401**  
**Health Disruptions II**  
3 CR  
Contact Hours: 3 + 0  
Prerequisites: NS A313 with minimum grade of C and NS A313L with minimum grade of C and NS A315 with minimum grade of C and NS A315L with minimum grade of P.  
Corequisite: NS A401L.  
Special Fees.  
Emphasis on episodic health disruptions in specialty-focused care. Nursing therapeutics focus on care of individuals, families and environments.
Investigation of the challenges facing nurses caring for individuals with a developmental (intellectual or physical) disability. Exploration of communication styles, psychosocial needs, physical needs, and integration of individuals with developmental disabilities into the community health care system.

NS A421  Sexual Assault Response Team Training 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Registered Nurse or current enrollment in a nursing program.

Provides clinical experience to build skills and reinforce student learning in NS A411.

NS A415  Nursing Management and Legal Perspectives 4 CR
Contact Hours: 4 + 0
Prerequisites: NS A313 with minimum grade of C and NS A315 with minimum grade of C and NS A319 with minimum grade of C.
Special Fees.
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.

NS A416  Concentration in Clinical Nursing 5 CR
Contact Hours: 1 + 0
Prerequisites: NS A400 with minimum grade of C and NS A401 with minimum grade of C and NS A401L with minimum grade of P and NS A406 with minimum grade of C and NS A406L with minimum grade of P and NS A411 with minimum grade of C.
Corequisite: NS A416L.
Grade Mode: Pass/No Pass.
Special Fees.
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.

NS A416L  Concentration in Clinical Nursing Lab 3.5 CR
Contact Hours: 0 + 10.5
Prerequisites: NS A400 with minimum grade of C and NS A401 with minimum grade of C and NS A401L with minimum grade of P and NS 406 with minimum grade of C and NS A406L with minimum grade of P and NS A411 with minimum grade of C.
Corequisite: RN licensure in state of Alaska.
Grade Mode: Pass/No Pass.
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.

NS A417  Management in Nursing 3 CR
Contact Hours: 3 + 0
Prerequisites: NS A305 and NS A308.
Major Restriction: Must be Nursing Science major.
Registration Restrictions: RN licensure in state of Alaska.
Corequisite: NS A314 and NS A314L.
Special Fees.
Special Note: Offered only in Spring semester.
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.

NS A420  Nursing Care of Special Populations 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Enrollment in the School of Nursing or hold RN licensure in Alaska.
Special Fees.
Investigation of the challenges facing nurses caring for individuals with a developmental (intellectual or physical) disability. Exploration of communication styles, psychosocial needs, physical needs, and integration of individuals with developmental disabilities into the community health care system.

NS A421  Sexual Assault Response Team Training 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Registered Nurse or current enrollment in a nursing program.

Development of advanced knowledge and skills required for nurses to function effectively as members of a multi-disciplinary Sexual Assault Response Team (SART). Covers roles of team members, team building strategies, development of SART procedures and protocols, interaction with judicial system, skill development in performing medical-legal examination and collecting forensic evidence, sex offender characteristics, identification of community resources, and exploration of cultural issues.
NS A422 Nursing Interventions for the Critically Ill Adult 2-3 CR

Contact Hours: 2 + 0-3
Registration Restrictions: Grade of C or better in all required 300-level nursing courses.
Special Fees:
Emphasizes the specific nursing care needs of critically ill adults and the role of the critical care nurse. Case studies are used to assist students to apply the nursing process to the care of critically ill adults to promote movement of the client from critical illness to recovery and independence. Clinical experiences consist of participant observation in a variety of critical care settings.

NS A423 Transcultural Nursing 3 CR

Contact Hours: 3 + 0
Registration Restrictions: Grade of C or better in all required NS 300-level clinical courses or RN licensure in State of Alaska.
Special Fees:
Examination of sociocultural factors that influence health, illness, and health-related human behavior. Introduction to concepts that place health-related behaviors within a cultural context and to the elements of a culturally sensitive approach to clients seeking professional nursing care services.

NS A424 Issues in Women's Health 3 CR

Contact Hours: 3 + 0
Prerequisites: NS A300 with minimum grade of C and NS A303 with minimum grade of P and NS A309 with minimum grade of C and NS A313 with minimum grade of C and NS A313L with minimum grade of P and NS A315 with minimum grade of C and NS A315L with minimum grade of P.
Registration Restrictions: If prerequisites not met, then RN licensure in the state of Alaska.
Special Fees:
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.

NS A426 Critical Care Concepts in Acute Care Settings 3 CR

Contact Hours: 3 + 0
Registration Restrictions: RN licensure in state of Alaska.
Special Fees:
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.

NS A427 Care of Victims of Family Violence 3 CR

Contact Hours: 3 + 0
Prerequisites: NS A300 and NS A303 and NS A309.
Registration Restrictions: If prerequisites not met, RN licensure in State of Alaska.
Special Fees:
Overview of family violence and its impact on health. The etiology of family violence is explored from various theoretical perspectives with an emphasis on prevention and intervention with at-risk groups. Focuses on the collaborative role of the nurse and the knowledge and skills applicable to providing care for victims of family violence.

NS A428 Nursing Clients with Chemical Dependency 3 CR

Contact Hours: 3 + 0
Prerequisites: NS A300 with minimum grade of C and NS A303 with minimum grade of C and NS A309 with minimum grade of C.
Registration Restrictions: If prerequisites not met, then RN licensure in the state of Alaska.
Special Fees:
In-depth study of the pathophysiology, psychopharmacologic and sociocultural effects of chemical dependency. Emphasizes the collaborative role of the nurse in managing the care of clients who are chemically dependent and their families using the nursing process.

NS A429 Perioperative Nursing 3 CR

Contact Hours: 2 + 3
Prerequisites: NS A300 with minimum grade of C and NS A303 with minimum grade of C and NS A303L with minimum grade of P and NS A309 with minimum grade of C and NS A313 with minimum grade of C and NS A313L with minimum grade of P and NS A315 with minimum grade of C and NS A315L with minimum grade of P.
Registration Restrictions: If prerequisites not met, then RN licensure in state of Alaska.
Special Fees:
Introduction to the operating room, its origin and purpose, including functions of the operating room team members. Covers the perioperative nursing role as it relates to a client undergoing surgery. The nursing process is utilized as a basis for planning, implementing, and evaluating individualized care.

NS A430 Rural Health Care 3 CR

Contact Hours: 3 + 0
Prerequisites: NS A300 with minimum grade of C.
Registration Restrictions: If prerequisite not met, then RN licensure in the state of Alaska.
Special Fees:
Analysis of rural health care from a problem-solving framework. Alaska communities are utilized as a focus for the course.

NS A431 Human Sexuality in Health and Illness 3 CR

Contact Hours: 3 + 0
Prerequisites: NS A300 with minimum grade of C and NS A303 with minimum grade of C and NS A303L with minimum grade of P and NS A309 with minimum grade of C.
Registration Restrictions: If prerequisites not met, then RN licensure in state of Alaska.
Special Fees:
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.

NS A433 Health Education: Theory and Practice 3 CR

Contact Hours: 3 + 0
Registration Restrictions: Grade of C or better in Nursing Foundations I, II, and III or RN licensure in State of Alaska.
Crosslisted with: HS A433.
Special Fees:
Introduction to the principles, methods, and resources used in health education. Examines psychosocial and cultural determinants of health behavior and their role in the development of effective health education strategies. Explores organizational, societal, and professional issues influencing health education for individuals, groups, and communities.

NS A434 Health Care of the Elderly 3 CR

Contact Hours: 3 + 0
Prerequisites: NS A300 with minimum grade of C and NS A303 with minimum grade of C and NS A303L with minimum grade of P and NS A309 with minimum grade of C.
Registration Restrictions: Prerequisites or RN licensure in Alaska.
Special Fees:
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.

NS A435 Disaster Nursing 3 CR

Contact Hours: 3 + 0
Prerequisites: (NS A303 with minimum grade of C or concurrent enrollment) and (NS A309 with minimum grade of C or concurrent enrollment).
Registration Restrictions: Prerequisites or RN licensure in Alaska.
Special Fees:
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.

NS A439 Spirituality in Nursing 3 CR

Contact Hours: 3 + 0
Prerequisites: NS A300 with minimum grade of C.
Registration Restrictions: Nursing major or instructor permission
Special Fees:
Describes the philosophical, historical, and cultural influences on spiritual development through the lifespan. Examines the nurse's role in applying the nursing process to meet the spiritual needs of clients during illness and health. Identifies models and research findings applicable to spiritual care.

NS A440 Nursing Honors I: Project Exploration 1 CR

Contact Hours: .5 + 1.5
Prerequisites: (NS A400 or concurrent enrollment).
Registration Restrictions: Permission for enrollment in Nursing Honors by Baccalaureate Chair and Nursing Baccalaureate Curriculum Committee.
Special Fees:
Developing a rationale, justification, and plan for a project involving nursing practice and/or nursing management of a client or population in any health care setting. Basic research techniques and discovery are used.
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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Contact Hours</th>
<th>Level Restrictions</th>
<th>Registration Restrictions</th>
<th>Special Fees</th>
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<tbody>
<tr>
<td>NS A619</td>
<td>Health Policy Issues in Advanced Practice Nursing</td>
<td>2 CR</td>
<td>2 + 0</td>
<td>Level Restriction: Must be Graduate - UAA level.</td>
<td>Registration Restrictions: Graduate standing.</td>
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<td>Analyses procedures by which governmental and private agencies make decisions that affect the health of populations. Examines 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.</td>
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<td>NS A620</td>
<td>Nursing Research Methods</td>
<td>4 CR</td>
<td>4 + 0</td>
<td>Level Restriction: Must be Graduate - UAA level.</td>
<td>Registration Restrictions: Grade of C or better in undergraduate research course and basic statistics course. Course standing.</td>
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<td>Emphasizes critical appraisal and synthesis of research qualitative and quantitative literature. Provides for the acquisition of advanced knowledge and skills in scientific inquiry, including proposal development. Addresses the evidence-based approach to research utilization in advanced nursing practice.</td>
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<td>NS A621</td>
<td>Knowledge Development for Advanced Nursing Practice</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Level Restriction: Must be Graduate - UAA level.</td>
<td>Registration Restrictions: Graduate standing.</td>
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<td>Special Fees.</td>
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<td>Integrates theory from nursing and other disciplines to describe and explain human responses in health and illness. Critically analyzes theories for adequacy of conceptualization, measurement, and application. Theories include adaptation, illness prevention, health promotion, and change in relation to individuals, families, and populations.</td>
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<tr>
<td>NS A624</td>
<td>Qualitative Nursing Research</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Level Restriction: Must be Graduate - UAA level.</td>
<td>Registration Restrictions: Graduate Standing.</td>
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<td>Uses various qualitative paradigms, traditions, philosophical foundations and methods for studying nursing and health-related phenomena. Develops and critiques data collection processes and approaches to data analysis. Explores scientific and ethical issues surrounding qualitative research.</td>
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<tr>
<td>NS A625</td>
<td>Biostatistics for Health Professionals</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Level Restriction: Must be Graduate - UAA level.</td>
<td>Registration Restrictions: Graduate standing or instructor permission.</td>
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<td></td>
<td>Undergraduate statistics course with a grade of C or better.</td>
<td>Crosslisted with: HS A625.</td>
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<td>Special Fees.</td>
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<td>Principles of statistical reasoning and quantitative skills for analyzing health data. Topics include the binomial, Poisson, and normal distributions, the treatment of rates, measures of location and dispersion, and testing of statistical hypotheses. Both descriptive and inferential statistics are illustrated in mortality and morbidity problem sets requiring manual or computer assisted calculations. The comparison of methodological techniques and the choice of appropriate statistical methods to answer health research questions are stressed. This course is designed to enhance rather than substitute for statistical knowledge gained at the undergraduate level.</td>
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<tr>
<td>NS A625L</td>
<td>Biostatistics for Health Professionals Lab</td>
<td>1 CR</td>
<td>0 + 3</td>
<td>Level Restriction: Must be Graduate - UAA level.</td>
<td>Registration Restrictions: Grade of C or better in undergraduate research and statistics. Graduate status or faculty permission.</td>
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<td>Grade Mode: Pass/No Pass.</td>
<td>Crosslisted with: HS A625L</td>
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<td>Introduction to statistical analysis using the Statistical Package for the Social Sciences (SPSS) computer program. Focuses on creating a database, evaluating these data for entry errors, identifying statistical test assumptions, and computing descriptive and inferential statistics.</td>
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<tr>
<td>NS A626</td>
<td>Principles of Epidemiology</td>
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<td>Registration Restrictions: Graduate standing or faculty permission.</td>
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<td>Crosslisted with: HS A626.</td>
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<td>Special Fees:</td>
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<td>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.</td>
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<td>NS A631</td>
<td>Family Nurse Practitioner</td>
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<td>Contact Hours: 1 + 4</td>
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<td>Registration Restrictions: Enrollment in a graduate degree or certificate program in the School of Nursing. Current immunization per SON policy; current CPR certification; individual malpractice insurance policy. Licensed as an advanced nurse practitioner in the State of Alaska with certification as a pediatric nurse practitioner.</td>
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<td>Preparation for the expanded role of family practice focus in primary care. Includes advanced history and physical assessment skills for clients of all ages with a focus on developing families and women. Clinical focus includes acquisition of skills and diagnostic evaluation methods required for management of clients. Principal clinical experiences will be in the primary care of children and childbearing families with a focus on wellness and prevention.</td>
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<td>NS A632</td>
<td>Family Nurse Practitioner</td>
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<td>Contact Hours: 1 + 4</td>
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<td>Registration Restrictions: Enrollment in a graduate degree or certificate program in the School of Nursing; current immunizations per SON policy; current CPR certification; individual malpractice insurance policy; advanced nurse practitioner license in Alaska with certification as a women's health nurse practitioner.</td>
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<td>Clinical focus includes acquisition of skills and diagnostic evaluation methods required for management of clients. Principal clinical experiences will be in the primary care of children and child-rearing families with a focus on wellness and prevention.</td>
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<tr>
<td>NS A635</td>
<td>Family Nurse Practitioner</td>
<td>2 CR</td>
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<td></td>
<td>Contact Hours: 1 + 4</td>
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<td>Prerequisites: NS A631 and NS A633 with minimum grade of C.</td>
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<td>Registration Restrictions: Enrollment in a graduate degree or certificate program in the School of Nursing. Licensed as an advanced nurse practitioner in the State of Alaska with certification as a pediatric nurse practitioner. Current CPR certification; individual malpractice insurance policy; current immunization per SON policy.</td>
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<td>Continuing preparation for expansion to primary care of all ages. Includes advanced history and physical assessment skills for clients of pediatric ages with a focus on developing families. Clinical focus includes acquisition of skills and diagnostic evaluation methods required for management of clients. Principal clinical experiences will be in the primary care of children and child-rearing families with a focus on wellness and prevention, and primary care of common diseases.</td>
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<td>NS A636</td>
<td>Family Nurse Practitioner</td>
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<td>Prerequisites: NS A632.</td>
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<td>Registration Restrictions: Enrollment in a graduate degree or certificate program in the School of Nursing. Licensed as an advanced nurse practitioner in the State of Alaska with certification as a women's health nurse practitioner. Current CPR certification; individual malpractice insurance policy; current immunization per SON policy.</td>
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<td>Continuing preparation for expansion to primary care of all ages. Includes advanced history and physical assessment skills for clients of pediatric ages with a focus on developing families. Clinical focus includes acquisition of skills and diagnostic evaluation methods required for management of clients. Principal clinical experiences will be in the primary care of children and child-rearing families with a focus on wellness, prevention, and primary care of common diseases.</td>
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<td>NS A640</td>
<td>Teaching and Learning in Nursing</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: NS A618 and NS A619 and NS A620 and NS A621.</td>
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<td>Level Restriction: Must be Graduate - UAA level.</td>
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<td>Registration Restrictions: Graduate standing; completion of course prerequisites or prior master's in nursing.</td>
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<td>Special Fees:</td>
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<td>Examines the conceptual and theoretical foundation of learning with an emphasis on selecting teaching methods in designing learner-centered classroom and clinical instruction. Explores the role and expected competencies of the nurse educator.</td>
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<td>NS A641</td>
<td>Curriculum Development and Evaluation</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: NS A618 and NS A619 and NS A620 and NS A621.</td>
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<td>Level Restriction: Must be Graduate - UAA level.</td>
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<td>Registration Restrictions: Graduate standing; completion of prerequisites or prior master's in nursing.</td>
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<td>Examines history of higher education and nursing education in the United States. Assesses components of modern collegiate nursing curricula with consideration of internal and external factors that drive or impact the curriculum. Evaluates an existing curriculum and develops a course that fits within the context of an existing curriculum philosophy and conceptual framework and that contributes to the accomplishment of program outcomes.</td>
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<td>NS A643</td>
<td>Assessment and Evaluation in Nursing Education</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: NS A625 and NS A640 and NS A641.</td>
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<td>Registration Restrictions: Graduate standing.</td>
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<td>Special Fees:</td>
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<td>Focuses on assessment and evaluation concepts, principles and evidence-based practices as a basis for planning learner-centered instruction, targeting learning outcomes and evaluating student achievement and instructional effectiveness. Examines a variety of classroom and clinical assessment methods and tools with an emphasis on their use, development and interpretation in course-level assessment.</td>
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<td>NS A644</td>
<td>Distance Education in Nursing</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: NS A640 and NS A641.</td>
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<td>Level Restriction: Must be Graduate - UAA level.</td>
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<td>Registration Restrictions: Graduate standing.</td>
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<td>Special Fees:</td>
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<td>Acquires knowledge and understanding of methods and strategies for the distance delivery of nursing education, including theoretical and clinical learning. Examines the “fit” between distance programming and institutional and program missions, program philosophy, and nursing curriculum. Investigates the internal and external fiscal, human, and service supports required for program success. Applies distance education strategies to the development of learning units.</td>
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<td>NS A647</td>
<td>Teaching Practicum in Nursing</td>
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<td>Contact Hours: 1 + 8</td>
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<td>Prerequisites: NS A601 and NS A602 and NS A640 and NS A641 and NS A643 and NS A644.</td>
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<td>Level Restriction: Must be Graduate - UAA level.</td>
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<td>Registration Restrictions: Graduate standing.</td>
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<td>Special Fees:</td>
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<td>Applies educational theory and skills to the role of nurse educator in a variety of clinical and classroom settings. Participates in a seminar to identify, analyze, and solve teaching and learning problems related to the practicum.</td>
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<td>NS A658</td>
<td>Public Health Policy</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Registration Restrictions: Graduate Standing.</td>
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<td>Special Note: Offered as Demand Warrants.</td>
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<td>An analysis of the procedures by which government and private agencies make decisions that affect the health of population groups. The influence of lay, professional and special interest groups are explored in relation to health legislation, allocation of resources, and the setting of public health priorities. Current issues in public health policy are examined, focusing on how policy is changed, interpreted and implemented.</td>
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<td>NS A660</td>
<td>Family Nurse Practitioner</td>
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<td>Contact Hours: 2+4 or 8+16</td>
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<td>Prerequisites: NS A602.</td>
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<td>Registration Restrictions: Admission to a graduate degree or certificate program in the School of Nursing. Current Alaska RN license; current CPR certification; current immunization per SON policy.</td>
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<td>Corequisite: NS A601.</td>
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<td>Special Fees:</td>
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<td>Beginning preparation for primary care. Includes advanced history and physical assessment skills for clients of all ages with a focus on developing families. Clinical focus includes acquisition of skills and diagnostic evaluation methods required for management of clients. Principal clinical experiences will be in the primary care of women, childbearing, and child-rearing families with a focus on wellness and prevention.</td>
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Focuses on the theory, research, and clinical literature related to mental health assessment, intervention, and evaluation in families and groups. A social system perspective is used to examine intrinsic and extrinsic factors influencing the development of adaptive and maladaptive behavioral, emotional, and functional patterns in groups and families. Various theoretical approaches to therapeutic assessment and intervention with families and groups are explored through the counselor/therapist role, initially using case analysis and therapy simulations, assessment and intervention with families and groups are explored through the patterns in groups and families. Various theoretical approaches to therapeutic development of adaptive and maladaptive behavioral, emotional, and functional responses.

Continuing preparation for expansion to primary care of all ages. Includes advanced history and physical assessment skills for pediatric and female clients of all ages with a focus on developing families. Clinical focus includes acquisition of skills and diagnostic evaluation method required for management of clients. Principal clinical experiences will be in the primary care of infants, children, adolescents, females of all ages, and child-bearing families with a focus on primary care of common diseases.

Introduces the psychiatric-mental health nurse practitioner role and entry-level competencies. Emphasizes interpersonal and diagnostic processes utilized in assessing and managing the care of individuals across the lifespan who are at risk of, or are experiencing, mental health problems and psychiatric disorders. Evidence regarding the clinical basis and effectiveness of current treatment modalities is examined. Application focuses on developing counseling skills that foster therapeutic alliances and promote mental health and functional well-being.

A comprehensive overview of the evolution and major components of the health service system in the United States. System performance, directions being taken by major providers, characteristics of resources (financial, personnel, and technological), and implications for policy making in health are discussed.

Continuing preparation for expansion to primary care of all ages. Includes advanced history and physical assessment skills for pediatric and female clients of all ages with a focus on developing families. Clinical focus includes acquisition of skills and diagnostic evaluation method required for management of clients. Principal clinical experiences will be in the primary care of infants, children, adolescents, females of all ages, and child-bearing families with a focus on primary care of common diseases.

Continuing preparation for expansion to primary care of all ages. Includes advanced history and physical assessment skills for pediatric and female clients of all ages with a focus on developing families. Clinical focus includes acquisition of skills and diagnostic evaluation method required for management of clients. Principal clinical experiences will be in the primary care of infants, children, adolescents, females of all ages, and child-bearing families with a focus on primary care of common diseases.

Initiates the consultant/liaison role of advanced practice psychiatric-mental health nursing, with an emphasis on consultation in organizational settings. Consultation models are examined and linked to essential skill competencies. Historical and contemporary trends and organizational approaches to delivering population-focused mental health services are analyzed. Current fiscal and social policy statements and research findings are evaluated in terms of their implications for planning, implementing, and evaluating services for at-risk and culturally diverse populations.

Continuing preparation for expansion to primary care of all ages. Includes advanced history and physical assessment skills for pediatric and female clients of all ages with a focus on developing families. Clinical focus includes acquisition of skills and diagnostic evaluation method required for management of clients. Principal clinical experiences will be in the primary care of infants, children, adolescents, females of all ages, and child-bearing families with a focus on primary care of common diseases.

Initiates the consultant/liaison role of advanced practice psychiatric-mental health nursing, with an emphasis on consultation in organizational settings. Consultation models are examined and linked to essential skill competencies. Historical and contemporary trends and organizational approaches to delivering population-focused mental health services are analyzed. Current fiscal and social policy statements and research findings are evaluated in terms of their implications for planning, implementing, and evaluating services for at-risk and culturally diverse populations.

Continuing preparation for expansion to primary care of all ages. Includes advanced history and physical assessment skills for pediatric and female clients of all ages with a focus on developing families. Clinical focus includes acquisition of skills and diagnostic evaluation method required for management of clients. Principal clinical experiences will be in the primary care of infants, children, adolescents, females of all ages, and child-bearing families with a focus on primary care of common diseases.

Post-Master's Certificate students may take this course concurrently with NS A660. Registration Restrictions: Enrollment in a graduate degree or certificate program in the School of Nursing. Knowledge of basic anatomy/physiology and pharmacology. Current Alaska RN license; current CPR certification; individual malpractice insurance policy; current immunization per SON policy. Special Fees.

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### NUPN - Nursing - Practical Nursing

**Course Descriptions**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Contact Hours</th>
<th>Prerequisites</th>
<th>Corequisites</th>
<th>Grade Mode</th>
<th>Special Fees</th>
<th>Contact Information</th>
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<tbody>
<tr>
<td>NS A699</td>
<td>Thesis</td>
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<td>Contact Hours: 1 + 3</td>
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<td>Registration Restrictions: Admission to the Practical Nursing Certificate Program.</td>
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<td>Prerequisites: NS A618 and NS A619 and NS A620 and NS A621 and NS A625.</td>
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<td>Level Restriction: Must be Graduate - UAA level.</td>
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<td>Registration Restrictions: Enrollment in graduate nursing program.</td>
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<td>Grade Mode: Pass/No Pass.</td>
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<td>Special Fees.</td>
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<td>Special Note: Must be taken twice for credit for the Master of Science in Nursing degree.</td>
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**NUPN A101**  
**Fundamental Concepts and Skills for Practical Nursing**  
**Contact Hours:** 7 + 0  
**Prerequisites:** (NUPN A105 or concurrent enrollment).  
**Corequisite:** NUPN A101L.  
**Introduction of fundamental concepts of basic human needs, health-illness continuum, nursing process, therapeutic communication, and basic drug and diet therapy. Holistic care that meets the unique physical, mental, emotional, and spiritual health needs of the client and family is emphasized. Development of critical thinking skills and conscientious accountability for working in the practical nurse role within the health care system is emphasized.**

**NUPN A101L**  
**Fundamental Concepts and Skills for Practical Nursing Lab**  
**Contact Hours:** 0 + 15  
**Prerequisites:** (NUPN A105 or concurrent enrollment).  
**Corequisite:** NUPN A101.  
**Grade Mode:** Pass/No Pass.  
**Special Fees:**  
**Application of knowledge gained in NUPN A101 to the acquisition of nursing skills in the nursing skills laboratory and to the care of clients in the clinical practice setting.**

**NUPN A105**  
**Human Anatomy and Function**  
**Contact Hours:** 3 + 0  
**Registration Restrictions:** Admission to the Practical Nursing Certificate Program.  
**Corequisite:** NUPN A101 and NUPN A101L.  
**Special Fees:**  
**Anatomy and Function of organs and systems within the human body. Students learn the basic structure and function of the human body. Students also learn derivation, application, and integration of appropriate terminology to anatomy, physiology, and pathophysiology. Provides a foundation for practical nurse clinical practice.**

**NUPN A110**  
**Adult Medical-Surgical Nursing for Practical Nurses**  
**Contact Hours:** 5 + 0  
**Prerequisites:** NUPN A101 with minimum grade of C and NUPN A105 with minimum grade of P.  
**Registration Restrictions:** Admission to the Practical Nursing Certificate Program.  
**Corequisite:** NUPN A110L and NUPN A115.  
**Introduction to nursing care of the ill adult, using the nursing process as a unifying framework. Pathophysiology of common disorders, treatment options, including drug therapy and nursing care approaches are presented.**

**NUPN A110L**  
**Adult Medical-Surgical Nursing for Practical Nurses Lab**  
**Contact Hours:** 0 + 9  
**Prerequisites:** NUPN A101 with minimum grade of C and NUPN A105 with minimum grade of C and NUPN A101L with minimum grade of P.  
**Registration Restrictions:** Admission to the Practical Nursing Certificate Program.  
**Corequisite:** NUPN A110 and NUPN A115.  
**Grade Mode:** Pass/No Pass.  
**Special Fees:**  
**Application of knowledge gained in NUPN A110 to the acquisition of more advanced nursing skills and techniques for the care of adults experiencing medical-surgical illnesses.**

**NUPN A112**  
**Mother-Baby Nursing for Practical Nurses**  
**Contact Hours:** 3 + 0  
**Prerequisites:** NUPN A101 with minimum grade of C and NUPN A105 with minimum grade of C and NUPN A101L with minimum grade of P.  
**Registration Restrictions:** Admission to the Practical Nursing Certificate Program.  
**Corequisite:** NUPN A112L.  
**Application of knowledge gained in NUPN A112 toward the acquisition of nursing skills for the care of childbearing women and newborn infants.**

**NUPN A112L**  
**Mother-Baby Nursing for Practical Nurses Lab**  
**Contact Hours:** 1 CR  
**Prerequisites:** NUPN A112 with minimum grade of C and NUPN A113 with minimum grade of C and NUPN A115 with minimum grade of C and NUPN A101L with minimum grade of P.  
**Registration Restrictions:** Admission to the Practical Nursing Certificate Program.  
**Corequisite:** NUPN A112.  
**Grade Mode:** Pass/No Pass.  
**Special Fees:**  
**Application of knowledge gained in NUPN A112 to the acquisition of nursing skills for the care of childbearing women and newborn infants.**

**NUPN A113**  
**Nursing of Children for Practical Nurses**  
**Contact Hours:** 3 + 0  
**Prerequisites:** NUPN A101 with minimum grade of C and NUPN A105 with minimum grade of C and NUPN A101L with minimum grade of P.  
**Registration Restrictions:** Admission to the Practical Nursing Certificate Program.  
**Corequisite:** NUPN A113.  
**Application of nursing care knowledge, skills, and processes to infants, children, adolescents, and families experiencing illness. Includes concepts and characteristics of growth and cognitive and physical development. The role of play and the impact of events and actions on development of a child's self-worth and caregiver teaching to prevent accidents and promote health are emphasized. Major health problems associated with each stage of growth and development and concepts in the care of the chronically ill and dying child are presented.**

**NUPN A113L**  
**Nursing of Children for Practical Nurses Lab**  
**Contact Hours:** 1 CR  
**Prerequisites:** NUPN A113 with minimum grade of C and NUPN A115 with minimum grade of C and NUPN A101L with minimum grade of P.  
**Registration Restrictions:** Admission to the Practical Nursing Certificate Program.  
**Corequisite:** NUPN A113.  
**Grade Mode:** Pass/No Pass.  
**Special Fees:**  
**Application of knowledge gained in NUPN A113 to the acquisition of nursing skills for the care of infants, children, and adolescents.**

**NUPN A115**  
**Concepts in Mental Health for Practical Nurses**  
**Contact Hours:** 1 + 0  
**Prerequisites:** NUPN A110 with minimum grade of C and NUPN A110L with minimum grade of P.  
**Registration Restrictions:** Admission to the Practical Nursing Certificate Program.  
**Corequisite:** NUPN A110 and NUPN A110L.  
**Special Fees:**  
**Basic theory and principles of mental health nursing care for clients experiencing psychiatric disorders or situational crisis. Includes identification of resources for mental health care and discussion of the inter-relationship between disorders of physical and mental health across the life span. The role of the practical nurse in mental illness is explored.**

**NUPN A116**  
**Role Transition to LPN**  
**Contact Hours:** 1 + 0  
**Prerequisites:** NUPN A110 with minimum grade of C and NUPN A112 with minimum grade of C and NUPN A113 with minimum grade of C and NUPN A115 with minimum grade of C and NUPN A110L with minimum grade of P and NUPN A112L with minimum grade of P and NUPN A113L with minimum grade of P.  
**Registration Restrictions:** Admission to the Practical Nursing Certificate Program.  
**Corequisite:** NUPN A118L.  
**Grade Mode:** Pass/No Pass.  
**Special Fees:**  
**Exploration of attitudes and expectations of the LPN and current and future trends in nursing, including licensure, scope of practice, legal and ethical issues. Emphasis is on the need to work as a member of the health care team and on the responsibility of the practical nurse to engage in life-long learning. Designed to prepare the soon-to-graduate practical nurse to integrate concepts, knowledge, and skills into a coherent whole ready to assume the beginning practical nurse role in the employment setting.**
NUPN A118L  Integrated Clinical Practicum for Practical Nurses  2 CR
Contact Hours: 2 + 0
Prerequisites: NUPN A110 with minimum grade of C and NUPN A112 with minimum grade of C and NUPN A113 with minimum grade of C and NUPN A115 with minimum grade of C and NUPN A110L with minimum grade of P and NUPN A112L with minimum grade of P and NUPN A113L with minimum grade of P. Registration Restrictions: Admission to Practical Nursing Certificate Program. Corequisite: NUPN A116. Grade Mode: Pass/No Pass. Special Fees.

Concentrated clinical work to facilitate the transition of the graduating practical nurse to the full practical nurse role.

NURS - Nursing
Offered through the College of Health & Social Welfare Professional Studies Building (PSB), Room 110, 786-4582 http://nursing.uaa.alaska.edu

NURS A101  Introduction to Nursing  2 CR
Contact Hours: 2 + 0
Special Fees.
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 CR
Contact Hours: 3 + 0
Prerequisites: (BIOL A111 with minimum grade of C or concurrent enrollment) and (ENGL A111 with minimum grade of C or concurrent enrollment) and (PSY A150 with minimum grade of C or concurrent enrollment).
Major Restriction: Must be Nursing major.
Registration Restrictions: Acceptance to first semester of Associate of Applied Science Nursing Program.
Corequisite: NURS A120L.

Focuses on foundational nursing interventions principles and skills. Explores and utilizes nursing process as a method to identify and meet basic nursing care needs. Examines human responses in the healthy state and introduces concepts related to health disruptions. Emphasizes assessment based on developmental and cultural influences and prioritization of needs and interventions according to Maslow's Hierarchy of Needs.

NURS A120L  Nursing Fundamentals Laboratory  4 CR
Contact Hours: 0 + 12
Prerequisites: (BIOL A111 with minimum grade of C or concurrent enrollment) and (ENGL A111 with minimum grade of C or concurrent enrollment) and (PSY A150 with minimum grade of C or concurrent enrollment).
Major Restriction: Must be Nursing major.
Registration Restrictions: Acceptance to Associate of Applied Science Nursing Program.
Corequisite: NURS A120.
Grade Mode: Pass/No Pass. Special Fees.

Students practice and develop nursing interventions and skills utilizing fundamental nursing principles from NURS A120. Nursing process is applied in campus lab and clinical settings as the method for identifying individual health needs and prioritizing needs and nursing care according to Maslow's Hierarchy of Needs. Students assess, diagnose, plan, implement and evaluate nursing care with emphasis on developmentally appropriate and culturally sensitive nursing intervention. Focus is 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.

NURS A125  Adult Nursing I  3 CR
Contact Hours: 3 + 0
Prerequisites: BIOL A111 with minimum grade of C and (BIOL A112 with minimum grade of C or concurrent enrollment) and (BIOL A240 with minimum grade of C or concurrent enrollment) and ENGL A111 with minimum grade of C and NURS A120 with minimum grade of C and NURS A120L with minimum grade of P and NURS A120L with minimum grade of C. Major Restriction: Must be Nursing major.
Registration Restrictions: Current admission to second semester of UAA AAS nursing program.
Corequisite: NURS A125L and NURS A180.

Focuses on use of nursing process in providing care for adult patients experiencing chronic health disruptions that respond predictably to established nursing and healthcare regimens. Emphasizes the patho-physiologic basis of disease, treatment options and nursing care for patients based on stages of adult development, and prioritized using Maslow's Hierarchy of Needs. Includes specific focus on health needs and care of the aging adult.

NURS A125L  Adult Nursing I Laboratory  3 CR
Contact Hours: 0 + 12
Prerequisites: (BIOL A111 with minimum grade of C and (BIOL A112 with minimum grade of C or concurrent enrollment) and (BIOL A240 with minimum grade of C or concurrent enrollment) and ENGL A111 with minimum grade of C and NURS A120 with minimum grade of C and NURS A120L with minimum grade of P and NURS A120L with minimum grade of C. Major Restriction: Must be Nursing major.
Registration Restrictions: Current admission to second semester AAS nursing program.
Corequisite: NURS A125 and NURS A180.

Grade Mode: Pass/No Pass. Special Fees.


NURS A127  LPN to AAS Nursing Bridge  1 CR
Contact Hours: 7 + 1
Prerequisites: BIOL A111 with minimum grade of C and (BIOL A112 with minimum grade of C or concurrent enrollment) and (BIOL A240 with minimum grade of C or concurrent enrollment) and ENGL A111 with minimum grade of C and NURS A120 with minimum grade of C and NURS A120L with minimum grade of C and NURS A125 with minimum grade of C. Major Restriction: Must be Nursing major.
Registration Restrictions: Current Alaska LPN license, graduate of AVTECH LPN program, and admission to UAA Pre-nursing major.
Special Fees.

Provides the LPN with an introduction to the role of the RN. Specific focus is on the use of critical thinking in providing nursing care at the RN level. Emphasis is on practice and analyzing assessment data, developing and prioritizing nursing diagnoses, using therapeutic communication, and developing and implementing patient teaching.

NURS A180  Basic Nursing Pharmacology  3 CR
Contact Hours: 3 + 0
Prerequisites: BIOL A111 with minimum grade of C and (BIOL A112 with minimum grade of C or concurrent enrollment) and (BIOL A240 with minimum grade of C or concurrent enrollment) and ENGL A111 with minimum grade of C and NURS A120 with minimum grade of C and NURS A120L with minimum grade of C and NURS A125 with minimum grade of C.
Major Restriction: Must be Nursing major.
Registration Restrictions: Current admission to second semester of Associate of Applied Science Nursing Program.
Corequisite: NURS A125 and NURS A125L.
Special Fees.

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 determine appropriate pharmacologic intervention and Maslow's Hierarchy of Needs is applied to identify priorities for care of patients receiving medications.

NURS A220  Perinatal Nursing  3 CR
Contact Hours: 3 + 0
Prerequisites: BIOL A112 with minimum grade of C and BIOL A240 with minimum grade of C and (DN A203 with minimum grade of C or concurrent enrollment) and ([ENGL A213 with minimum grade of C or concurrent enrollment] or [ENGL A212 with minimum grade of C or concurrent enrollment]) and NURS A125 with minimum grade of C and NURS A125L with minimum grade of C and NURS A180 with minimum grade of C.
Major Restriction: Must be Nursing major.
Registration Restrictions: Current admission to third semester of AAS nursing program. Completion of one social science elective with a minimum grade of C or concurrent enrollment.
Corequisite: NURS A220L, NURS A221, NURS A222 and NURS A222L.

Focuses on use of nursing process to provide healthcare 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.
Course Descriptions

NURS A220L  Perinatal Nursing Laboratory  1 CR
Contact Hours: 0 + 3
Prerequisites: BIOL A112 with minimum grade of C and BIOL A240 with minimum grade of C and (DN A203 with minimum grade of C or concurrent enrollment) and [ENGL A211 with minimum grade of C or concurrent enrollment] or (ENGL A212 with minimum grade of C or concurrent enrollment) or (ENGL A213 with minimum grade of C or concurrent enrollment)] and NURS A125 with minimum grade of C and NURS A125L with minimum grade of C and NURS A180 with minimum grade of C.
Major Restriction: Must be Nursing major.
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.
Corequisite: NURS A220, NURS A221, NURS A222 and NURS A222L.
Grade Mode: Pass/No Pass.
Special Fees.
Provides clinical experiences to reinforce learning in NURS A220. Students use nursing process as they provide care for the childbearing woman, 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.

NURS A221  Advanced Parenteral Therapy Laboratory  1 CR
Contact Hours: 0 + 3
Prerequisites: BIOL A112 with minimum grade of C and BIOL A240 with minimum grade of C and (DN A203 with minimum grade of C or concurrent enrollment) and [ENGL A211 with minimum grade of C or concurrent enrollment] or (ENGL A212 with minimum grade of C or concurrent enrollment) or (ENGL A213 with minimum grade of C or concurrent enrollment)] and NURS A125 with minimum grade of C and NURS A125L with minimum grade of C and NURS A180 with minimum grade of C.
Major Restriction: Must be Nursing major.
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.
Corequisite: NURS A220, NURS A220L, NURS A222 and NURS A222L.
Grade Mode: Pass/No Pass.
Special Fees.
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 healthcare settings. Utilizes presentation, seminar, demonstration, supervised practice, return demonstration, and directed self-learning.

NURS A222  Pediatric Nursing  3 CR
Contact Hours: 3 + 0
Prerequisites: BIOL A112 with minimum grade of C and BIOL A240 with minimum grade of C and (DN A203 with minimum grade of C or concurrent enrollment) and [ENGL A211 with minimum grade of C or concurrent enrollment] or (ENGL A212 with minimum grade of C or concurrent enrollment) or (ENGL A213 with minimum grade of C or concurrent enrollment)] and NURS A125 with minimum grade of C and NURS A125L with minimum grade of C and NURS A180 with minimum grade of C.
Major Restriction: Must be Nursing major.
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.
Corequisite: NURS A220, NURS A220L, NURS A221 and NURS A222L.
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.

NURS A222L  Pediatric Nursing Laboratory  1 CR
Contact Hours: 0 + 3
Prerequisites: BIOL A112 with minimum grade of C and BIOL A240 with minimum grade of C and (DN A203 with minimum grade of C or concurrent enrollment) and [ENGL A211 with minimum grade of C or concurrent enrollment] or (ENGL A212 with minimum grade of C or concurrent enrollment) or (ENGL A213 with minimum grade of C or concurrent enrollment)] and NURS A125 with minimum grade of C and NURS A125L with minimum grade of C and NURS A180 with minimum grade of C.
Major Restriction: Must be Nursing major.
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.
Corequisite: NURS A220, NURS A220L, NURS A221 and NURS A222.
Grade Mode: Pass/No Pass.
Special Fees.
Provides lab/c 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.

NURS A225  Adult Nursing II  3 CR
Contact Hours: 3 + 0
Prerequisites: NURS A220 with minimum grade of C and NURS A220L with minimum grade of C and NURS A221 with minimum grade of C and NURS A222 with minimum grade of C and NURS A222L with minimum grade of C.
Major Restriction: Must be Nursing major.
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).
Corequisite: NURS A225L, NURS A250, NURS A250L and NURS A255.
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 healthcare needs and nursing interventions utilizing critical thinking and Maslow's Hierarchy of Needs.

NURS A225L  Adult Nursing II Laboratory  3 CR
Contact Hours: 0 + 9
Prerequisites: NURS A220 with minimum grade of C and NURS A220L with minimum grade of C and NURS A221 with minimum grade of C and NURS A222 with minimum grade of C and NURS A222L with minimum grade of C.
Major Restriction: Must be Nursing major.
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).
Corequisite: NURS A225, NURS A250, NURS A250L and NURS A255.
Grade Mode: Pass/No Pass.
Special Fees.
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.

NURS A250  Psychiatric Nursing  3 CR
Contact Hours: 2 + 2
Prerequisites: DN A203 with minimum grade of C and [ENGL A211 with minimum grade of C or ENGL A212 with minimum grade of C or ENGL A213 with minimum grade of C] and NURS A220 with minimum grade of C and NURS A220L with minimum grade of P and NURS A221 with minimum grade of P and NURS A222 with minimum grade of P and NURS A222L with minimum grade of P.
Major Restriction: Must be Nursing major.
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.
Corequisite: NURS A225, NURS A225L, NURS A250L and NURS A255.
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.
OSH A101 Introduction to Occupational Safety and Health 3 CR
Contact Hours: 3 + 0
Introduces regulatory, consensus, environmental and industrial standards applicable to the occupational safety and health profession. Examines the role of the safety professional and the philosophy of safety and health in the workplace.

OSH A108 Injury Prevention and Risk Management 4 CR
Contact Hours: 3 + 2
Identifies safety, health 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 accident prevention.

OSH A110 Program Assessment, Development, and Implementation 4 CR
Contact Hours: 4 + 0
Prerequisites: OSH A108.
Examines the role of a safety program in the workplace. Emphasizes program assessment, design, development, implementation, and evaluation of safety programs.

OSH A112 Introduction to Injury Epidemiology 3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A105 and OSH A108.
Introduces the principles of epidemiology and how they pertain to injury prevention. Stresses the collection of data, principles of injury prevention, and data evaluation.

OSH A120 Safety Program Management and Recordkeeping 3 CR
Contact Hours: 3 + 0
Prerequisites: (OSH A101 or concurrent enrollment) and OSH A108.
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 need for accurate recordkeeping.

OSH A180 Introduction to Industrial Hygiene 4 CR
Contact Hours: 3 + 2
Prerequisites: OSH A101.
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.

OSH A201 Workplace Injury and Incident Evaluations 4 CR
Contact Hours: 4 + 0
Prerequisites: OSH A108.
Assesses and evaluates workplace hazards. Investigates worker complaints and actual health and safety incidents. Includes practical applications and basic accident investigation.

OSH A210 Training Needs and Methods 3 CR
Contact Hours: 3 + 0
Prerequisites: OSH A110.
Evaluates safety and health training needs in the workplace. Emphasizes safety and health training needs and regulatory compliance.

OSH A230 Principles of Ergonomics 3 CR
Contact Hours: 2 + 2
Prerequisites: BIOL A100 and OSH A201.
Examines workplace ergonomics, emphasizing types and sources of physiological stressors and their mitigation.

OSH A240 Workplace Monitoring: Instrumentation and Calibration 3 CR
Contact Hours: 2 + 2
Prerequisites: OSH A180.
Examines the equipment used in performing measurements of environmental factors in the workplace, including noise, lighting, vibration, chemicals, and heat stress. Emphasizes equipment and methods, equipment calibration, and evaluation of environmental factors found in Alaskan workplaces.

OSH A250 Hazardous Material Operation 3 CR
Contact Hours: 2 + 2
Prerequisites: OSH A180.
Identifies the policies, procedures, and equipment needed to deal with hazardous material. Emphasizes the types of hazards, planning, organization, and training needed to work safely with hazardous material.

PADM A601 Introduction to Public Administration 3 CR
Contact Hours: 3 + 0
Special Note: Offered Fall and Spring Semesters.
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.
PADM A602 Seminar in Public Management 3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.
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.

PADM A603 Management Analysis 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Faculty permission.
Special Note: Offered Spring Semesters.
Introduction to organizational and systems analysis, systems theory, information systems, procedure analysis, management planning, and management problem solving.

PADM A604 Research Methods in Administration 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Introductory course in statistics.
Special Note: Offered Spring Semesters.
Methods and techniques of empirical research. Scientific method, design of research, data collection and analysis methods, survey sampling, and statistical analysis including use of computers in data analysis.

PADM A606 The Policymaking Process 3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.
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.

PADM A610 Organizational Theory and Behavior 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
Special Note: Offered Spring Semesters.
Role of the administrator, theories of complex organizations and their administration, administrative leadership, and ethics. A detailed study of organized behavior, including concepts of leadership style, authority, and organizational change.

PADM A618 Public Accountability and Ethics 3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.
Discusses the challenges of maintaining a responsive bureaucracy subject to democratic controls; and examines the implications of ethical standards and administrative due process of law. Also explores selected case studies in government and non-profit administration.

PADM A620 Internship in Public Administration/Policy 1-3 CR
Contact Hours: 0 + 4-12
Registration Restrictions: Faculty permission.
Special Note: Offered as Demand Warrants.
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.

PADM A624 Human Resources Administration 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Faculty permission.
Special Note: Offered Fall Semesters.
Fundamental human resource topics dealing with problems in private and public sectors from an interdisciplinary viewpoint. Current and future development in selection and placement, classification and compensation, training and development, collective bargaining and managerial behavior, performance and effectiveness will be examined.

PADM A628 Administration of Financial Resources 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Faculty permission.
Special Note: Offered Spring Semesters.
Public financial organization, problems of financial management in government units, revenue sources, budgetary planning and control, methods of debt financing and intergovernmental relationships.

PADM A632 Policy Analysis 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Faculty permission. PADM A604 recommended.
Special Note: Offered as Demand Warrants.
Quick methods for policy analysis, emphasizing analytic thinking to narrow and focus the decision problem, and quantitative and qualitative techniques to generate insight from information. Covers basic steps in the analytic process, and methods including legal research, decision analysis, and interpreting regressions. Exercises are from contemporary Alaska policy issues.

PADM A640 Alternative Dispute Resolution 1-3 CR
Contact Hours: 1-3 + 0
Registration Restrictions: Faculty permission.
Reviews literature and principles of alternative dispute resolution. Focuses on negotiation and mediation as ways to resolve individual conflicts, group conflicts and public disputes.

PADM A659 Public Administration Capstone 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Faculty permission.
Capstone course for master of public administration program. Includes in-depth discussions of case studies illustrating problems of organizational change, decision making, problem solving, and the interrelated processes of policy formulation, implementation, and evaluation. Emphasis on student participation, including presentation of a major policy or administrative report.

PADM A671 Selected Topics in Public Administration 1-3 CR
Contact Hours: 1-3 + 0
Registration Restrictions: Faculty permission.
Analysis of selected public administration issues. Topics will be announced in the published class schedule.

PADM A688 Program Evaluation and Performance Measurement 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing; one undergraduate or graduate statistics course; PADM A604 recommended
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.

PARL - Paralegal Studies

Offered through the College of Health & Social Welfare
Consortium Library (LIB), Room 213, 786-1810
http://justice.uaa.alaska.edu

PARL A101 Introduction to Law 3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Social Sciences Requirement.
Survey course 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 introduction to skills for conducting basic legal analysis.

PARL A215 Paralegal Studies 3 CR
Contact Hours: 3 + 0
Special Note: Offered Fall and Spring Semesters.
Foundation course for legal studies area. Explores role, responsibilities, and ethics of paralegal activities and relationship of paralegals to lawyers. Study of paralegal responsibilities including statute and regulation formats, litigation, insurance, probate and real estate. Covers interviewing, investigation, writing and application of social science techniques to paralegal problems.

PARL A235 Factual Investigation and Interviewing 2 CR
Contact Hours: 2 + 0
Prerequisites: PARL A101 and PARL A215.
Special Note: Offered Spring Semesters.
Study of the fundamentals of investigation. Scene investigation and recording, collection and preservation of physical evidence and scientific aids. Sources of information, interviews, follow-up and case preparation.
Course Descriptions

PARL A236 Ethics and Paralegals 1 CR
Contact Hours: 1 + 0
Prerequisites: PARL A101 and PARL A215.
Special Note: Offered Spring Semesters.

PARL A238 Civil Procedure 3 CR
Contact Hours: 3 + 0
Prerequisites: PARL A101.
Special Note: Offered Spring Semesters.

PARL A256 Legal Research I 3 CR
Contact Hours: 3 + 0
Prerequisites: [PARL A101 or JUST A110] and ENGL A111 with minimum grade of B and [ENGL A211 with minimum grade of B or ENGL A212 with minimum grade of B or ENGL A213 with minimum grade of B or ENGL A311 with minimum grade of B or ENGL A312 with minimum grade of B or ENGL A414 with minimum grade of B].

PARL A340 Family Law 3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110 or PARL A101.
Crosslisted with: JUST A340.

PARL A352 Substantive Criminal Law 3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110 or PARL A101.
Crosslisted with: JUST A352.

PARL A354 Criminal Procedure 3 CR
Contact Hours: 3 + 0
Prerequisites: PARL A101 or JUST A110.
Crosslisted with: JUST A354.

PARL A362 Commercial Law 3 CR
Contact Hours: 3 + 0
Prerequisites: PARL A101.

PARL A375 Litigation 3 CR
Contact Hours: 3 + 0
Prerequisites: PARL A238.

REGISTRATION RESTRICTIONS: Legal Research I recommended. Special Fees.

INTENSIVE study of range of paralegal tasks associated with matters in litigation, from conducting the initial client interview through perfecting an appeal and collecting a judgment. Includes extensive coverage of principles of evidence. Procedures for alternative dispute resolution are also addressed. Requires active student participation in preparing a hypothetical case for trial, and culminates in a student presentation of a mock trial. Individual production of a comprehensive litigation systems binder, comprising student-drafted checklists, forms, and practice tips, is required. Student participation is premised on a solid foundation in civil procedure and legal research.

PARL A456 Advanced Legal Analysis and Writing 4 CR
Contact Hours: 3 + 3
Prerequisites: ENGL A111 with minimum grade of B and [ENGL A211 with minimum grade of B or ENGL A212 with minimum grade of B or ENGL A213 with minimum grade of B or ENGL A311 with minimum grade of B or ENGL A312 with minimum grade of B or ENGL A414 with minimum grade of B] and PARL A256.

Special Fees.

Special Note: Requires knowledge of basic legal research techniques and the uniform system of citation, and use of computerized legal research. Offered Spring Semesters.

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.

PARL A470 Law of Government Regulation 3 CR
Contact Hours: 3 + 0
Prerequisites: PARL A101.

Special Note: Offered Fall Semesters.

Administrative law and procedure in the context of federal, state and local agencies operating in Alaska. Includes consideration of unfair competition and anti-trust law from the perspective of the businessman and consumer.

PEP - Physical Education Professional

Offered through the Community and Technical College
Eugene Short Hall (ESH), Room 125, 786-4083
www.uaa.alaska.edu/ctc/programs/pep

PEP A103 SCUBA 2 CR
Contact Hours: 1.5 + 1

Special Fees.

Special Note: Students may need to pay a dive equipment fee as well as rent or purchase additional gear for practical sessions. Course meets Professional Association of Diving Instructors (PADI) and National Association of Underwater Instructors (NAUI) standards. Certification fees are not included in course fees.

Introduces skills for open water snorkeling and SCUBA diving. Emphasizes selection and use of specialized equipment, hyperbaric theory, proper planning, diving rescue skills, use of recreational dive tables and first-aid specific to the activity. Heavy emphasis placed on hazard assessment and safety issues.

PEP A110 Remote First Aid 1 CR
Contact Hours: 5 + 1

Special Fees.

Special Note: Wilderness First Aid and Adult CPR certifications provided upon successful completion of course.

Introduces knowledge and skills necessary to deal with accidents and injuries when 911 is not readily available. Covers assessment and management of the scene, assessment and management of life-threatening conditions, assessment and management/treatment of minor injuries and appropriate short-term care techniques. Also introduces decision-making as it relates to delayed transport.

PEP A112 First Aid and CPR for Professionals 1 CR
Contact Hours: 5 + 1
Grade Mode: Pass/No Pass.

Special Fees.

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 CR
Contact Hours: 3 + 0

Registration Restrictions: Must be concurrently enrolled in PEP A116 or PEP A117.

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.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Contact Hours</th>
<th>Prerequisites</th>
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</thead>
<tbody>
<tr>
<td>PEP A116</td>
<td>Techniques in Group Fitness Instruction</td>
<td>2 CR</td>
<td>1 + 2</td>
<td>(PEP A115 or concurrent enrollment) Special Fees</td>
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<td></td>
<td>Introduction to basic exercise program planning and progression, testing</td>
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<td>techniques, high risk exercises, music selection, choreography and teaching</td>
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<td>techniques. Examines a wide range of issues and formats related to exerciser's</td>
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<td>varied needs. Conducted in a lab setting for hands-on experience.</td>
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<tr>
<td>PEP A117</td>
<td>Techniques in Personal Training</td>
<td>2 CR</td>
<td>1 + 2</td>
<td>(PEP A115 or concurrent enrollment) Special Fees</td>
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<td>Special Note: Designed for individuals interested in working in the fitness</td>
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<td>industry as a personal trainer. Conducted in a lab setting for hands-on</td>
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<td>experience. Introduces the basics of client assessment, proper use of</td>
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<td>resistance and cardio equipment, teaching techniques and injury prevention.</td>
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<td>Examines a wide range of issues related to exerciser's varied needs.</td>
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<td></td>
<td>Presents techniques for exercise program planning, implementation and</td>
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<td></td>
<td>progression for general and special populations.</td>
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<tr>
<td>PEP A130</td>
<td>Introduction to Coaching</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Special Fees</td>
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<td>Special Note: Successful completion results in eligibility for certification</td>
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<td>as a high school coach in Alaska.</td>
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<td>Explores the purpose and objectives of interscholastic athletics. Presents</td>
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<td>principles of coaching, including: common teaching and learning styles,</td>
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<td>scientific foundations of physical activity, season planning, and the</td>
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<td></td>
<td>development of a personal coaching philosophy. Also examines common sports</td>
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<td>safety issues as well as basic injury prevention and treatment. Reviews</td>
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<td>guidelines and requirements for Alaska high school coaches.</td>
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<tr>
<td>PEP A161</td>
<td>Wilderness First Responder</td>
<td>4 CR</td>
<td>2 + 4</td>
<td>Special Fees</td>
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<td>Special Note: Students will be awarded nationally recognized WFR certificate</td>
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<td>upon successful completion of course and other certification requirements.</td>
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<td>Provides knowledge and skills necessary to administer emergency and</td>
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<td></td>
<td>medical care in non-urban environments. Covers basic anatomy and physiology,</td>
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<td>assessment and treatment of injuries, appropriate short-term to multi-day</td>
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<td>patient care and evacuation considerations.</td>
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<tr>
<td>PEP A181</td>
<td>Introduction to Health, Physical Education and Recreation</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Special Fees</td>
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<td>Special Note: A field outing may be required.</td>
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<td></td>
<td>Introduces the history, philosophies, objectives and foundations of health,</td>
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<td>physical education, and recreation. Surveys career and professional</td>
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<td>development opportunities.</td>
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<tr>
<td>PEP A207</td>
<td>Emergency Water Safety</td>
<td>2 CR</td>
<td>1 + 2</td>
<td>(PER A135) Special Fees</td>
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<td>Prerequisites: PER A135.</td>
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<td>Special Fees: Prior to admission in this course, students must be able to</td>
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<td></td>
<td>swim 200 yards (crawl) or breast stroke, foot first surface dive, retrieve</td>
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<td>a 10lb brick from 12ft depth, and tread water for two minutes using legs.</td>
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<td>Presents professional lifeguard training to prevent, recognize, and manage</td>
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<td>aquatic emergencies. Successful completion can result in National Pool and</td>
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<td>Water Park Lifeguard License. Includes CPR/First Aid and supplemental</td>
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<td>oxygen support.</td>
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<td>PEP A208</td>
<td>Water Safety Instructor Training</td>
<td>3 CR</td>
<td>2 + 2</td>
<td>(PER A135) Special Fees</td>
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<td>Prerequisites: PER A135.</td>
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<td>Special Fees: Presents the knowledge and skills necessary for instructor</td>
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<td>candidates to teach a wide variety of aquatic programs, including water</td>
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<td>safety courses. Successful completion can result in a WSI certification.</td>
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<td>PEP A210</td>
<td>Wilderness Emergency Medical Technician</td>
<td>4 CR</td>
<td>2 + 4</td>
<td>(EMT A130) Special Fees</td>
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<td>Prerequisites: EMT A130.</td>
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<td>Special Note: Students are required to obtain BLS Provider CPR certificate</td>
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<td>before end of course. Students in possession of current EMT will be awarded</td>
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<td>nationally recognized WEMT certificate upon successful completion of course.</td>
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<td>Provides knowledge and skills necessary to apply emergency medical</td>
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<td>training in non-rapid-transport settings. Emphasizes general medicine,</td>
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<td>trauma, environmental medicine and wilderness rescue. Provides opportunity</td>
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<td>for critical thinking, application of skills and evacuation decision-making.</td>
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<td>PEP A230</td>
<td>Sport Ethics</td>
<td>1 CR</td>
<td>1 + 0</td>
<td>Special Fees</td>
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<td>Emphasizes the role of the coach in building character, good sportsmanship,</td>
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<td>and positive values in athletes. Covers teachable moments, positive</td>
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<td>communication, and teamwork.</td>
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</table>

Contact Hours: 1 + 0

Prerequisites: (PEP A115 or concurrent enrollment).

Presents basic exercise program planning and progression, testing techniques, high risk exercises, music selection, choreography and teaching techniques. Examines a wide range of issues and formats related to exerciser's varied needs. Conducted in a lab setting for hands-on experience.

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. 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.

Presents professional lifeguard training to prevent, recognize, and manage aquatic emergencies. Successful completion can result in National Pool and Water Park Lifeguard License. Includes CPR/First Aid and supplemental oxygen support.

Presents the knowledge and skills necessary for instructor candidates to teach a wide variety of aquatic programs, including water safety courses. Successful completion can result in a WSI certification.

Provides knowledge and skills necessary to apply emergency medical training in non-rapid-transport settings. Emphasizes general medicine, trauma, environmental medicine and wilderness rescue. Provides opportunity for critical thinking, application of skills and evacuation decision-making.

Emphasizes the role of the coach in building character, good sportsmanship, and positive values in athletes. Covers teachable moments, positive communication, and teamwork.
PEP A251  Prevention and Care of Activity-Related Injuries  3 CR
Contact Hours: 2 + 2
Prerequisites: BIOL A111 and BIOL A112.
Special Fees.
Special Note: Field work is required.
Introduces the profession of athletic training. Examines theories and practices in preventing, recognizing, and treating common activity-related injuries.

PEP A262  Foundations of Adventure and Experiential Leadership  3 CR
Contact Hours: 3 + 0
Introduces the field and profession of adventure and experiential leadership. Examines philosophical, historical, theoretical, legal, and ethical foundations of the field. Explores career opportunities and options.

PEP A281  Leadership in Activities for Diverse Populations  2 CR
Contact Hours: 1 + 2
Special Fees.
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.

PEP A282  Leadership in Experiential Initiatives and Activities  2 CR
Contact Hours: 1 + 2
Examines key concepts associated with aquatic activities. Presents a variety of motor skill themes and movement concepts in a progression from the precontrol level to the proficiency level. Presents a variety of water activities.

PEP A284  Leadership in Fitness Activities  2 CR
Contact Hours: 1 + 2
Special Fees.
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.

PEP A285  Leadership in Team Activities  2 CR
Contact Hours: 1 + 2
Special Fees.
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.

PEP A286  Leadership in Individual and Dual Activities  2 CR
Contact Hours: 1 + 2
Special Fees.
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.

PEP A287  Leadership in Outdoor Recreation Activities  2 CR
Contact Hours: 1 + 2
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.

PEP A288  Leadership in Rhythmic Activities  2 CR
Contact Hours: 1 + 2
Special Fees.
Examines key concepts associated with rhythmic activities. Presents a variety of fundamental, rhythmic patterns and movement concepts in a progression from precontrol to proficiency level. Demonstrates rhythmic experience; folk, ethnic or square dances; creative dance; and educational gymnastics. Combines the mastery of movement skills with the artistry of expression.

PEP A345  Incorporating Health and Physical Activity into the Pre-K - 6 Classroom  2 CR
Contact Hours: 1 + 2
Prerequisites: EDSE A212 or PSY A245.
Special Fees.
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.

PEP A346  Lower Body Injury Assessment Skills  3 CR
Contact Hours: 5 + 7.5
Prerequisites: PEP A251.
Special Fees.
Special Note: This is a clinical/practicum course and field work is required.
Focuses on the recognition and assessment of athletic injuries. Emphasizes lower body injury assessment skills and proficiencies.

PEP A347  Upper Body Injury Assessment Skills  3 CR
Contact Hours: 5 + 7.5
Prerequisites: PEP A251 and PEP A346.
Special Fees.
Special Note: This is a clinical/practicum course and field work is required.
Focuses on the recognition and assessment of athletic injuries. Emphasizes upper body injury assessment skills and proficiencies.

PEP A363  Natural History Interpretation and Environmental Education  3 CR
Contact Hours: 3 + 0
Prerequisites: BIOL A104 or GEOL A104.
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.

PEP A364  Survival and Search and Rescue for Adventure Leaders  3 CR
Contact Hours: 3 + 0
Prerequisites: PEP A161 and PEP A262.
Registration Restrictions: Activity course requirements completed; instructor approval.
Presents theoretical overview of survival with emphasis on psychology of lost persons and survivors. Presents small group search for lost persons and self-rescue considerations. Introduces local and national Search and Rescue (SAR) systems and operational methods.

PEP A365  Adventure Leadership Theory and Practice  3 CR
Contact Hours: 3 + 0
Prerequisites: PEP A262 and PEP A282 and PEP A287 and (PEP A384 or concurrent enrollment).
Presents theories of leadership with emphasis on adventure programming application. Covers leadership styles, power, motivation, followership, group dynamics, diversity, safety, and ethics.

PEP A382  Kinesiology and Biomechanics  4 CR
Contact Hours: 3 + 2
Prerequisites: BIOL A111 and BIOL A112.
Special Fees.
Analyzes the structure, function, and mechanics of human movement with an emphasis on exercise, sports, and recreational activities. Includes application-based laboratory experiences.

PEP A383  Movement Theory and Motor Development  3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A111 or PSY A150.
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.
Pep A384  Cultural and Psychological Aspects of Health and Physical Activity 3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A111 or PSY A150.
Class Standing Restriction: Must be Junior or Senior.
Registration Restrictions: Completion of GER Tier 1 (Basic college-level skills) courses and junior standing.
Course Attributes: UA GER Integrative Capstone.
Investigates the dynamic relationship between psychological issues and health behavior adherence and/or physical activity performance. Analyzes the interaction between physical activity and society.

Pep A385  Physiology of Exercise 4 CR
Contact Hours: 3 + 2
Prerequisites: BIOL A111 and BIOL A112.
Special Fees: 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.

Pep A442  Exercise and Aging 3 CR
Contact Hours: 2 + 1.5
Special Note: Recommended for juniors or seniors who have had at least one course in anatomy, physiology, psychology, sociology or gerontology.
Develops knowledge and skills necessary for understanding, leading or participating in physical programs for older adults. Fosters positive attitudes and addresses creative and meaningful movement experiences as well as the physiological implications for the aged individual.

Pep A452  Challenges in Health and Fitness Leadership 1 CR
Contact Hours: 1 + 0
Presents topics of particular interest to health and fitness leaders. Focuses on subjects such as legal issues, staff concerns, common programming problems, funding opportunities, resources, and other areas of interest.

Pep A453  Health Promotion 2 CR
Contact Hours: 2 + 0
Focuses on understanding health behaviors and the development of intervention strategies to modify health risk behaviors. Provides a look at various health promotion settings and the role of the health/fitness professional.

Pep A454  Exercise Testing and Prescription 3 CR
Contact Hours: 2 + 2
Prerequisites: PEP A385.
Provides an understanding of techniques necessary for exercise test administration, evaluation, and prescription for normal and special populations.

Pep A455  Cardiac Rehabilitation 3 CR
Contact Hours: 2 + 2
Prerequisites: PEP A385 and PEP A454.
Special Fees: Provides an understanding of 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 disease. Focuses on the pathophysiology of the disease, its detection, program design, medical management, and exercise therapy.

Pep A456  Contemporary Personal Health Issues 3 CR
Contact Hours: 3 + 0
Class Standing Restriction: Must be Senior.
Registration Restrictions: Senior status.
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.

Pep A466  Organizational Safety and Risk Management 3 CR
Contact Hours: 3 + 0
Prerequisites: PEP A161 and PEP A364 and (PEP A365 or concurrent enrollment) and PEP A384.
Provides an in-depth analysis of accident prevention and crisis response from an organizational perspective. Emphasizes current standards as well as prevention and response plans to minimize the potential for, and consequences of, an accident.

Pep A467A  Challenge Course Adventure Leadership 2 CR
Contact Hours: 5 + 3
Prerequisites: PEP A282 and PEP A364 and PEP A365.
Provides techniques and strategies of challenge course leadership. Emphasizes application of leadership skills in field-based experiences. Covers assessment, logistics, initiatives, low and high rope course elements, and safety, with an emphasis on facilitation and debriefing.

Pep A467B  Climbing-Based Adventure Leadership 2 CR
Contact Hours: 5 + 3
Prerequisites: PEP A161 and PEP A365 and PER A146 and PER A147 and PER A148 and PER A181 and PER A246.
Presents techniques and strategies of outdoor leadership in the alpine or climbing environment. Emphasizes application of leadership skills in field-based experiences. Covers planning and organization, logistics, rope systems and anchors, environmental considerations, decision making and judgment, and safety.

Pep A467C  Land-Based Adventure Leadership 2 CR
Contact Hours: 5 + 3
Prerequisites: PEP A161 and PEP A365 and (PER A169 or PER A182).
Registration Restrictions: Instructor permission.
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.

Pep A467D  Water-Based Adventure Leadership 2 CR
Contact Hours: 5 + 3
Prerequisites: PEP A161 and PEP A365 and PER A151 and (PER A152 or PER A153).
Registration Restrictions: Instructor permission.
Presents techniques and strategies of water-based outdoor leadership in all seasons. Emphasizes application of leadership skills in field-based experiences. Covers planning and organization, logistics, lead-paddling considerations, environmental considerations, decision making and judgment, and safety.

Pep A486  Standards and Assessment in Health, Physical Education, and Recreation 3 CR
Contact Hours: 3 + 0
Prerequisites: PEP A181.
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.

Pep A487  Administration and Supervision in Health, Physical Education and Recreation 3 CR
Contact Hours: 3 + 0
Prerequisites: PEP A181.
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.

Pep A495  Internship in Health and Fitness Leadership 6 CR
Contact Hours: 5 + 16.5
Registration Restrictions: Successful completion of a minimum of 12 hours of upper level emphasis-specific courses; Grade of C or better in all emphasis-specific courses with minimum GPA of 2.7; Instructor approval; Current CPR/First Aid certification required for internship placement; Admission to BS in PE; Senior status.
Special Fees.
Special Note: Special clothing may be required.
Advanced professional experience in an approved position with supervision and training in health and fitness programming.

Pep A496  Internship in Adventure Leadership 6 CR
Contact Hours: 5 + 16.5
Prerequisites: PEP A365 and PEP A466 and PEP A487.
Registration Restrictions: A grade of C or better in all emphasis-specific courses with a minimum overall GPA of 2.7; 100 days of field leadership, at least 50 of which are outside UAA; Instructor approval; Current CPR/First Aid certification required for placement; Admission to BS in PE; Senior status.
Special Fees.
Special Note: Special clothing may be required.
Provides advanced professional experience in an approved position with supervision and training in various aspects of adventure programming.

Pep A645  Methods in Elementary Physical Education 3 CR
Contact Hours: 3 + 0
Prerequisites: EDFN A478 and EDFN A602.
Registration Restrictions: Departmental approval.
Special Fees.
Special Note: Concurrent enrollment in an internship is required.
Applies theory and practice necessary for facilitating learning, providing positive behavioral supports, evaluating programs, and developing curriculum within the elementary physical education classroom ecology.
**Course Descriptions**

**PER A100**  
**Fitness for Life**  
Contact Hours: 1 + 2  
Special Fees.  
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**  
Contact Hours: 0.5 + 1  
Special Fees.  
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**  
Contact Hours: 0.5 + 1  
Special Fees.  
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**  
Contact Hours: 0.5 + 1  
Special Fees.  
Introduces key concepts associated with lifetime personal fitness. Presents and technical skills to set up and participate in a regular aerobic walking program.

**PER A105**  
**Low Impact Aerobics**  
Contact Hours: 0.5 + 1  
Special Fees.  
Introduces key concepts related to lifetime personal fitness. Presents a variety of low impact aerobic exercise routines such as step aerobics, lateral training, circuit training, and interval training for improved physical fitness.

**PER A106**  
**Aerobics**  
Contact Hours: 0.5 + 1  
Special Fees.  
Introduces key concepts related to lifetime personal fitness. Presents a variety of aerobic exercise routines such as step aerobics, lateral training, circuit training, and interval training for improved physical fitness.

**PER A107**  
**Aerobic Kickboxing**  
Contact Hours: 0.5 + 1  
Special Fees.  
Presents the fundamentals of intermediate intensity kickboxing, martial arts-based aerobics, and interval training for improved physical fitness.

**PER A109**  
**Aqua Aerobics**  
Contact Hours: 0.5 + 1  
Special Fees.  
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 A111**  
**Country Line Style Workout**  
Contact Hours: 0.5 + 1  
Special Fees.  
Introduces country line dancing as an effective way to improve cardiorespiratory fitness and muscular endurance. Covers basic dance terminology and conditioning exercise for specific muscles.

**PER A113**  
**Beginning Pilates**  
Contact Hours: 0.5 + 1  
Special Fees.  
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 A114**  
**Muscle Fitness**  
Contact Hours: 0.5 + 1  
Special Fees.  
Introduces key concepts related to lifetime personal fitness. Presents a variety of non-aerobic exercises such as light weight training, resistance bands, circuit training, and interval training for improved skill-related fitness, muscular endurance, and flexibility.

**PER A116**  
**Circuit Training**  
Contact Hours: 0.5 + 1  
Special Fees.  
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**  
Contact Hours: 0.5 + 1  
Special Fees.  
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**  
Contact Hours: 0.5 + 1  
Special Fees.  
Introduces key concepts related to lifetime personal fitness. Presents resistance exercises to strengthen and condition major muscle groups.

**PER A120**  
**Beginning Yoga**  
Contact Hours: 0.5 + 1  
Special Fees.  
Introduces yoga physical exercises, breathing, relaxation and concentration techniques as an approach to wellness.

**PER A121**  
**Yoga for Athletes**  
Contact Hours: 0.5 + 1  
Special Fees.  
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**  
Contact Hours: 0.5 + 1  
Special Fees.  
Introduces Tai Chi exercises designed to improve health, tranquility, energy, and strength.

**PER A124**  
**Beginning Karate**  
Contact Hours: 0.5 + 1  
Special Fees.  
Introduces karate philosophy, principles, and applications. Training and discipline on the physical, mental, and spiritual levels will be covered.

**PER A125**  
**Beginning Kung Fu**  
Contact Hours: 0.5 + 1  
Special Fees.  
Introduces Northern Shaolin Kung Fu philosophy, principles, and applications. Training and discipline on the physical, mental, and spiritual levels will be covered.

**PER A126**  
**Beginning Kendo**  
Contact Hours: 0.5 + 1  
Special Fees.  
Introduces Kendo, the art of Japanese fencing. Training and discipline on the physical, mental, and spiritual levels will be covered.

**PER A127**  
**Beginning Tae Kwon Do**  
Contact Hours: 0.5 + 1  
Special Fees.  
Introduces Tae Kwon Do philosophy, principles, and applications. Training and discipline on the physical, mental, and spiritual levels will be covered.
PER A128  Wing Tsun for Self Defense  1 CR
Contact Hours: .5 + 1
Special Fees.
Introduces Wing Tsun (a form of Kung Fu) concepts and applications. Focuses on self-defense. Basic history and philosophy as well as benefits of Wing Tsun will also be presented.

PER A130  Beginning Tennis  1 CR
Contact Hours: .5 + 1
Special Fees.
Introduces basic skills and knowledge to play singles and doubles tennis. Applies basic principles of tennis through active participation.

PER A131  Beginning Racquetball  1 CR
Contact Hours: .5 + 1
Special Fees.
Introduces the basic skills and knowledge associated with playing racquetball. Applies basic principles of racquetball through active participation.

PER A132  Beginning Golf  1 CR
Contact Hours: .5 + 1
Special Fees.
Introduces the basic skills and knowledge associated with playing golf. Applies basic principles of golf through active participation.

PER A133  Beginning Bowling  1 CR
Contact Hours: .5 + 1
Introduces the basic skills and knowledge associated with bowling. Applies basic principles of bowling through active participation.

PER A135  Beginning Swimming  1 CR
Contact Hours: .5 + 1
Special Fees.
Introduces proper breathing technique and basic strokes for those with little or no swimming background. Emphasizes personal water safety.

PER A136  Beginning In-Line Skating  1 CR
Contact Hours: .5 + 1
Special Fees.
Introduces the basic skills and knowledge associated with in-line skating. Applies basic principles of in-line skating through active participation.

PER A137  Beginning Ice Skating  1 CR
Contact Hours: .5 + 1
Special Fees.
Introduces the basic skills and knowledge associated with ice skating. Applies basic principles of skating through active participation.

PER A138  Beginning Foil Fencing  1 CR
Contact Hours: .5 + 1
Special Fees.
Introduces the basic skills and knowledge of the sport of fencing with foils. Applies the basic principles of fencing through active participation.

PER A139  Recreational Latin Dance  1 CR
Contact Hours: .5 + 1
Special Fees.
Introduces basic skills associated with social Latin dance. Covers various dances including Merengue, Bachata, Cumbia, Cha-Cha-Cha, and Salsa. Applies concepts of fitness, but focuses on Latin dance as a form of recreation.

PER A141  Beginning Basketball  1 CR
Contact Hours: .5 + 1
Special Fees.
Introduces the basic skills and knowledge associated with playing basketball. Applies basic principles of basketball through active participation.

PER A142  Beginning Soccer  1 CR
Contact Hours: .5 + 1
Special Fees.
Introduces the basic skills and knowledge associated with playing soccer. Applies basic principles of soccer through active participation.

PER A143  Beginning Hockey  1 CR
Contact Hours: .5 + 1
Special Fees.
Introduces the basic skills and knowledge associated with playing hockey. Applies basic principles of hockey through active participation.

PER A144  Beginning Volleyball  1 CR
Contact Hours: .5 + 1
Special Fees.
Introduces the basic skills and knowledge associated with playing volleyball. Applies basic principles of volleyball through active participation.

PER A146  Beginning Rock Climbing  1 CR
Contact Hours: .5 + 1
Special Fees.
Special Note: Requires ability to function comfortably in inclement weather. 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.

PER A147  Beginning Ice Climbing  1 CR
Contact Hours: .5 + 1
Special Fees.
Special Note: Requires ability to function comfortably in extremely cold temperatures and inclement weather. 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.

PER A148  Beginning Indoor Sport Climbing  1 CR
Contact Hours: .5 + 1
Special Fees.
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 knots, rope handling, belaying, descent techniques, and top-rope climbing on an indoor climbing wall.

PER A151  Beginning Canoeing  1 CR
Contact Hours: .5 + 1
Special Fees.
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. 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.

PER A152  Beginning River Rafting  1 CR
Contact Hours: .5 + 1
Special Fees.
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. Introduces the most commonly used equipment, techniques, challenges, and risks found in the sport of river rafting. Includes instruction on equipment selection, trip planning, canoeing strokes and re-entry techniques with an emphasis on risk assessment and risk management.

PER A153  Beginning Sea Kayaking  1 CR
Contact Hours: .5 + 1
Special Fees.
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. Introduces the most commonly used equipment, techniques, challenges, and risks found in the sport of kayak paddling. Includes instruction on equipment selection, trip planning, sea kayaking strokes and re-entry techniques, and safety equipment. Emphasizes risk assessment and water safety.

PER A154  Beginning Sailing  1 CR
Contact Hours: .5 + 1
Special Fees.
Special Note: Requires ability to perform comfortably in inclement weather. Field session may be held on local lakes and/or ocean environment. Introduces the equipment, vocabulary, techniques, challenges, and risks most commonly found in the sport of sailing. Provides opportunity to become familiar with safety equipment, learn pre-trip preparation, practice boat handling skills, and identify steps used in the event of an emergency.

PER A160  Beginning Cross-Country Ski: Diagonal Stride  1 CR
Contact Hours: .5 + 1
Special Fees.
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. 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.
PER A161  Beginning Cross-Country Skate Skiing  1 CR
Contact Hours: 5 + 1
Special Fees.
Special Note: Requires ability to remain active and perform comfortably in extremely cold and/or inclement weather for up to two hours.
Introduces skate skiing techniques for groomed trail conditions. Covers selection of personal and safety equipment, recognition and prevention of cold-weather injuries, and skiing skills and trail ethics. Provides opportunity for skiing on local trails.

PER A162  Beginning Telemark Skiing  1 CR
Contact Hours: 5 + 1
Special Fees.
Special Note: Students may be required to rent or purchase equipment and/or lift tickets for outings. Requires ability to perform comfortably in extremely cold and/or inclement weather.
Introduces the fundamentals of telemark skiing. Covers hazard evaluation, selection of personal ski and safety equipment, recognition and prevention of cold-weather injuries, skiing skills, and ski hill rules.

PER A163  Beginning Alpine Skiing  1 CR
Contact Hours: 5 + 1
Special Fees.
Special Note: Students may be required to rent or purchase equipment and/or lift tickets for outings. Requires ability to perform comfortably in extremely cold and/or inclement weather.
Introduces the fundamentals of downhill skiing. Covers hazard evaluation, selection of personal ski and safety equipment, recognition and prevention of cold-weather injuries, skiing skills, and ski hill rules.

PER A164  Skiiing Alaska's Backcountry  2 CR
Contact Hours: 5 + 4.5
Special Fees.
Special Note: Requires ability to function comfortably and perform well in extremely cold or inclement weather. Good physical fitness is required for all day outings. 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.
Introduces skills needed to ski off-trail. Covers techniques for traveling on rolling and inclined terrain, selecting routes, and using appropriate gear and equipment for day trips. Requires ability to function comfortably in extremely cold and/or inclement weather.

PER A166  Beginning Snowboarding  1 CR
Contact Hours: 5 + 1
Special Fees.
Special Note: May require rental of equipment and/or lift tickets for outings. Requires ability to perform comfortably in extremely cold and/or inclement weather.
Introduces snowboarding and the equipment, techniques, challenges, and risks common to the sport. Covers selecting personal and safety equipment, recognizing and preventing cold-weather injuries, and learning snowboarding techniques and ski hill rules.

PER A167  Dog Mushing  1 CR
Contact Hours: 5 + 1
Special Fees.
Special Note: Requires ability to function comfortably in extremely cold and/or inclement weather. Good physical fitness is required for all day outings. 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.
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.

PER A168  Winter Camping Alaska  1 CR
Contact Hours: 5 + 1
Special Fees.
Special Note: Requires good physical condition and ability to perform comfortably in extremely cold and/or inclement weather.
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.

PER A169  Four-Season Backpacking  3 CR
Contact Hours: 1 + 4
Special Fees.
Special Note: Requires good backcountry camping skills, good physical condition and ability to perform comfortably in extremely cold and/or inclement weather. Students may need to rent or purchase additional equipment for this course.
Introduces four-season backpacking in Alaska. Covers selection of personal, group, and 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 management.

PER A170  Backpack Alaska  3 CR
Contact Hours: 1 + 4
Special Fees.
Special Note: Requires good physical condition and ability to function comfortably in extremely cold weather.
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/cocking skills.

PER A171  Outdoor Adventure in Alaska  2 CR
Contact Hours: 1 + 2
Registration Restrictions: Must be 18 years of age or older to enroll.
Special Fees.
Special Note: Requires good physical fitness and ability to function comfortably in inclement weather. Students may need to rent or purchase additional equipment for this course.
Provides an overview of basic outdoor skills commonly used and enjoyed in Alaska. Covers trip preparation, equipment selection and maintenance, introduction to map and compass, and learning to identify risk in the field. Includes season-dependent activities such as day hiking, backpacking, canoeing, rock climbing, cross-country skiing (classic), or winter camping.

PER A172  Fishing Academy  2 CR
Contact Hours: 1 + 2
Registration Restrictions: Must be 18 years of age or older to enroll. 
Special Fees.
Special Note: Requires the ability function comfortably in inclement weather.
Introduces fundamentals of recognizing birds and plants as well as observing and tracking Alaskan mammals. Uses extensive reading and written assignments, as well as hands-on application of field techniques, to provide students with a solid, academic foundation for understanding animal behaviors and their signs.

PER A173  Ice Climbing  1 CR
Contact Hours: 5 + 1
Special Fees.
Special Note: Requires ability to function comfortably in inclement weather.
Introduces fundamentals of recognizing birds and plants as well as observing and tracking Alaskan mammals. Uses extensive reading and written assignments, as well as hands-on application of field techniques, to provide students with a solid, academic foundation for understanding animal behaviors and their signs.

PER A174  Nature Observation and Tracking  3 CR
Contact Hours: 1 + 4
Special Fees.
Special Note: Requires ability to function comfortably in inclement weather.
Introduces the diversity of Alaskan flora and its myriad uses. Addresses risk assessment and hazard evaluation, especially in relation to learning to identify and/ or use edible, poisonous and medicinal species.

PER A175  Alaska's Wild Mushrooms  1 CR
Contact Hours: 5 + 1
Special Fees.
Special Note: Requires ability to function comfortably in inclement weather.
Focuses on field identification of mushrooms with emphasis on those common to Alaska. Covers identification through drawings, visual guides, macroscopic features, and spore prints. Includes collection techniques, preservation, edible vs. poisonous species and historic use. Addresses risk assessment and hazard evaluation in relation to gathering mushrooms in local environment. Includes field outing.

PER A176  Crevasse Rescue Techniques  1 CR
Contact Hours: 5 + 1
Registration Restrictions: Instructor approval.
Special Fees.
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.
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 extraction. Emphasizes risk assessment and technical-skill acquisition.

PER A177  Alaska Winter Survival  3 CR
Contact Hours: 1 + 4
Special Fees.
Special Note: Requires excellent backpacking skills, good physical condition, and the ability to function comfortably in extremely cold and inclement weather.
Introduces the most common risks and challenges encountered in winter survival situations. Emphasizes hazard evaluation, physical and psychological factors that affect survival, and preparation tips. Provides opportunity to practice outdoor skills and survival techniques.
Presents key concepts related to lifetime personal fitness. Applies intermediate-advanced level exercise routines for improved cardiorespiratory fitness, flexibility and muscular endurance. A wide variety of aerobic exercise routines will be presented, such as step aerobics, lateral training, circuit training, and interval training.

**PER A209 Intermediate Aqua Aerobics** 1 CR  
Contact Hours: .5 + 1  
Prerequisites: PER A109.  
Special Fees:  
- Presents key concepts related to lifetime personal fitness. Applies intermediate level aqua exercise routines for improved cardiorespiratory fitness, flexibility and muscular endurance. A wide variety of aerobic exercise routines will be presented, such as deep water jogging, aerobics to music, circuit training, and interval training. Designed for swimmers and non-swimmers.

**PER A220 Intermediate Yoga** 1 CR  
Contact Hours: .5 + 1  
Prerequisites: PER A120.  
Special Fees:  
- Presents intermediate level yoga physical exercises, breathing techniques, meditation, and relaxation exercises.

**PER A223 Intermediate Tai Chi** 1 CR  
Contact Hours: .5 + 1  
Prerequisites: PER A123.  
Special Fees:  
- Presents intermediate level Tai Chi exercises designed to improved health, tranquility, energy, and strength.

**PER A224 Intermediate Karate** 1 CR  
Contact Hours: .5 + 1  
Prerequisites: PER A124.  
Special Fees:  
- Presents intermediate level Shotokan Karate principles and applications. Training and discipline on the physical, mental, and spiritual levels will be covered.

**PER A225 Intermediate Kung Fu** 1 CR  
Contact Hours: .5 + 1  
Prerequisites: PER A125.  
Special Fees:  
- Presents intermediate level Northern Shaolin Kung Fu principles and applications. Training and discipline on the physical, mental, and spiritual levels will be covered.

**PER A226 Intermediate Kendo** 1 CR  
Contact Hours: .5 + 1  
Prerequisites: PER A126.  
Special Fees:  
- Presents intermediate level Kendo principles and applications. Training and discipline on the physical, mental, and spiritual levels will be covered.

**PER A227 Intermediate Tae Kwon Do** 1 CR  
Contact Hours: .5 + 1  
Prerequisites: PER A127.  
Special Fees:  
- Presents intermediate level Tae Kwon Do principles and applications. Training and discipline on the physical, mental, and spiritual levels will be covered.

**PER A230 Intermediate Tennis** 1 CR  
Contact Hours: .5 + 1  
Prerequisites: PER A130.  
Special Fees:  
- Emphasizes game strategy and develops intermediate tennis skills. Applies offensive and defensive strategies of tennis through active participation.

**PER A231 Intermediate Racquetball** 1 CR  
Contact Hours: .5 + 1  
Prerequisites: PER A131.  
Special Fees:  
- Emphasizes game strategy and develops intermediate racquetball skills. Applies offensive and defensive strategies of racquetball through active participation.

**PER A232 Intermediate Golf** 1 CR  
Contact Hours: .5 + 1  
Prerequisites: PER A132.  
Special Fees:  
- Emphasizes game strategy and develops intermediate golf skills. Applies principles of golf through active participation.

**PER A233 Intermediate Bowling** 1 CR  
Contact Hours: .5 + 1  
Prerequisites: PER A133.  
Special Fees:  
- Emphasizes game strategy and develops intermediate bowling skills. Applies game strategies of bowling through active participation.

**PER A234 Swimming Conditioning** 1 CR  
Contact Hours: .5 + 1  
Prerequisites: PER A134.  
Special Fees:  
- Develops and refines swimming skills, physical conditioning, and knowledge of training and competition. Designed for intermediate to competitive level swimmers.

**PER A235 Intermediate Swimming** 1 CR  
Contact Hours: .5 + 1  
Prerequisites: PER A135.  
Special Fees:  
- Develops and refines breathing technique and intermediate swimming strokes and diving. Emphasizes personal water safety.

**PER A236 Intermediate In-Line Skating** 1 CR  
Contact Hours: .5 + 1  
Prerequisites: PER A136.  
Special Fees:  
- Emphasizes and develops intermediate in-line skating skills and stunts. Applies intermediate level in-line skating skills through active participation.

**PER A237 Intermediate Ice Skating** 1 CR  
Contact Hours: .5 + 1  
Prerequisites: PER A137.  
Special Fees:  
- Emphasizes and develops intermediate ice skating skills. Applies intermediate principles of ice skating through active participation.

**PER A238 Intermediate Foil Fencing** 1 CR  
Contact Hours: .5 + 1  
Prerequisites: PER A138.  
Special Fees:  
- Reinforces the basic skills and knowledge of the sport of fencing with foils and introduces intermediate level movement, skills, and strategies. Applies the intermediate level principles of fencing through active participation.

**PER A241 Intermediate Basketball** 1 CR  
Contact Hours: .5 + 1  
Prerequisites: PER A141.  
Special Fees:  
- Emphasizes game strategy and develops intermediate and advanced basketball skills. Applies offensive and defensive strategies of basketball through active participation.

**PER A242 Intermediate Soccer** 1 CR  
Contact Hours: .5 + 1  
Prerequisites: PER A142.  
Special Fees:  
- Emphasizes game strategy and develops intermediate and advanced soccer skills. Applies offensive and defensive strategies of soccer through active participation.

**PER A243 Intermediate Hockey** 1 CR  
Contact Hours: .5 + 1  
Prerequisites: PER A143.  
Special Fees:  
- Develops intermediate level power skating techniques and hockey skills. Applies defensive and offensive strategies and tactics.
Course Descriptions

**PER A244** Intermediate Volleyball 1 CR
Contact Hours: 5 + 1
Prerequisites: PER A144.
Special Fees.
Emphasizes game strategy and develops intermediate and advanced volleyball skills. Applies offensive and defensive strategies of volleyball through active participation.

**PER A246** Intermediate Rock Climbing 1 CR
Contact Hours: 5 + 1
Prerequisites: PER A146.
Special Fees.
Special Note: Requires ability to function comfortably in inclement weather.
Builds on the skills and knowledge gained in Beginning Rock Climbing. Emphasizes risk management skills, learning to build/use a variety of anchors, and ascending and descending techniques. Introduces a risk/benefit analysis of, but not the practice of, lead climbing vs. following. Provides opportunity to practice protection placement and mock lead climbing.

**PER A252** Intermediate River Rafting 2 CR
Contact Hours: 5 + 4.5
Prerequisites: PER A152.
Special Fees.
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.
Expands on the skills developed in PER A152. 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.

**PER A253** Intermediate Sea Kayaking 2 CR
Contact Hours: 5 + 4.5
Prerequisites: PER A153.
Special Fees.
Special Note: Participants must be able to demonstrate solid 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.
Provides foundational open water sea kayaking skills for those with sheltered coastal kayaking skills. Skills introduced will include 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.

**PER A272** Advanced Weight Training 1 CR
Contact Hours: 5 + 1
Prerequisites: PER A117 or PER A118.
Special Fees.
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.

**PER A273** Strength Training Through Periodization 2 CR
Contact Hours: 1 + 2
Prerequisites: PER A117 or PER A118.
Special Fees.
Expands on key concepts related to strength and power training using the periodization model. Applies designing, planning, and implementing complete strength training programs in lecture and weight room sessions.

**PER A275** Advanced T’ai Chi 1 CR
Contact Hours: 5 + 1
Prerequisites: PER A123 and PER A223.
Instruction and guided practice in advanced T’ai Chi Ch’uan Yang Long form. Focuses on exercises for the improvement of health, muscle endurance, energy, and relaxation.

**PER A277** Advanced Racquetball 1 CR
Contact Hours: 5 + 1
Prerequisites: PER A231.
Special Fees.
Emphasizes game strategy and develops advanced racquetball skills. Applies advanced offensive and defensive strategies of racquetball through active participation.

**PER A278** Advanced Figure Skating 1 CR
Contact Hours: 5 + 1
Prerequisites: PER A237.
Emphasizes and develops intermediate to advanced figure skating skills. Applies advanced principles of ice skating, program development, and choreography.

**PER A280** Power Skating 1 CR
Contact Hours: 5 + 1
Prerequisites: PER A137.
Expands on key concepts related to power skating for improved performance in ice hockey. Applies principles of balance, skating strides, crossovers, and physical conditioning through active participation.

**PER A281** Advanced Hockey 1 CR
Contact Hours: 5 + 1
Prerequisites: PER A243.
Special Fees.
Emphasizes strategy and develops advanced skating and hockey skills. Applies advanced offensive and defensive strategies of hockey through active participation. Presents winning hockey coaching techniques.

**PER A285** Expedition Glacier School 2 CR
Contact Hours: 1 + 2
Registration Restrictions: Instructor approval. Special Fees.
Special Note: Requires excellent physical condition and the ability to function comfortably in extremely cold and/or inclement weather. A student must attend the shakedown weekend in order to participate in the expedition.
Applies backpacking and mountaineering techniques in a multi-day glacier expedition. Introduces glacier-travel and crevasse-rescue techniques as well as expedition planning. Emphasizes risk assessment and learning to minimize the inherent risks associated with the activity.

**PER A287** Expedition Backpacking 2 CR
Contact Hours: 1 + 2
Prerequisites: PER A170.
Special Fees.
Special Note: Requires excellent physical condition and ability to function comfortably in inclement weather. A student must attend the shakedown weekend in order to participate in the expedition.
Provides experienced backpackers with the fundamentals of planning and participating on a multi-day backpacking trip. Emphasizes risk assessment, selection of group members, and importance of group dynamics, route selection, and logistics.

**PETR - Petroleum Technology**

**PETR A155** Blueprint Reading 3 CR
Contact Hours: 3 + 0
Registration Restrictions: MATH A054 or placement in MATH A055.
Introduces the reading of machine, piping, welding, instrumentation, and process detail drawings. Includes practice in visualization and sketching of isometric drawings.

**PETR A240** Industrial Process Instrumentation III 3 CR
Contact Hours: 3 + 0
Prerequisites: PETR A144.
Major Restriction: Must be Industrial Proc Instrumentatn or Process Technology major.
Registration Restrictions: Degree-seeking Industrial Process Instrumentation or Process Technology students.
Presents details of the installation and application of continuous process instruments in closed feedback control loops. Includes practice of functional checkout procedures on physical hardware. Introduces ladder logic used for discrete control of processes.

**PETR A244** Industrial Process Instrumentation IV 3 CR
Contact Hours: 3 + 0
Prerequisites: PETR A240.
Major Restriction: Must be Industrial Proc Instrumentatn or Process Technology major.
Registration Restrictions: Degree-seeking Industrial Process Instrumentation or Process Technology students.
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.

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Course Descriptions

PHAR - Pharmacy Technology

Offered through the Community & Technical College
Allied Health Sciences Building (AHS), Room 161, 786-6928
www.uaa.alaska.edu/ctc/programs/alliedhealth/pharmacy

PHAR A101 Introduction to Pharmacy 3 CR
Contact Hours: 3 + 0
Special Fees.
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 CR
Contact Hours: 3 + 0
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 CR
Contact Hours: 3 + 0
Special Fees.
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 CR
Contact Hours: 3 + 0
Special Fees.
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 CR
Contact Hours: 3 + 0
Prerequisites: PHAR A105 with minimum grade of C.
Special Fees.
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 CR
Contact Hours: 1 + 0
Grade Mode: Pass/No Pass.
Special Fees.
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.

PHIL - Philosophy

Offered through the College of Arts and Sciences
Administration/Humanities Building (ADM), Room 254, 786-4455
http://philosophy.uaa.alaska.edu

PHIL A101 Introduction to Logic 3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Humanities Requirement.
Deals with 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.

PHIL A201 Introduction to Philosophy 3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Humanities Requirement.
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.

PHIL A211 History of Philosophy I 3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Humanities Requirement.
Survey of primarily 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.
PHIL A317 Metaphysics 3 CR
Contact Hours: 3 + 0
Registration Restrictions: 6 credits with minimum grade of C from PHIL A101, A201, A211, A212, or A301.
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.

PHIL A318 Epistemology 3 CR
Contact Hours: 3 + 0
Registration Restrictions: 6 credits with minimum grade of C from PHIL A101, A201, A211, A212, or A301.
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.

PHIL A390 Selected Topics in Philosophy 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Upper-division standing.
Special Note: Course can be repeated for credit with a different subtitle.
Detailed study of a selected topic in philosophy.

PHIL A400 Ethics, Community, and Society 3 CR
Contact Hours: 3 + 0
Prerequisites: PHIL A301.
Registration Restrictions: Completion of GER Tier 1 (Basic college-level skills) courses and junior standing (at least 60 credit hours).
Course Attributes: UAA GER Integrative Capstone.
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.

PHIL A401 Aesthetics 3 CR
Contact Hours: 3 + 0
An investigation into the nature of art and the creative process from both a historical and theoretical perspective, utilizing especially the philosophy of the ancient Greeks, the Romantic thinkers and contemporary semiotics.

PHIL A405 Professional Ethics 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Junior standing.
Study of the common ethical concerns of professional practices, including professional-client relationships, confidentiality, integrity, the role of professional codes, conflicts of interest, conflicts of duties, questions of responsibility, and the concept of a profession. Includes an account of professional virtues, and an analysis of moral decision-making. Case studies and practical examples selected from various professions.

PHIL A406 Philosophy of Law 3 CR
Contact Hours: 3 + 0
Registration Restrictions: JUST A250 or 6 credits in Philosophy, and Junior standing.
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.

PHIL A415 Feminist Philosophy 3 CR
Contact Hours: 3 + 0
Registration Restrictions: WS A200 or 6 credits in philosophy, and Junior standing.
Examines women's position in the writings of prominent thinkers in the Western philosophical canon; contemporary theories concerning the nature of gender and its interaction 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.

PHIL A421 Philosophy of the Sciences 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Junior or Senior standing.
A general introduction to the philosophical problems common to the physical, biological, behavioral, and social sciences, focusing on issues concerning metaphysics, epistemology, modes of explanation, and the differences between the natural and the human sciences.

PHIL A423 Advanced Ethical Theory 3 CR
Contact Hours: 3 + 0
Prerequisites: PHIL A101 with minimum grade of C and PHIL A201 with minimum grade of C and PHIL A211 with minimum grade of C and PHIL A212 with minimum grade of C and PHIL A301 with minimum grade of C.
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.

PHIL A490 Topics in Contemporary Philosophy 3 CR
Contact Hours: 3 + 0
Prerequisites: PHIL A101 with minimum grade of C and PHIL A201 with minimum grade of C and PHIL A211 with minimum grade of C and PHIL A212 with minimum grade of C and PHIL A301 with minimum grade of C.
Registration Restrictions: Junior standing.
An intensive and detailed study of a topic in contemporary philosophy in a seminar format.

PHIL A492 Seminar on an Enduring Philosopher 3 CR
Contact Hours: 3 + 0
Prerequisites: PHIL A101 with minimum grade of C and PHIL A201 with minimum grade of C and PHIL A211 with minimum grade of C and PHIL A212 with minimum grade of C and PHIL A301 with minimum grade of C.
Registration Restrictions: Junior standing.
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.

PHIL A495 Service Learning in Applied Ethics 3 CR
Contact Hours: 3 + 0
Prerequisites: PHIL A101 with minimum grade of C and PHIL A201 with minimum grade of C and PHIL A211 with minimum grade of C and PHIL A212 with minimum grade of C and PHIL A301 with minimum grade of C.
Registration Restrictions: Junior standing.
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.

PHIL A498 Senior Research Project 3 CR
Contact Hours: 3 + 0
Prerequisites: PHIL A101 with minimum grade of C and PHIL A201 with minimum grade of C and PHIL A211 with minimum grade of C and PHIL A212 with minimum grade of C and PHIL A301 with minimum grade of C.
Registration Restrictions: Senior standing, nine credits of philosophy in addition to the prerequisites, and faculty permission.
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.

PHIL A607 Ethics in Clinical Medicine 1 CR
Contact Hours: 1 + 0
Registration Restrictions: Admission to the WWAMI program or the MS program in Nursing Science, or with the consent of the instructor.
Grade Mode: Pass/No Pass.
Focuses on ethical issues in medical training and clinical practice, as well as on core topics in biomedical ethics.

PHYS - Physics

PHYS A101 Physics for Poets 3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A105 or MATH A107 or MATH A108 or MATH A172 or MATH A200 or MATH A201 or MATH A272.
Course Attributes: UAA GER Natural Sciences Requirement.
Special Note: Does not fulfill the Natural Sciences component of the CAS B.S. Degree.
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.

PHYS A115 Physical Science 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Placement into MATH A105 or higher.
Exposes students to basic concepts in physics. Presents general knowledge of science rather than an in-depth study of any one field.
PHYS A115L  Physical Science Lab  1 CR  
Contact Hours: 0 + 3  
Prerequisites: (PHYS A115 or concurrent enrollment).  
- Exposes students to basic concepts in physics labs. Presents general knowledge of science rather than an in-depth study of any one field.

PHYS A123  Basic Physics I  3 CR  
Contact Hours: 3 + 0  
Prerequisites: MATH A105 or MATH A107 or MATH A108 or MATH A109 or MATH A122 or MATH A200 or MATH A201 or MATH A272.  
- Registration Restrictions: High school trigonometry.  
- Course Attributes: UAA GER Natural Sciences Requirement.  
- Non-calculus introduction to mechanics, fluids, and thermodynamics.  
- Emphasizes motion, forces, gravitation, fluid motion, and laws of thermodynamics.  
- Limited emphasis on historical development of physics.

PHYS A123L  Basic Physics I Laboratory  1 CR  
Contact Hours: 0 + 3  
- Prerequisites: (PHYS A123 or concurrent enrollment) and [MATH A105 or MATH A107 or MATH A108 or MATH A109 or MATH A122 or MATH A200 or MATH A201 or MATH A272].  
- Registration Restrictions: High school trigonometry.  
- Course Attributes: UAA GER Natural Sciences Lab Only.  
- Special Fees.  
- Introductory physics laboratory, with experiments in mechanics, fluids, and thermodynamics.

PHYS A124  Basic Physics II  3 CR  
Contact Hours: 3 + 0  
Prerequisites: PHYS A123 with minimum grade of C.  
- Course Attributes: UAA GER Natural Sciences Requirement.  
- Non-calculus introduction to electricity and magnetism, waves, optics, light, some modern and nuclear physics. Limited emphasis on historical development of physics.

PHYS A124L  Basic Physics II Laboratory  1 CR  
Contact Hours: 0 + 3  
- Prerequisites: PHYS A123 with minimum grade of C and PHYS A123L with minimum grade of C and (PHYS A124 or concurrent enrollment).  
- Course Attributes: UAA GER Natural Sciences Lab Only.  
- Special Fees.  
- Introductory physics laboratory, with experiments in electricity and magnetism, waves, and optics.

PHYS A130  Survey of College Physics  3 CR  
Contact Hours: 3 + 0  
Prerequisites: MATH A108.  
- 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.

PHYS A211  General Physics I  3 CR  
Contact Hours: 3 + 0  
Prerequisites: MATH A201 with minimum grade of C and (MATH A202 or concurrent enrollment) and PHYS A124 with minimum grade of C.  
- Registration Restrictions: If PHYS A130 prerequisite is not satisfied, then a passing score on department exam is required.  
- Course Attributes: UAA GER Natural Sciences Requirement.  
- Calculus-based course covering classical mechanics (statics and dynamics of translational and rotational motion), fluids, elasticity, and introduction to thermodynamics.

PHYS A211L  General Physics I Laboratory  1 CR  
Contact Hours: 0 + 3  
Prerequisites: PHYS A211 with minimum grade of C or concurrent enrollment.  
- Registration Restrictions: If PHYS A211 is taken from another institution, it must be completed prior to taking PHYS A211L.  
- Course Attributes: UAA GER Natural Sci Lab Only.  
- Special Fees.  
- Calculus-based introductory physics laboratory, with experiments in computerized data collection and analysis, mechanics, waves, elasticity, and wave motion.

PHYS A211R  General Physics I Problem Solving  1 CR  
Contact Hours: 0 + 1.5  
Prerequisites: PHYS A211.  
- Course Mode: Pass/No Pass.  
- Special Note: This course does not meet General Education Requirements.  
- Techniques of problem solving for material covered in PHYS A211. Includes student discussion and presentation of solutions.

PHYS A212  General Physics II  3 CR  
Contact Hours: 3 + 0  
Prerequisites: MATH A201 with minimum grade of C and (MATH A202 or concurrent enrollment) and PHYS A211 with minimum grade of C.  
- Course Attributes: UAA GER Natural Sciences Requirement.  
- Calculus-based course emphasizing basic electromagnetic theory, waves, fundamentals of geometric and physical optics, and light.

PHYS A212L  General Physics II Laboratory  1 CR  
Contact Hours: 0 + 3  
Prerequisites: (PHYS A212 with minimum grade of C or concurrent enrollment).  
- Registration Restrictions: If PHYS A212 is taken from another institution, it must be completed prior to taking PHYS A212L.  
- Course Attributes: UAA GER Natural Sciences Lab Only.  
- Special Fees.  
- Calculus-based introductory physics laboratory, with experiments in electric and magnetic fields, geometric and physical optics, and light.

PHYS A212R  General Physics II Problem Solving  1 CR  
Contact Hours: 0 + 1.5  
Prerequisites: PHYS A212.  
- Course Mode: Pass/No Pass.  
- Special Note: This course does not meet General Education Requirements.  
- Techniques of problem solving for material covered in PHYS A212. Includes student discussion and presentation of solutions.

PHYS A303  Modern Physics  3 CR  
Contact Hours: 3 + 0  
Prerequisites: PHYS A212 and MATH A302.  
- Introduces modern physics, including special relativity, atomic and molecular physics, electromagnetic radiation, solid-state physics, elementary particles, simple transport theory, kinetic theory, and concepts of quantum mechanics.

PHYS A311  Intermediate Classical Mechanics  3 CR  
Contact Hours: 3 + 0  
Prerequisites: MATH A302 with minimum grade of C and PHYS A212 with minimum grade of C.  
- Newtonian, Lagrangian, and Hamiltonian mechanics, dynamics of systems of particles and rigid bodies.

PHYS A314  Electromagnetics  3 CR  
Contact Hours: 3 + 0  
Prerequisites: PHYS A212 and PHYS A212L and MATH A302.  
- Crosslisted with: EE A314.  
- 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.

PHYS A320  Simulation of Physical Systems  3 CR  
Contact Hours: 3 + 0  
Prerequisites: MATH A202 and PHYS A124 or PHYS A212.  
- Special Fees.  
- Introduction to 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.

PHYS A324  Electromagnetics II  3 CR  
Contact Hours: 3 + 0  
Prerequisites: [EE A314 or PHYS A314] and MATH A302.  
- Crosslisted with: EE A324.  
- Use of Maxwell's equations in analysis of plane wave propagation, wave reflection, radiation and antennas, waveguides, cavity resonators, transmission lines, and radio propagation.

PHYS A403  Quantum Mechanics  3 CR  
Contact Hours: 3 + 0  
Prerequisites: [CHEM A332 with minimum grade of C or PHYS A303 with minimum grade of C] and MATH A314 with minimum grade of C.  
- Fundamentals of quantum mechanics, including applications to the hydrogen atom, particle spin, and perturbation theory.

PHYS A413  Statistical and Thermal Mechanics  3 CR  
Contact Hours: 3 + 0  
Prerequisites: CHEM A331 with minimum grade of C or PHYS A212 with minimum grade of C.  
- Principles of statistical mechanics and thermodynamics, with applications.
PHYS A456  Nonlinear Dynamics and Chaos  3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A202 with minimum grade of C and [PHYS A124 with minimum grade of C or PHYS A212 with minimum grade of C].
Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses and junior standing.
Crosslisted with: BIOL A456 and CHEM A456.
Course Attributes: UAA GER Integrative Capstone.
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.
PHYS A498  Individual Research  1-6 CR
Contact Hours: 0 + 3-18
Registration Restrictions: Department permission.
Special Note: May be repeated for a maximum of 6 credits.
Research projects to be arranged with individual faculty members who will direct the research program.

PM - Project Management

Offered through the School of Engineering
University Center (UC), Room 155, 786-1924
http://soc.uaa.alaska.edu/espm

PM A601  Project Management Fundamentals  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate level standing.
Special Fees.
Project Scope Management. Project methods, tools, and techniques utilized to plan and define scope of work, verify and manage scope, measure project scope against the project plan, and change scope are emphasized. Elements crucial to initiation, selection, and authorization of the project are examined.

PM A610  Project Scope Management  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate level standing.
Special Fees.
Advanced project scope management processes utilized to ensure on-time project completion. Processes include defining project activities, sequencing activities, estimating activity duration, and developing and controlling the project schedule. Project scheduling software will be utilized in these processes.

PM A612  Project Time Management  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate level standing.
Special Fees.
Advanced project time management processes utilized to ensure on-time project completion. Processes include project scheduling software in these processes.

PM A614  Project Cost Management  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate level standing.
Special Fees.
Advanced project cost management processes and procedures utilized to ensure project completion is within budget. Cost estimating, WBS, scheduling, resource planning, accounting interface, cost budgeting, cost and schedule integration, and cost control are examined.

PM A616  Project Quality Management  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate level standing.
Special Fees.
Examination and implementation of contemporary team-based quality leadership. Major emphasis will be placed on understanding the philosophy and metrics for building and maintaining team-based continuous quality improvement. Special focus will be placed on developing an organizational climate for continuous quality leadership in public, non-profit, and private sector service-based enterprises.

PM A620  Project Human Resource Management  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate level standing.
Special Fees.
Covers the processes required to make effective use of people involved with the project. This forum- or discussion-style course is intended to open students to the wide variety of subject matter that will ultimately form the basis of their personal tool kit. Topics will include leadership, team leadership, delegating, motivation, performance measurement and reward systems, innovation and creativity, communications, and management systems.

PM A622  Project Communications Management  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate level standing.
Special Fees.
Advanced project communication processes and techniques used to successfully manage the project on time, within budget, and to the satisfaction of the customer. Includes collaboration, distribution, and storing of project information.

PM A624  Project Risk Management  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate level standing.
Special Fees.
Examines methods and processes of planning for, identifying, assessing, monitoring, and responding to project risk. Qualitative and quantitative risk analysis procedures, including decision making, risk simulation, risk ranking, and risk responding techniques.

PM A626  Project Procurement Management  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate level standing.
Special Fees.
Procurement management processes for project planning, solicitation, source selection, contract administration, and contract closeout are presented.

PM A685  Project Management Case Study and Research  6 CR
Contact Hours: 6 + 0
Registration Restrictions: Graduate level standing and instructor’s permission.
Special Fees.
Team-based case studies of actual project management problems that should be identified in the students’ workplace and will result in a written report. The report will include recommendations for action regarding the problem.

PM A698  Individual Research  3-6 CR
Contact Hours: 3-6 + 0
Registration Restrictions: Instructor approval.
Special Fees.
A project to be designed between the student and faculty members to allow the opportunity to pursue special advanced interests in project management at the M.S. level.

PMED - Paramedical Technology

Offered through Kenai Peninsula College, Kenai River Campus
156 College Road, Soldotna, Alaska 99669, (877) 262-0330
www.kpc.alaska.edu/academics/paramedical.html
and
Offered through Matanuska-Susitna College
Mile 2 Trunk Road, Palmer, Alaska 99645, (907) 746-9329
www.matsu.alaska.edu/paramedic

PMED A241  Paramedicine I  8 CR
Contact Hours: 7 + 2
Prerequisites: BIOL A111 with minimum grade of C and BIOL A111L and BIOL A112 with minimum grade of C and BIOL A112L.
Registration Restrictions: Current Alaska EMT-1 or National Registry EMT-Basic; Acceptance into the PMED Program.
Corequisite: PMED A242.

PMED A242  Clinical Rotation I  4 CR
Contact Hours: 0 + 8
Prerequisites: BIOL A111 with minimum grade of C and BIOL A111L and BIOL A112 with minimum grade of C and BIOL A112L.
Registration Restrictions: Current Alaska EMT-1 or National Registry EMT-Basic; Acceptance into the PMED Program.
Corequisite: PMED A241.

PMED A251  Paramedicine II  8 CR
Contact Hours: 7 + 2
Prerequisites: PMED A241 and PMED A242.
Corequisite: PMED A252.
Integrates pathophysiologic principles and assessment findings to formulate impressions and implement treatment plans needed when caring for trauma patients, and patients with special needs.
PMED A252  Clinical Rotation II  4 CR
Contact Hours: 0 + 8
Prerequisites: PMED A241 and PMED A242.
Corequisite: PMED A251.
Grade Mode: Pass/No Pass.
Paramedics 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.

PMED A261  Paramedicine III  8 CR
Contact Hours: 7 + 2
Prerequisites: PMED A251 and PMED A252.
Corequisite: PMED A262.
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.

PMED A262  Clinical Rotation III  4 CR
Contact Hours: 0 + 8
Prerequisites: PMED A251 and PMED A252.
Corequisite: PMED A261.
Grade Mode: Pass/No Pass.
Paramedics 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.

PMED A295  Paramedic Internship  12 CR
Contact Hours: 0 + 36
Prerequisites: PMED A261 and PMED A262.
Registration Restrictions: All PMED Major and AAS General Degree Education
Requirements must be completed prior to registration.
Grade Mode: Pass/No Pass.
Pre-hospital field experience under the guidance of a paramedic preceptor on
an advanced life support ambulance. Interns perform all aspects of paramedic care.

PRPE - Preparatory English
Offered through the Community and Technical College
Beatrice McDonald Hall (BMH), Room 121, 786-6856
www.uaa.alaska.edu/ctc/programs/cpds

PRPE A050  ESL Basic Conservation Skills  3 CR
Contact Hours: 3 + 0
Special Note: Student entering this course must have an advising slip signed
by faculty. Call the Advising and Testing Center for appointment times. May be
repeated one time for credit.
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.

PRPE A051  ESL Basic Reading and Writing  3 CR
Contact Hours: 3 + 0
Special Note: Student entering this course must have an advising slip signed
by faculty. Call the Advising and Testing Center for appointment times. May be
repeated one time for credit.
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.

PRPE A054  Learning Strategies  1-3 CR
Contact Hours: 1-3 + 0
Registration Restrictions: Appropriate score on reading placement test.
Grade Mode: Pass/No Pass.
Special Fees.
Provides basic learning strategies. Develops time management, learning styles,
textbook study, note taking, and test taking skills.

PRPE A070  Basic Reading  2-4 CR
Contact Hours: 2-4 + 0
Registration Restrictions: Appropriate score on English placement test.
Special Fees.
Special Note: Concurrent enrollment in PRPE A070 is strongly recommended.
Improves basic reading skills with guided, structured practice in vocabulary,
comprehension, and reading flexibility.

PRPE A072  Individualized Reading Lab  1-3 CR
Contact Hours: 0 + 2-6
Registration Restrictions: Appropriate score on reading placement test.
Grade Mode: Pass/No Pass.
Special Fees.
Special Note: May be repeated for a maximum of 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.

PRPE A074  Vocabulary Skill Building  1-3 CR
Contact Hours: 1-3 + 0
Prerequisites: ASSET Writing Skills with score of 30.
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.

PRPE A075  Speed Reading  1-3 CR
Contact Hours: 1-3 + 0
Registration Restrictions: Appropriate score on reading placement test.
Grade Mode: Pass/No Pass.
Special Fees.
Introduces skills to increase reading speed and comprehension. Presents
techniques for efficient reading of different types of material.

PRPE A076  Reading Strategies  3 CR
Contact Hours: 3 + 0
Prerequisites: COMPASS Reading Skills with score of 62 or Accuplacer-Reading
Comp with score of 055.
Registration Restrictions: Appropriate score on reading placement test.
Special Fees.
Provides basic strategies for reading comprehension, vocabulary development,
and textbook skills necessary for success in college settings.

PRPE A080  Basic Writing  2-4 CR
Contact Hours: 2-4 + 0
Prerequisites: [COMPASS E-Write (1-12 scale) with score of 04 and COMPASS
Reading Skills with score of 50] or [Accuplacer-Reading Comp with score of 040
and Accuplacer-Sentence Skills with score of 040].
Registration Restrictions: Appropriate score on English placement test.
Special Fees.
Special Note: Concurrent enrollment in PRPE A070 is strongly recommended.
Improves basic writing skills to develop sentences and paragraphs that
conform to Standard American English.

PRPE A082  Refresher Writing Lab  1-3 CR
Contact Hours: 5-1.5 + 1-3
Prerequisites: ASSET Writing Skills with score of 30.
Grade Mode: Pass/No Pass.
Special Fees.
Special Note: May be repeated for a maximum of 6 credits.
Provides individualized instruction in basic writing skills for school, work,
personal, or creative development.

PRPE A084  Sentence Skills  1-3 CR
Contact Hours: 1-3 + 0
Registration Restrictions: Appropriate score on English placement test.
Special Fees.
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.

PRPE A086  Writing Strategies  3 CR
Contact Hours: 3 + 0
Prerequisites: [COMPASS E-Write (1-12 scale) with score of 06 and COMPASS
Reading Skills with score of 50] or [Accuplacer-Reading Comp with score of 040
and Accuplacer-Sentence Skills with score of 060].
Registration Restrictions: Appropriate score on English placement test.
Special Fees.
Introduces composition of paragraphs and short essays that conform to
Standard American English for college writing. Emphasizes basic reading skills to
enhance students’ writing. Reviews the basics of grammar, effective sentences, and
sentence combining.

PRPE A105  Introduction to College Study Skills  1-3 CR
Contact Hours: 1-3 + 0
Prerequisites: PRPE A076 with minimum grade of C or COMPASS Reading Skills
with score of 75.
Registration Restrictions: If prerequisite is not satisfied, then appropriate score on
reading placement test is required.
Special Fees.
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.
PRTE A107 Introduction to College Reading 3 CR
Contact Hours: 3 + 0
Prerequisites: PRTE A076 with minimum grade of C or COMPASS Reading Skills with score of 75 or Accuplacer-Reading Comp with score of 070.
Registration Restrictions: If prerequisite is not satisfied, then appropriate score on reading placement test is required.
Special Fees.

PRTE A108 Introduction to College Writing 3 CR
Contact Hours: 3 + 0
Prerequisites: [PRTE A076 with minimum grade of C and PRTE A086 with minimum grade of C] or [COMPASS E-Write (1-12 scale) with score of 08 and COMPASS Reading Skills with score of 75] or [Accuplacer-Reading Comp with score of 070 and Accuplacer-Sentence Skills with score of 080].
Registration Restrictions: If prerequisite is not satisfied, then appropriate scores on reading and writing placement tests required.
Special Fees.

Preparation for ENGL A111 and alternative to ENGL A109. Introduces composition of multi-paragraph essays that conform to Standard American English for college writing. Includes critical reading skills to enhance students’ writing. Continues intensive practice in punctuation, sentence combining, revising, and editing.

PRT - Process Technology
Offered through Kenai Peninsula College
156 College Road, Soldotna, Alaska, 99669, (907) 262-0330
www.kpc.alaska.edu

PRT A101 Introduction to Process Technology 3 CR
Contact Hours: 3 + 0
Introduction to process operations in industry through an overview of general information, processes, procedures, and equipment.

PRT A110 Introduction to Occupational Safety, Health, and Environmental Awareness 3 CR
Contact Hours: 3 + 0
Introduction to the field of safety, health, and environment within the process industry. Covers various types of plant hazards, safety and environmental systems equipment, and applicable government regulations, and industry standards.

PRT A130 Process Technology I: Equipment 4 CR
Contact Hours: 4 + 0
Prerequisites: PRT A101.
In-depth treatment of selected process equipment including rotating machinery and process units. Equipment components, construction, preventive maintenance, and safety will be emphasized.

PRT A140 Industrial Process Instrumentation I 3 CR
Contact Hours: 3 + 0
Prerequisites: (MATH A105 or concurrent enrollment).
Major Restriction: Must be Industrial Proc Instrumentatn or Process Technology major.
Registration Restrictions: Degree-seeking Process Technology or Industrial Process Instrumentation students.
Introduction to the terminology and symbolism encountered in process instrumentation. The common process variable measurement tools used industrially are explored.

PRT A144 Industrial Process Instrumentation II 3 CR
Contact Hours: 2.5 + 1
Prerequisites: PRT A140.
Major Restriction: Must be Industrial Proc Instrumentatn or Process Technology major.
Registration Restrictions: Degree-seeking Process Technology or Industrial Process Instrumentation students.
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.

PRT A160 Oil and Gas Exploration and Production I 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Admission to Process Technology degree program.
Surveys oil and gas exploration and production issues including marketing, geology, reservoir economics, legal aspects of resource ownership, drilling and production technologies, product separation, safety, and environmental issues.

PRT A230 Process Technology II: Systems 4 CR
Contact Hours: 3 + 2
Prerequisites: PRT A130.
Covers how the individual components interact as part of a system and how each system works within an entire processing facility. Special attention is given to the common systems found in each Alaskan process industry. Some topics include upstream oil and gas production, petrochemicals and refinery processes, refrigeration, power generation, milling, boilers and heaters, coolers, and heat exchangers.

PRT A231 Process Technology III: Operations 4 CR
Contact Hours: 3 + 2
Prerequisites: PRT A230.
Analyzes duties and responsibilities of the process, operator on the job. Includes normal operation, upset conditions, emergency action plans, startups, shutdowns, operating modes, turnarounds, and routine maintenance activities.

PRT A250 Process Troubleshooting 3 CR
Contact Hours: 3 + 0
Prerequisites: PRT A231.
Analyzes the troubleshooting process and studies the use of indicators, variables, and controllers to troubleshoot problems current to the process industries.

PRT A255 Quality Concepts for the Process Industry 1 CR
Contact Hours: 1 + 0
Prerequisites: PRT A231.
Introduction and application of current quality concepts used by the process technician. Discusses the role of statistical processes used by the operator in achieving quality.

PS - Political Science
Offered through the College of Arts and Sciences
Social Sciences Building (SSB), Room 367, 786-4897
http://polsci.uaa.alaska.edu

PS A101 Introduction to American Government 3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Social Sciences Requirement.
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.

PS A102 Introduction to Political Science 3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Social Sciences Requirement.
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.

PS A290 Topics in Politics 1-3 CR
Contact Hours: 1-3 + 0
Special Note: May be repeated up to five times for credit with change of title for maximum of 6 credits.
Introductory-level examination of current or ongoing topic of interest related to one or more sub-fields within political science.

PS A301 Comparative Political Economy 3 CR
Contact Hours: 3 + 0
Prerequisites: PS A102.
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.

PS A311 Comparative Politics 3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A111 and [PS A101 or PS A102].
Course Attributes: UAA GER Social Sciences Requirement.
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.

PS A312 Comparative Politics: Case Studies 3 CR
Contact Hours: 3 + 0
Prerequisites: PS A311.
Detailed analysis of the political systems of several selected independent sovereign nation-states. Cases selected for study represent contrasting types of political systems in different regions of the world.
Course Descriptions

PS A321 International Relations 3 CR
Contact Hours: 3 + 0
Prerequisites: PS A102.
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.

PS A322 United States Foreign Policy 3 CR
Contact Hours: 3 + 0
Prerequisites: PS A101 or PS A102.
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.

PS A324 Model United Nations 3 CR
Contact Hours: 3 + 0
Special Fees.
Special Note: May be repeated once for credit.
Student simulation of the United Nations. Acting as nation-state delegates, students research and debate a topic of international concern.

PS A325 Northeast Asia in 21st Century 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Junior standing. Completion of GER Tier 1 (basic college-level skills) courses. Six credits of Tier 2 GEOG, HIST, or PS courses.
Crosslisted with: HIST A325 and INTL A325.
Course Attributes: UAA GER Integrative Capstone.
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.

PS A330 The American Political Tradition 3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A111 and [HIST A101 or PS A101].
The political theory of liberal democracy examined in its application to crucial events in American political history, with emphasis on the American founding era.

PS A331 Political Philosophy 3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A111.
Course Attributes: UAA GER Humanities Requirement.
An introduction to political philosophy, with emphasis on the study of regimes; selected regimes are examined through the writings of political philosophers.

PS A332 History of Political Philosophy I: Classical 3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A111.
Course Attributes: UAA GER Humanities Requirement.
Political philosophy from Plato to Maritius, with emphasis on natural right.

PS A333 History of Political Philosophy II: Modern 3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A111.
Course Attributes: UAA GER Humanities Requirement.
Political philosophy from Machiavelli to Nietzsche, with emphasis on liberalism and its critics.

PS A341 The United States Congress 3 CR
Contact Hours: 3 + 0
Prerequisites: PS A101.
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.

PS A342 The American Presidency 3 CR
Contact Hours: 3 + 0
Prerequisites: PS A101.
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.

PS A343 Constitutional Law 3 CR
Contact Hours: 3 + 0
Prerequisites: PS A101 or JUST A110.
Crosslisted with: JUST A343.
An introduction to American constitutional law through study of selected Supreme Court cases. Among the topics considered are judicial review; separation of powers; property, commerce, and taxation; liberties guaranteed by the Bill of Rights; equal protection; and privacy. Comparisons are made with the Alaska Constitution.

PS A344 State and Local Politics 3 CR
Contact Hours: 3 + 0
Prerequisites: PS A101.
State and local politics and governments in the United States and their interrelationships. The course focuses on how the political process works, how decisions are made, and current issues and policies.

PS A345 Alaska Government and Politics 3 CR
Contact Hours: 3 + 0
Prerequisites: PS A101.
Special Note: May be applied to the Alaska Culture and History requirements for state of Alaska teacher certification.
Examines all forms of governmental structures and political processes in Alaska. Examines the history of government in Alaska, contemporary political issues and political change.

PS A346 Alaska Native Politics 3 CR
Contact Hours: 3 + 0
Class Standing Restriction: Must be Junior.
Registration Restrictions: Upper division standing.
Crosslisted with: AKNS A346.
Special Note: May be used to fulfill the Alaska studies requirement for teacher certification.
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.

PS A347 Public Administration 3 CR
Contact Hours: 3 + 0
Prerequisites: PS A101 or PS A102.
Case study approach to public policy and policymaking. Examines the relationship between the social, economic, and political environments and specific contemporary policies (e.g., education, social welfare, housing, employment, etc.), the policymaking process, and alternative models of policymaking. Emphasis on Alaska as well as national issues.

PS A348 Public Policy 3 CR
Contact Hours: 3 + 0
Prerequisites: PS A101 or PS A102.
Case study approach to public policy and policymaking. Examines the relationship between the social, economic, and political environments and specific contemporary policies (e.g., education, social welfare, housing, employment, etc.), the policymaking process, and alternative models of policymaking. Emphasis on Alaska as well as national issues.

PS A351 Political Sociology 3 CR
Contact Hours: 3 + 0
Prerequisites: [ENGL A211 or ENGL A212 or ENGL A213 or ENGL A214] and [PS A102 or SOC A101].
Course Attributes: UAA GER Social Sciences Requirement.
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.

PS A353 Political Behavior, Participation, and Democracy 3 CR
Contact Hours: 3 + 0
Prerequisites: PS A101 or PS A102.
Examines the nature of democratic systems and explores their influence on political participation and behavior.

PS A355 Women in Politics 3 CR
Contact Hours: 3 + 0
Prerequisites: PS A101 or PS A102 or WS A200.
Crosslisted with: WS A355.
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.

PS A361 Social Science Research Methods 3 CR
Contact Hours: 3 + 0
Prerequisites: PS A102 or SOC A101.
Crosslisted with: SOC A361.
Provides a formal 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.
Course Descriptions

PS A411  Tribes, Nations, and Peoples  3 CR
Contact Hours: 3 + 0
Prerequisites: AKNS A201 or PS A102.
Crosslisted with: AKNS A411.
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.

PS A424  International Law and Organizations  3 CR
Contact Hours: 3 + 0
Prerequisites: PS A101 or PS A110.
Examines the development of international law and organizations and
their role in the international community. Analyzes issues such as nation-state
sovereignty, human rights, the use of force, and international criminal law to
demonstrate the application of international law and the operation of international
organizations.

PS A453  Organization Theory  3 CR
Contact Hours: 3 + 0
Prerequisites: PS A101.
Examines theoretical explanations of large, public sector organizations, their
structure and design, internal conflicts, and ability to adapt and achieve goals.

PS A490  Studies in Politics  1-3 CR
Contact Hours: 1-3 + 0
Prerequisites: PS A101 or PS A110.
Registration Restrictions: Junior standing. May be stacked with: PS A690.
Special Note: Subtitle varies; may be repeated with different subtitles.
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.

PS A492  Senior Seminar in Politics  3 CR
Contact Hours: 3 + 0
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.
Course Attributes: UAA GER Integrative Capstone.
Senior Integrative Capstone course required of all Political Science majors. An
examination of a single major problem in the study of politics.

PS A495  Internship in Political Science  3 CR
Contact Hours: 0 + 9
Prerequisites: PS A101 or PS A110.
Class Standing Restriction: Must be Junior.
Registration Restrictions: Junior standing. Faculty permission required.
Special Note: Internships vary; may be repeated once for credit with a different
internship.
Students apply the subject matter of political science in an agency or
community setting.

PS A690  Studies in Politics  1-3 CR
Contact Hours: 1-3 + 0
Prerequisites: PS A101 or PS A110.
May be stacked with: PS A490.
Special Note: Subtitle varies; may be repeated with different subtitles.
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.

PSY - Psychology

Offered through the College of Arts and Sciences
Social Sciences Building (SSB), Room 214, 786-1711
http://psych.uaa.alaska.edu

PSY A111  General Psychology  3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Social Sciences Requirement.
Introduces methods, theories, and research in the psychological sciences. Core
topics include psychological research methods, biopsychology, learning, cognition,
lifespan development, personality, psychological disorders, and social psychology.

PSY A112  Psychology Short Courses  1 CR
Contact Hours: 1 + 0
Special Note: May be repeated for a maximum of 3 credits.
Present topics in general psychology. Specific topics to be announced.

PSY A115  Memory: How it Works and How to Improve It  3 CR
Contact Hours: 3 + 0
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 CR
Contact Hours: 1 + 0
Offered only at Kodiak College.
Basic listening skills and crisis intervention techniques. Overview of domestic
violence, adult and child sexual assault, legal alternatives, and community
resources.

PSY A135  Domestic Violence and Sexual Assault Advocacy Training  1 CR
Contact Hours: 1 + 0
Offered only at Kodiak College.
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.

PSY A143  Death and Dying  3 CR
Contact Hours: 3 + 0
Special Fees.
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 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Social Sciences Requirement.
Reviews physical, cognitive, and socioemotional aspects of human growth,
maturatation, 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.

PSY A153  Human Relations  3 CR
Contact Hours: 3 + 0
Crosslisted with: HUMS A153.
Special Fees.
A survey of human relations to include communication, problem solving,
interaction, relationship, choice and change skills.

PSY A168  Human Sexuality  3 CR
Contact Hours: 3 + 0
Introduces topics of human sexual functioning including physiology,
psychology, sociology, philosophy, and morality of human sexual practices and love.

PSY A230  Psychology of Adjustment  3 CR
Contact Hours: 3 + 0
Registration Restrictions: One social science course.
Study of sources and problems of stress. Examines self-esteem and
interpersonal relationships from perspective of personal coping skills. Emphasizes
taking control of one's life.

PSY A245  Child Development  3 CR
Contact Hours: 3 + 0
Registration Restrictions: One social science course.
Study of physical, emotional, cognitive, and social aspects of a child's
development from prenatal period to beginning of adolescence. Includes
theoretical view of development and effects of genetics, environment, and
socialization.

PSY A245L  Child Development Laboratory  1 CR
Contact Hours: 0 + 3
Prerequisites: (PSY A245 or concurrent enrollment).
Special Fees.
Laboratory experience that extends the understanding of cognitive, affective,
social, and physical development of children gained from PSY A245. Child
Development. Includes field observations of and interactions with children in
settings such as daycare centers, schools, and community-based service
organizations.
Course Descriptions

PSY A260L Statistics for Psychology Lab 1 CR
Contact Hours: 0 + 2
Prerequisites: PSY A111 and [MATH A105 or MATH A107 or MATH A108 or MATH A109 or MATH A172 or MATH A200 or MATH A201 or MATH A272].
Registration Restrictions: Concurrent enrollment in PSY A260L is strongly recommended.
Special Note: Does not satisfy the General Education Quantitative Skills requirement.

PSY A260L Statistics for Psychology Lab 1 CR
Contact Hours: 0 + 2
Prerequisites: PSY A111 and [MATH A105 or MATH A107 or MATH A108 or MATH A109 or MATH A172 or MATH A200 or MATH A201 or MATH A272].
Registration Restrictions: Concurrent enrollment in PSY A260L is strongly recommended.
Special Note: Laboratory work requires that students be familiar with research and statistical calculations.

PSY A260L Statistics for Psychology Lab 1 CR
Contact Hours: 0 + 2
Prerequisites: PSY A111 and [MATH A105 or MATH A107 or MATH A108 or MATH A109 or MATH A172 or MATH A200 or MATH A201 or MATH A272].
Registration Restrictions: Concurrent enrollment in PSY A260L is strongly recommended.
Special Note: Does not satisfy the General Education Quantitative Skills requirement.

PSY A261 Research Methods in Psychology 4 CR
Contact Hours: 3 + 3
Prerequisites: ENGL A111 and PSY A111.
Special Fees: Laboratory work requires that students be familiar with research and statistical calculations.

PSY A261 Research Methods in Psychology 4 CR
Contact Hours: 3 + 3
Prerequisites: ENGL A111 and PSY A111.
Special Fees: Laboratory work requires that students be familiar with research and statistical calculations.

PSY A313 Psychology of Women 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Junior level standing, or 6 credits of psychology.

PSY A316 Motivation and Emotion 3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A111.
Special Fees: Laboratory work requires that students be familiar with research and statistical calculations.

PSY A327 Field Experience in Psychology I 3 CR
Contact Hours: 1 + 6
Prerequisites: PSY A111.
Registration Restrictions: Instructor permission and completion of 6 additional credits in Psychology beyond PSY A111.
Special Fees: Laboratory work requires that students be familiar with research and statistical calculations.

PSY A345 Abnormal Psychology 3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A111.

PSY A355 Learning and Cognition 4 CR
Contact Hours: 3 + 3
Prerequisites: PSY A260 and PSY A261.
Special Note: Laboratory work requires that students be familiar with research and statistical calculations.

PSY A366 Perception 3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A111 and PSY A261.
Special Fees: Laboratory work requires that students be familiar with research and statistical calculations.

PSY A367 Biological Psychology 3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A261 and [PSY A260 or STAT A252 or STAT A253] and [BIOL A102 or BIOL A111 or BIOL A115].
Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses and junior standing.
Course Attributes: UAA GER Integrative Capstone.
Special Note: This course does not meet the Psychology major capstone requirement.

PSY A372 Community Psychology 3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A111.
Registration Restrictions: One other three (3) credit psychology course.

PSY A375 Social Psychology 3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A111 or PSY A150.

PSY A380 Psychology of Stress and Coping 3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A111.
Registration Restrictions: One other three (3) credit psychology course.

PSY A398 Individual Research 3 CR
Contact Hours: 1 + 6
Prerequisites: PSY A260 and PSY A261.
Registration Restrictions: Faculty permission.
Grade Mode: Pass/No Pass.
Special Fees: Laboratory work requires that students be familiar with research and statistical calculations.

PSY A412 Foundations of Modern Psychology 3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A260 and PSY A261.
Special Note: Course meets the capstone requirement for the psychology major.
Recommended for seniors. Seminar format.

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PSY A420  Conducting Research in Psychology  3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A111 and PSY A261 and [PSY A260 or STAT A252 or STAT A253 or STAT A307].
Special Fees.
Special Note: Fulfills capstone requirement for psychology majors.

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.

PSY A425  Clinical Psychology  3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A111 and PSY A345.

Historical developments and contemporary applications of clinical psychology. Survey of major counseling and psychotherapy approaches, including basic assumptions, techniques, and related research findings.

PSY A427  Field Experience in Psychology II  3 CR
Contact Hours: 1 + 6
Registration Restrictions: Instructor permission.
Special Fees.
Special Note: Meets the departmental capstone requirements for the psychology major.

Arranged placement in supervised settings that provide psychological services. Focus on policy, communication skills, intervention skills, assessment, service planning, and evaluation. Students are expected to complete 90 hours of supervised experience.

PSY A428  Evolutionary Psychology  3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A260 and PSY A260L and PSY A261.

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.

PSY A445  Strategies of Behavior Change  3 CR
Contact Hours: 3 + 0
Focuses on the various principles, concepts, and clinical applications of applied behavior analysis with the human population. Includes methodology to complete a functional behavioral assessment of a target behavior.

PSY A450  Adult Development and Aging  3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A111 or PSY A150.

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.

PSY A453  Application of Statistics to the Social Sciences  4 CR
Contact Hours: 3 + 2
Registration Restrictions: STAT A252 for BA Sociology or STAT A253 for BS Sociology or PSY A260 for BARBS Psychology, and SOC A361 or PSY A261. Crosslisted with: SOC A453.
Special Fees.

Demonstrates application of statistics to various types of studies in the social sciences. Students analyze social science journal articles that utilize statistics.

PSY A455  Mental Health Services in Alaska  3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A345.

Emphasizes behavioral health topics in Alaska such as developmental disabilities, fetal alcohol spectrum disorders, traumatic brain injury, substance abuse, and suicide. The course will present culturally sensitive, community-based services that address these problems throughout the life span.

PSY A465  Cross-Cultural Psychology  3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A111 and PSY F380.
Registration Restrictions: Three other psychology courses; PSY A425 recommended.

May be stacked with: PSY A654.

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.

PSY A473  Psychological Testing  3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A111 and [PSY A260 or STAT A252].
Special Fees.

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.

PSY A485  Health Psychology  3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A111 and PSY A370.

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.

PSY A486  Forensic Psychology  3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A111 or SOC A101.

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.

PSY A490  Distinguished Practitioners Series  1 CR
Contact Hours: 1 + 0
Registration Restrictions: 12 credits of psychology.
May be stacked with: PSY A690.
Special Note: May be repeated for a maximum of 6 credits with a change of subtitle.

Topics in clinical or applied psychology presented by practicing members of the professional community. Specific titles as announced.

PSY A492  Individual Research  3 CR
Contact Hours: 1 + 6
Prerequisites: PSY A398.
Registration Restrictions: Faculty permission.
Grade Mode: Pass/No Pass.
Special Fees.
Special Note: May be repeated for a maximum of 9 credits.

Serve as a project leader in a collaborative research effort under the supervision of a faculty member. The research group will select a topic for research, read relevant studies, formulate a research question and carry out an original study. The findings will be reported in a paper or presented at a conference.

PSY A499  Senior Thesis  3 CR
Contact Hours: 0 + 9
Registration Restrictions: Senior standing in psychology and PSY A420 or current enrollment and advisor’s signature.

Independent or collaborative research under faculty supervision. Culminates in document prepared to publication standards. Presentation at behavioral sciences conference of the North is encouraged.

PSY A601  Clinical/Community/Cross-Cultural Integration Seminar  1 CR
Contact Hours: 1 + 0
Registration Restrictions: Admission to the Ph.D. Program in Clinical-Community Psychology.

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.
Course Descriptions

PSY A602 Native Ways of Knowing 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing in Psychology.
Grade Mode: Pass/No Pass.
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 interconnectedness of family and community, the nature of spirituality and indigenous healing, and the importance of elders and spiritual healers.

PSY A603 Alaskan and Rural Psychology 3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A632.
Registration Restrictions: Graduate standing in Psychology.
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.

PSY A604 Biological and Pharmacological Bases of Behavior 3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A622.
Registration Restrictions: Graduate standing in Psychology.
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.

PSY A605 History and Systems 1 CR
Contact Hours: 1 + 0
Registration Restrictions: Graduate standing in Psychology.
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.

PSY A606 Native Ways of Healing 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing in Psychology.
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.

PSY A607 Cognition, Affect, and Culture 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Admission to the Ph.D. Program in Clinical-Community Psychology and any psychology undergraduate course in learning, cognition, or emotion.
Provides 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.

PSY A609 Applied Research Methods 3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A260 and PSY A261.
Registration Restrictions: Graduate standing in Psychology.
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.

PSY A611 Ethics and Professional Practice 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing in Psychology.
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.

PSY A612 Human Development in a Cultural Context 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing in Psychology.
Study of developmental theory, research, and substantive applied issues across the life span. 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.

PSY A616 Program Evaluation and Community Consultation I 3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A639.
Registration Restrictions: Admission to the Ph.D. Program in Clinical-Community Psychology.
The first in a two-course series, providing an overview of the evaluation literature and the program. The second in a two-course series, introducing the principles and dynamics involved in organizational assessment, along with consultation in community and clinical settings. Seminar covers technical aspects of entry into various settings and designing program evaluations in collaboration with various community organizations.

PSY A617 Program Evaluation and Community Consultation II 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing in Psychology.
Covers methodological aspects of conducting program evaluation and the use of program evaluation findings for consulting with relevant stakeholders.

PSY A622 Multicultural Psychopathology 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing in Psychology.
Special Fees.
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.

PSY A623 Intervention I 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing in Psychology.
Special Fees.
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.

PSY A624 Group Therapy 3 CR
Contact Hours: 3 + 0
Prerequisites: (PSY A623 or concurrent enrollment).
Registration Restrictions: Graduate standing in Psychology.
Special Fees.
Special Note: Offered Spring Semesters. 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.

PSY A626 Family Therapy 3 CR
Contact Hours: 3 + 0
Prerequisites: (PSY A623 or concurrent enrollment).
Registration Restrictions: Graduate standing in Psychology.
Special Fees.
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.

PSY A627 Community-Based Intervention Skills 3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A623.
Special Fees.
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.
PSY A629  Intervention II  3 CR  
Contact Hours: 3 + 0  
Prerequisites: PSY A623.  
Registration Restrictions: Graduate standing in Psychology.  
- 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.

PSY A631  Cognitive Behavior Therapy  3 CR  
Contact Hours: 3 + 0  
Prerequisites: (PSY A623 or concurrent enrollment).  
Registration Restrictions: Graduate standing in Psychology.  
- 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.

PSY A632  Community Psychology Across Cultures  3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: Graduate standing in Psychology.  
- 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.

PSY A633  Tests and Measurement in Multicultural Context  3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: Graduate standing in Psychology.  
Special Fees.  
- 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.

PSY A638  Child Clinical Psychology  3 CR  
Contact Hours: 3 + 0  
Prerequisites: (PSY A622 or concurrent enrollment) and (PSY A623 or concurrent enrollment).  
Registration Restrictions: Graduate standing in Psychology or baccalaureate degree and professional experience.  
Special Fees.  
- 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.

PSY A639  Research Methods  3 CR  
Contact Hours: 3 + 0  
Prerequisites: PSY A260.  
Registration Restrictions: Graduate standing in Psychology.  
Special Fees.  
- 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.

PSY A650  Systems of Human Behavior I  3 CR  
Contact Hours: 3 + 0  
Level Restriction: Must be Graduate - UAA level.  
Registration Restrictions: Graduate level, and approval of WWAMI Biomedical Program Director and Faculty.  
Grade Mode: Pass/No Pass.  
Crosslisted with: BIOM A650.  
Special Fees.  
- 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.

PSY A652  Practicum Placement - Clinical I  1-3 CR  
Contact Hours: 1-3 + 7-20  
Prerequisites: PSY A611 and PSY A622 and PSY A623 and PSY A629.  
Registration Restrictions: Admission to Ph.D. Program in Clinical-Community Psychology.  
Special Fees.  
- Special Note: May be repeated for maximum of 6 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.

PSY A653  Practicum Placement - Clinical II  1-3 CR  
Contact Hours: 1-3 + 7-20  
Prerequisites: PSY A652.  
Registration Restrictions: Admission to the Ph.D. Program in Clinical-Community Psychology.  
Special Note: May be repeated for maximum of 6 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.

PSY A654  Cultural Issues in Psychotherapy  3 CR  
Contact Hours: 3 + 0  
Prerequisites: PSY A653.  
Registration Restrictions: Graduate standing in Psychology.  
May be stacked with: PSY A465.  
Special Note: PSY A654 cannot be applied toward the MS degree in Clinical Psychology if PSY A654 was previously taken for credit. Offered Spring Semesters.  
- 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.

PSY A657  Quantitative Analysis  3 CR  
Contact Hours: 3 + 0  
Prerequisites: PSY A639.  
Registration Restrictions: Admission to the Ph.D. Program in Clinical-Community Psychology.  
Special Fees.  
- 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.

PSY A658  Qualitative Analysis  3 CR  
Contact Hours: 3 + 0  
Prerequisites: PSY A639.  
Registration Restrictions: Admission to the Ph.D. Program in Clinical-Community Psychology.  
- 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.

PSY A659  Multivariate Methods in Psychology  3 CR  
Contact Hours: 3 + 0  
Prerequisites: PSY A639 and PSY A657.  
Registration Restrictions: Admission to the Ph.D. Program in Clinical-Community Psychology.  
- 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, logit regression, and cluster analysis.

PSY A665  Psychotherapy Practicum  1-3 CR  
Contact Hours: 2 + 10-20  
Prerequisites: (PSY A622 or concurrent enrollment) and PSY A623.  
Registration Restrictions: Graduate standing in Psychology, only with instructor permission.  
Special Fees.  
- 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.
Focus of the course is designed around the study of therapeutic communities in the conceptualizing substance abuse as a continuum from intervention to after-care. In instructor permission available for individuals with professional experience in substance abuse treatment.

Registration Restrictions: Graduate standing in psychology or related field.

Contact Hours: 1 + 0

Prerequisites: PSY A683.

Registration Restrictions: Admission to MS Clinical Psychology graduate program; Candidacy status, only with instructor permission.

Special Fees.

Special Note: 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.

Supervised psychotherapy with clients in a variety of settings throughout the community.

PSY A671 Grant Writing 1/3 CR

Contact Hours: 1 or 3 + 0

Prerequisites: PSY A639.

Registration Restrictions: Graduate standing in Psychology.

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.

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.

PSY A672 Practicum Placement - Community I 1-3 CR

Contact Hours: 1-3 + 7-20

Registration Restrictions: Admission to Ph.D. Program in Clinical-Community Psychology.

Special Fees.

Special Note: May be repeated for a maximum of 6 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.

PSY A673 Practicum Placement - Community II 1-3 CR

Contact Hours: 1-3 + 7-20

Prerequisites: PSY A672.

Registration Restrictions: Admission to Ph.D. Program in Clinical-Community Psychology.

Special Note: May be repeated for maximum of 6 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.

PSY A679 Multicultural Psychological Assessment I 3 CR

Contact Hours: 3 + 0

Prerequisites: PSY A633.

Registration Restrictions: Admission to the Ph.D. Program in Clinical-Community Psychology.

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.

PSY A681 Substances of Abuse in Alaska 1 CR

Contact Hours: 1 + 0

Registration Restrictions: Graduate standing in psychology or related field.

An overview of the most prevalent substances of abuse in Alaska, including physical, psychological, social, and medical consequences of use and abuse.

PSY A682 Clinical Interventions for Substance Abuse 1 CR

Contact Hours: 1 + 0

Registration Restrictions: Graduate standing in psychology or related field.

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.

PSY A683 Substance Abuse Assessment and Treatment Planning 1 CR

Contact Hours: 1 + 0

Registration Restrictions: Graduate standing in psychology or related field.

Instructor permission available for individuals with professional experience in substance abuse treatment.

Special Fees.

Assessment, measurement issues, and treatment planning in the context of clinical work with substance abusing individuals.

PSY A684 Clinical Supervision 3 CR

Contact Hours: 3 + 0

Prerequisites: PSY A683.

Registration Restrictions: Admission to the Ph.D. Program in Clinical-Community Psychology.

Familiarizes students with the clinical, ethical, and cultural issues involved in supervision. Contemporary, empirically supported information regarding various approaches to supervision will be examined. Covers both the relationship inherent in clinical supervision, and training in leadership and supervision of employees in other work settings.

PSY A686 Predoctoral Internship 6 CR

Contact Hours: 6 + 4

Registration Restrictions: Admission to the Ph.D. Program in Clinical-Community Psychology; approval of dissertation proposal; approval by the Director of Clinical Training.

Grade Mode: Pass/No Pass.

Special Fees.

Special Note: Must be taken for three consecutive semesters.

Deepsers 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.

PSY A687 Multicultural Psychological Assessment II 3 CR

Contact Hours: 3 + 0

Prerequisites: PSY A679.

Registration Restrictions: Admission to the Ph.D. Program in Clinical-Community Psychology.

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.

PSY A689 Advanced Psychological Assessment 3 CR

Contact Hours: 3 + 0

Prerequisites: PSY A633.

Registration Restrictions: Graduate standing in Psychology.

Special Fees.

Presents advanced psychological assessment topics and techniques including tests of intelligence, personality, and various projective techniques. Also teaches test battery administration, integrative report writing and involves practical application.

PSY A690 Selected Topics in Psychotherapy 1-3 CR

Contact Hours: 1-3 + 0

Registration Restrictions: Baccalaureate degree. Some sections in this series may require additional prerequisites. May be stacked with: PSY A490 and PSY A492.

A combined theory and technique course focused on specifically designated issues and problems in counseling and psychotherapy. Designed for students seeking advanced training in special areas of clinical psychology.

PSY A695 Teaching Practicum in Psychology 3 CR

Contact Hours: 2 + 8

Registration Restrictions: Graduate standing in Psychology; faculty permission.

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.

PSY A698 Individual Research 1-3 CR

Contact Hours: 0 + 3-9

Registration Restrictions: Admission to graduate studies in Psychology and faculty permission.

Special Fees.

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.

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<tr>
<td>RADT A171</td>
<td>Fundamentals of Medical Imaging</td>
<td>3 CR</td>
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<td>RADT A161,</td>
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<tr>
<td>RADT A195A</td>
<td>Radiography Practicum I</td>
<td>1 + 8</td>
<td>2 CR</td>
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<tr>
<td>RADT A195B</td>
<td>Radiography Practicum II</td>
<td>0 + 16</td>
<td>3 CR</td>
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<tr>
<td>RADT A195C</td>
<td>Radiography Practicum III</td>
<td>0 + 13</td>
<td>3 CR</td>
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<td>Department approval</td>
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</tbody>
</table>
RADT A211  Radiologic Pharmacology and Drug Administration  1 CR
Contact Hours: 1 + 0
Prerequisites: RADT A195C.
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. Emphasis is placed on appropriate delivery of patient care during procedures.

RADT A231  Sectional Anatomy for Diagnostic Imaging  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Departmental approval.
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.

RADT A251  Radiobiology and Protection  2 CR
Contact Hours: 2 + 0
Prerequisites: RADT A171.
Provides a comprehensive overview of the principles of radiation protection as they pertain to the interaction of radiation with living systems. Discusses effects of radiation on molecules, cells, tissues, and the body systems. Factors affecting biological response are presented, including acute and chronic effects of radiation.

RADT A272  Quality Control in Medical Imaging  2 CR
Contact Hours: 2 + 0
Prerequisites: RADT A171.
Registration Restrictions: Prerequisite or Registered Radiologic Technologist.
Provides introduction to the principles and practices governing quality control programs in medical imaging. Demonstrates the interrelatedness of accreditation, certification, licensure, and service delivery standards. Discusses the operational and administrative aspects of quality control as it relates to quality management.

RADT A280  Medical Imaging Pathology  3 CR
Contact Hours: 3 + 0
Prerequisites: RADT A133.
Registration Restrictions: Prerequisite or Registered Radiologic Technologist.
Provides an introduction to the theories of disease causation and the pathophysiologic disorders that compromise healthy systems. Etiology, pathophysiologic responses, clinical manifestations, radiographic appearance, and management of alterations in body systems are presented. Multiple imaging modalities for pathologic correlation are included.

RADT A282  Current Issues in Radiologic Technology  1 CR
Contact Hours: 0 + 3
Prerequisites: RADT A133 and RADT A195C.
Provides the opportunity to investigate current trends in Radiologic Technology. With the guidance of faculty the student will determine an area of investigative interest by selecting, technical, social, political, or economic aspects of Radiologic Technology.

RADT A295A  Radiography Practicum IV  5 CR
Contact Hours: 0 + 24
Prerequisites: RADT A195C.
Grade Mode: Pass/No Pass.
Special Fees: 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 previous learned clinical skills.

RADT A295B  Radiography Practicum V  5 CR
Contact Hours: 0 + 24
Prerequisites: RADT A295A.
Grade Mode: Pass/No Pass.
Special Fees: 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 previous learned clinical skills. Concludes the development of career entry skills for the Radiologic Technologist.

RADT A311  Mammography for Imaging Professionals  2/3 CR
Contact Hours: 2 or 0+3
Registration Restrictions: Registered or registry-eligible technologist or instructor permission.
Grade Mode: Pass/No Pass.
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).
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.

RE - Renewable Energy
Offered through Matanuska-Susitna College
Palmer, Alaska, (907) 745-9774
www.matsu.alaska.edu

RE A100  Introduction to Renewable Energy  3 CR
Contact Hours: 3 + 0
Introduces students to the field of renewable energy. Topics include renewable energy resources, technologies, principles of conservation and efficiency, storage and hardware options, thermal energy systems, regulations, applicable codes, and career pathways.

RE A101  Industrial Safety for Renewable Energy  2 CR
Contact Hours: 2 + 0
Emphasizes electrical and industrial safety for working in the renewable energy industry. Topics include hazard awareness, regulations, and mitigation skills.

RE A102  Applied Physics for Renewable Energy  3 CR
Contact Hours: 3 + 0
Prerequisites: (RE A100 or concurrent enrollment).
Registration Restrictions: Placement into MATH A055 or higher.
Introductory course for students considering a career in renewable energy. Includes the physical principles for various renewable energies including solar, wind, hydropower, and geothermal. Demonstrates how the principles of physics relate to the design, basic operation, advantages, and limitations of renewable energy sources.

RE A106  Introduction to Diesel Engines  3 CR
Contact Hours: 2 + 2
Introduces the knowledge, vocabulary, and technical skills required to maintain, diagnose, and make minor repairs to diesel engines. Topics include diesel engine theory, components, engine performance, cycle of operation, cooling systems, electrical systems, fuels, fuel systems, and the selection and use of tools.

RE A200  Power Generation Systems  3 CR
Contact Hours: 2 + 2
Prerequisites: RE A102.
Introduces the knowledge, vocabulary, and technical skills required to maintain, diagnose, and make minor repairs to small-scale power generation systems. Focuses on AC and DC theory, electrochemical storage systems, generators, inverters, transformers, and photovoltaic technologies.

RE A201  Power System Management  3 CR
Contact Hours: 3 + 0
Prerequisites: (RE A101 or concurrent enrollment) and (RE A106 or concurrent enrollment) and (RE A200 or concurrent enrollment).
Combines essential topics in power system management and business technology to provide a holistic view of energy management. Topics include power stability, economic dispatch, energy storage, smart grid, and Supervisory Control and Data Acquisition (SCADA) systems.

RE A203  Renewable Energy Project Development  3 CR
Contact Hours: 3 + 0
Prerequisites: (RE A101 or concurrent enrollment) and (RE A106 or concurrent enrollment) and (RE A200 or concurrent enrollment).
Synthesizes facets of project development and management within the context of renewable energy projects.

RE A295  Renewable Energy Practicum  3 CR
Contact Hours: 0 + 9
Prerequisites: RE A101 and RE A102 and RE A106.
Registration Restrictions: Instructor permission.
Special Note: May be repeated for up to 9 credits.
Provides practical experience in a workplace setting. Faculty, practicum supervisor, and student collaboratively develop an individualized plan for workplace training to reflect the student's occupational objectives.
RH - Refrigeration & Heating

Offered through Matanuska-Susitna College
P.O. Box 2889, Palmer, Alaska 99645, (907) 745-9715
www.matsu.alaska.edu

RH A101 Refrigeration and Air Conditioning Fundamentals 4 CR
Contact Hours: 3 + 2
Offered only at Matanuska-Susitna College.
Explores compressors, condensers, evaporators, metering devices, and related components. Offers instruction in the proper use of tools and testing devices applicable to the HVAC/R 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 design, construction, service, and repair of household refrigerators and freezers.

RH A103 Technical Mathematics for Industrial Trades 3 CR
Contact Hours: 3 + 0
Offered only at Matanuska-Susitna College.
Practical use of mathematics as applied to trade and vocational work, designed to increase skills involving trade and technical problems. Covers fractions, decimals, percentage, powers of numbers, and basic algebraic elements. Also explores geometric concepts, ration and proportion, scale drawings, and trigonometric functions.

RH A105 Electrical Circuits for Refrigeration and Heating I 3 CR
Contact Hours: 2 + 2
Offered only at Matanuska-Susitna College.
Explores the fundamentals of energy, sources of electricity, conductors and semiconductors, insulators, inductance, capacitance, resistance, and AC-DC motors. Provides students with the opportunity to apply principles and develop skills by using test instruments and training devices.

RH A109 Principles of Thermodynamics 3 CR
Contact Hours: 3 + 0
Corequisite: RH A103.
Offered only at Matanuska-Susitna College.
Focuses on physical laws applied to refrigeration and heating. Introduces practical aspects of psychrometry, load calculations, heat quantities, heat transfer, insulation factors and coefficients, gas laws, and heat and water vapor flow through structures.

RH A122 Refrigeration and Air Conditioning 4 CR
Contact Hours: 3 + 2
Prerequisites: RH A101 and RH A105 and RH A109.
Offered only at Matanuska-Susitna College.
Introduces and analyzes the chemical composition and properties of various refrigerants. Application of this analysis to “Shop-job” situations, using “Live” equipment and refrigeration training devices by diagnosing and correcting various malfunctions. Instruction in the safe handling and storage of refrigerants.

RH A126 Electrical Circuits for Refrigeration and Heating II 3 CR
Contact Hours: 2 + 2
Prerequisites: RH A103 and RH A105.
Offered only at Matanuska-Susitna College.
Explores schematic wiring diagrams and electrical circuits, alternating current, electric meters, single-phase motors, motor protection, and three-phase motors. Familiarization exercises dealing with air conditioning circuits and the ability to troubleshoot malfunctioning equipment will be covered.

RH A132 Troubleshooting for HVAC/R Systems 3 CR
Contact Hours: 2 + 2
Prerequisites: RH A101 and RH A105 and RH A109.
Offered only at Matanuska-Susitna College.
Emphasis on systematically analyzing and troubleshooting HVAC/R systems to include mechanical, electrical, piping, and control systems. Heavy emphasis on lab activities and training devices. Actual equipment with component faults is used to strengthen and test troubleshooting skills.

RH A201 Commercial and Ammonia Refrigeration 4 CR
Contact Hours: 3 + 2
Prerequisites: RH A122.
Offered only at Matanuska-Susitna College.
Provides an understanding of commercial refrigeration systems including hot gas defrosting, lubrication, contamination, pipe sizing, etc. Introduces ammonia refrigeration including safety start-up and diagnosis of an operational ammonia liquid overfeed system.

RH A203 HVAC/R Basic Controls 3 CR
Contact Hours: 2 + 2
Prerequisites: RH A126.
Offered only at Matanuska-Susitna College.
Introduces concepts and components of basic residential and commercial heating and cooling control applications. Associated lab exercises are designed to provide an understanding of the operation, troubleshooting, and repair of basic system components. Explores primary burner controls for forced air and hydronic control systems.

RH A209 Codes for HVAC/R 2 CR
Contact Hours: 2 + 0
Offered only at Matanuska-Susitna College.
Introduces current mechanical codes as adopted by the State of Alaska and covers sections of the Uniform Mechanical Code and the National Fuel Gas Code related to general heating, ventilation, and air conditioning work.

RH A211 Customer Relations and Job Etiquette 1 CR
Contact Hours: 1 + 0
Offered only at Matanuska-Susitna College.
Prerequisites: RH A126.
Explores methods, protocols, and techniques to build and maintain positive relationships with customers. Identifies a variety of characteristics and related behaviors required of a successful, productive, heating, ventilation, and air conditioning technician.

RH A225 Heating Fundamentals and Forced Air Heat 4 CR
Contact Hours: 3 + 2
Prerequisites: RH A105 and RH A126.
Offered only at Matanuska-Susitna College.
Assumes no previous knowledge of heating plants. Introduces knowledge and skills needed for the installation and service of forced air heating systems. Instruction ranges from beginning maintenance and installation to advanced troubleshooting of heating systems.

RH A226 Commercial HVAC/R Systems 4 CR
Contact Hours: 3 + 2
Prerequisites: RH A105.
Offered only at Matanuska-Susitna College.
Introduces commercial heating, ventilation, and air conditioning systems by category and application types. Includes both air-side and water-side systems along with humidification, ventilation, and air filtration requirements.

RH A228 Advanced Hydronic Heat Systems 4 CR
Contact Hours: 3 + 2
Prerequisites: RH A225.
Offered only at Matanuska-Susitna College.
Explores hydronic heating sources and emitters. Covers residential and light commercial boilers and hydronic heating systems. Includes radiant panel heating with a strong emphasis on wiring and troubleshooting of hydronic controls.

RH A229 HVAC/R Control Systems 3 CR
Contact Hours: 2 + 2
Prerequisites: RH A126.
Offered only at Matanuska-Susitna College.
Provides a survey of heating, ventilation, and air conditioning control systems and control theory. Topics will include pneumatic, electronic, and direct digital control systems. Lab exercises will be performed on training equipment for each of these system types.

RH A232 HVAC/R Sheet Metal 3 CR
Contact Hours: 2 + 2
Offered only at Matanuska-Susitna College.
Introduces the fundamentals of layout, cutting, forming, and fabricating of sheet metal and air conditioning. Blends basic principles with contemporary tools and Sheet Metal and Air Conditioning Contractors National Association (SMACNA) Duct Construction Standards.

RH A290 Selected Topics in Refrigeration and Heating 1-3 CR
Contact Hours: 0-3 + 0-9
Offered only at Matanuska-Susitna College.
Special Fees: Special Note: May be repeated up to 6 credits with change of subtitle.
Topics in heating, ventilating, air conditioning, and refrigeration (HVAC/R); such as theory, problem solving, system operation, economic analysis, specialized applications, performance optimization, or specialized study in an area of the trade.

University of Alaska Anchorage 2010-2011 Catalog
www.uaa.alaska.edu
Chapter 13 Page 465
RUSS - Russian

Offered through the College of Arts and Sciences
Administration/Humanities Building (ABM), Suite 287, 786-4030
www.uaa.alaska.edu/languages

**RUSS A101**  
**Elementary Russian I**  
Contact Hours: 4 + 0  
Course Attributes: UAA GER Humanities Requirement.  
Special Fees:  
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.

**RUSS A101E**  
**Elementary Russian I**  
Contact Hours: 3 + 0  
Course Attributes: UAA GER Humanities Requirement.  
Offered only at extended colleges.  
Special Fees:  
Introduces Russian language and culture for students with no background in Russian. Students learn alphabet, past and future tenses, and read simple paragraphs. Focuses on life in the Russian-speaking countries. Emphasizes conversation.

**RUSS A102**  
**Elementary Russian II**  
Contact Hours: 4 + 0  
Prerequisites: RUSS A101.  
Course Attributes: UAA GER Humanities Requirement.  
Special Fees:  
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.

**RUSS A201**  
**Intermediate Russian I**  
Contact Hours: 4 + 0  
Prerequisites: RUSS A102.  
Course Attributes: UAA GER Humanities Requirement.  
Special Fees:  
Intermediate course for students with basic knowledge of Russian. Enhances listening, speaking, reading, and writing skills for effective communication at the elementary level. Students critically examine diverse cultural perspectives. Course conducted in Russian.

**RUSS A202**  
**Intermediate Russian II**  
Contact Hours: 4 + 0  
Prerequisites: RUSS A201.  
Course Attributes: UAA GER Humanities Requirement.  
Special Fees:  
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.

**RUSS A205**  
**Conversational Skills II**  
Contact Hours: 0 + 2  
Registration Restrictions: Proficiency as after two semesters of college-level or two years of high school study in Russian.  
Grade Mode: Pass/No Pass.  
Special Fees:  
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.

**RUSS A301**  
**Advanced Russian I**  
Contact Hours: 4 + 0  
Prerequisites: RUSS A202 with minimum grade of C.  
Registration Restrictions: If prerequisite not met, students can gain entrance to course with departmental approval.  
Course Attributes: UAA GER Humanities Requirement.  
Special Fees:  
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.

**RUSS A302**  
**Advanced Russian II**  
Contact Hours: 4 + 0  
Prerequisites: RUSS A301 with minimum grade of C.  
Registration Restrictions: If prerequisite not met, students can gain entrance to course with departmental approval.  
Course Attributes: UAA GER Humanities Requirement.  
Special Fees:  
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.

**RUSS A390**  
**Selected Topics in Advanced Russian**  
Contact Hours: 3 + 0  
Prerequisites: RUSS A202.  
Registration Restrictions: RUSS A301 and RUSS A302 strongly recommended.  
Special Fees:  
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.

**RUSS A390B**  
**Topics in Advanced Language**  
Contact Hours: 1-3 + 0  
Prerequisites: RUSS A202.  
Special Fees:  
Special Note: May be offered in 1-, 2-, or 3-credit segments. Repeatable for credit with a change of subtitle.

**RUSS A427**  
**Post-Soviet Culture and Society**  
Contact Hours: 3 + 0  
Prerequisites: HIST A102.  
Registration Restrictions: Completion of all Tier I GER (basic college-level skills) courses; and Junior standing. Prerequisite HIST A102 or any RUSS prefix course. Crosslisted with: HIST A427.  
Course Attributes: UAA GER Integrative Capstone.  
Special Fees:  
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.

**RUSS A490A**  
**Selected Topics in Russian Culture**  
Contact Hours: 1-3 + 0  
Prerequisites: RUSS A302 or comparable proficiency level.  
Registration Restrictions: RUSS A302 and comparable proficiency level.  
Special Fees:  
Special Note: Conducted in Russian. May be repeated for credit with a change of subtitle.

**RUSS A490B**  
**Selected Topics in Russian Culture in Translation**  
Contact Hours: 1-3 + 0  
Registration Restrictions: Junior Standing.  
Special Fees:  
Special Note: Conducted in English. May be repeated for credit with a change of subtitle.

**SOC - Sociology**

Offered through the College of Arts and Sciences
Social Sciences Building (SSB), Room 372, 786-1714
www.uaa.alaska.edu/sociology

**SOC A101**  
**Introduction to Sociology**  
Contact Hours: 3 + 0  
Course Attributes: UAA GER Social Sciences Requirement.  
Special Note: Offered Fall and Spring Semesters.  
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.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Contact Hours:</th>
<th>Prerequisites:</th>
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<tbody>
<tr>
<td>SOC A110</td>
<td>Introduction to Gerontology: Multidisciplinary Approach</td>
<td>3 CR</td>
<td>3 + 0</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: SOC A110</td>
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<td>Course Attributes: UAA GER Social Sciences Requirement.</td>
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<td></td>
<td>A multidisciplinary course that provides an introduction to gerontology.</td>
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<td></td>
<td>Covers many aspects of aging including those associated with biology, physiology, medical care, psychology, culture, sociology, and social policies.</td>
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<td>SOC A201</td>
<td>Social Problems and Solutions</td>
<td>3 CR</td>
<td>3 + 0</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Course Attributes: UAA GER Social Sciences Requirement.</td>
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<td></td>
<td>Survey of contemporary social problems.</td>
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<td>Focuses on the causes and consequences of social problems and examines processes through which social problems are identified, prioritized, and addressed.</td>
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<td>SOC A202</td>
<td>Social Institutions</td>
<td>3 CR</td>
<td>3 + 0</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Course Attributes: UAA GER Social Sciences Requirement.</td>
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<td>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.</td>
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<td>SOC A222</td>
<td>Small and Rural Communities</td>
<td>3 CR</td>
<td>3 + 0</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Course Attributes: UAA GER Social Sciences Requirement.</td>
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<td>Special Note: Offered Alternate Spring Semesters.</td>
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<td>Overview of organization, viability, change and problems of small communities and villages in rural areas; their relations to larger and regional systems; and factors which affect their future as autonomous units.</td>
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<td>SOC A242</td>
<td>An Introduction to Marriage, Family and Intimate Relationships</td>
<td>3 CR</td>
<td>3 + 0</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Registration Restrictions: A social science course recommended.</td>
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<td>Special Fees.</td>
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<td>Special Note: Offered Fall and Spring Semesters.</td>
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<td>Introduction to sociological study of contemporary patterns relating to marriage, family and other intimate relationships. Also explores impact of gender roles, ethnicity and racial background on beliefs, values, attitudes and behaviors.</td>
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<td>SOC A246</td>
<td>Adolescence</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>JUST A110 or SOC A101</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: SOC A101 or PSY A111</td>
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<td>Special Note: Offered Spring Semesters.</td>
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<td>Introduction to the world of the adolescent.</td>
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<td>Examines various patterns of physical, social, intellectual and emotional development during adolescence and effects of social class, ethnicity, race and gender.</td>
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<tr>
<td>SOC A251</td>
<td>Crime and Delinquency</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>JUST A110 or SOC A101</td>
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<td></td>
<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: JUST A110 or SOC A101</td>
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<td>Crosslisted with: JUST A251</td>
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<td>Course Attributes: UAA GER Social Sciences Requirement.</td>
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<td>Theoretical perspectives on the causes, consequences, and control of crime and delinquency. Survey of 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.</td>
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<td>SOC A280</td>
<td>Contemporary Issues</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>SOC A101</td>
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<td></td>
<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: SOC A101</td>
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<td>Special Note: May be repeated twice for credit with a change in subtitle.</td>
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<td>Analysis of contemporary social issues from a variety of sociological perspectives.</td>
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<tr>
<td>SOC A307</td>
<td>Demography</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>SOC A101</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: SOC A101</td>
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<td></td>
<td>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.</td>
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<td>SOC A308</td>
<td>Sociology of Law</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>SOC A101</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: SOC A101</td>
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<td>Class Standing Restriction: Must be Junior.</td>
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<td>Registration Restrictions: Junior standing.</td>
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<td></td>
<td>Theoretical perspectives on law and social institutions with an introduction to relevant empirical research.</td>
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<td>SOC A309</td>
<td>Urban Sociology</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>SOC A101</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: SOC A101</td>
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<td>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.</td>
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<tr>
<td>SOC A310</td>
<td>Sociology of Aging</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>SOC A101 or SOC A110</td>
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<td>Contact Hours: 3 + 0</td>
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<td></td>
<td>Prerequisites: SOC A101 or SOC A110</td>
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<td>Registration Restrictions: SOC A110 for Gerontology Minors.</td>
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<td></td>
<td>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.</td>
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<tr>
<td>SOC A342</td>
<td>Sexual, Marital and Family Lifestyles</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>SOC A101</td>
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<td>Contact Hours: 3 + 0</td>
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<td></td>
<td>Prerequisites: SOC A101</td>
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<td>Course Attributes: UAA GER Social Sciences Requirement.</td>
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<td>Special Note: Offered Spring Semesters.</td>
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<td>An upper-division course which emphasizes theories and research that explain today’s marital, family and sexual lifestyles, as well as class and cultural variations found in the U.S. It includes a survey of why and how people meet, interact, love, fight, change, sustain or dissolve relationships, have children and age together.</td>
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<tr>
<td>SOC A343</td>
<td>Sociology of Deviant Behavior</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>SOC A101</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: SOC A101</td>
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<td>Special Note: Offered Spring Semesters.</td>
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<td>A study 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.</td>
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<td>SOC A347</td>
<td>Sociology of Religion</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>SOC A101</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: SOC A101</td>
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<td>Special Note: Offered Spring Semesters.</td>
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<td>The study of the historical development and functional significance of religion, values, and forms of institutions, groups, reform movements, and their influence on social organization.</td>
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<td>SOC A351</td>
<td>Political Sociology</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>ENGL A211 or ENGL A212 or ENGL A213 or ENGL A214 and PS A102 or SOC A101</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: [ENGL A211 or ENGL A212 or ENGL A213 or ENGL A214] and [PS A102 or SOC A101].</td>
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<td>Crosslisted with: PS A351</td>
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<td>Course Attributes: UAA GER Social Sciences Requirement.</td>
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<td>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.</td>
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<td>SOC A352</td>
<td>Women and Social Action</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>SOC A101</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: SOC A101</td>
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<td>Registration Restrictions: WS A200 recommended.</td>
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<td>Demonstrates how sociological and feminist theory and research can be applied to solving social issues in communities. Also demonstrates how women working together can empower themselves, their families, and their communities.</td>
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<td>SOC A361</td>
<td>Social Science Research Methods</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>SOC A101</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: SOC A101 or PS A102.</td>
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<td></td>
<td>Crosslisted with: PS A361</td>
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<td>Special Fees.</td>
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<td>Special Note: Offered Fall and Spring Semesters.</td>
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<td>Provides a firm grounding in rigorous and ethical social science research.</td>
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<td>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.</td>
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<td>SOC A363</td>
<td>Social Stratification</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>SOC A101</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: SOC A101</td>
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<td>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.</td>
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SOC A370  Medical Sociology  3 CR
Contact Hours: 3 + 0
Prerequisites: SOC A101.
Crosslisted with: HS A370.
Special Note: Offered Alternate Fall Semesters.
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.

SOC A375  Social Psychology  3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A111 or SOC A101.
Introduces differences in sociological approaches to social psychology. Effects of group interaction and social structural factors on individuals' values, attitudes, and behaviors are examined. Topics include socialization, perception, interpersonal relationships, conformity, helping behavior, aggression, and collective behavior. Theory, research, and application emphasized.

SOC A377  Men, Women and Change  3 CR
Contact Hours: 3 + 0
Prerequisites: SOC A101 or SOC A275.
Special Note: Offered Spring Semesters.
Examines how gender in our society affects from birth individuals' roles, socialization, achievement, opportunities, and overall personality and self-development. Studies changes that have taken place over the past several decades. Relevant theories and research form the foundation of the course.

SOC A387  Gay and Lesbian Lifestyles  3 CR
Contact Hours: 3 + 0
Prerequisites: SOC A101 and PSY A111.
Special Note: Offered Alternate Spring Semesters.
An overview of historical and theoretical factors relevant to gay and lesbian psychosocial development. Participation and acceptance in religion, the military, education, and the workforce will be considered with some emphasis on civil rights and discrimination.

SOC A402  Social Theory  3 CR
Contact Hours: 3 + 0
Prerequisites: SOC A101.
Class Standing Restriction: Must be Junior.
Registration Restrictions: Junior standing.
Theory, research, and application emphasized. Historical and contemporary approaches to social theory; analysis of conceptual frameworks applied to the study of society and social interaction.

SOC A404  Environmental Sociology  3 CR
Contact Hours: 3 + 0
Prerequisites: SOC A101.
Special Note: Offered Alternate Spring Semesters.
A critical analysis of the interactions between society and the environment from an ecological perspective, focusing on processes of industrial and economic growth, natural resource development, community change and social impact assessment, environmental values and environmental movement, land use planning and resource management decision making, and comparative perspectives on human relation to and use of the natural environment.

SOC A405  Social Change  3 CR
Contact Hours: 3 + 0
Prerequisites: SOC A101.
Special Note: Offered Fall Semesters.
Social change in long-time perspective, with emphasis on social movements and the influence of technology.

SOC A407  Formal Organizations  3 CR
Contact Hours: 3 + 0
Prerequisites: SOC A101.
Special Note: Offered Fall Semesters.
Modern formal organizations are examined in historical and contemporary contexts. Interrelationships between organizational structures, stakeholders, and environments are examined. Current trends in management and organizational analysis are reviewed. Protoprived, as well as non-profit considered, are social welfare, government, social policy, and educational organizations. The multiple roles of middle managers are given specific attention, as preparation for entry into student internships, practica, and the job market.

SOC A408  Sociology of Race and Ethnicity  3 CR
Contact Hours: 3 + 0
Prerequisites: SOC A101.
Special Note: Offered Spring Semesters.
Present status of ethnic, religious and national minorities and their changing sociological, economic, and political status.

SOC A453  Application of Statistics to the Social Sciences  4 CR
Contact Hours: 3 + 2
Prerequisites: [PSY A260 or STAT A252 or STAT A253] and [PSY A261 or SOC A361].
Crosslisted with: PSY A453.
Special Fees.
Special Note: Offered Spring Semesters.
Demonstrates application of statistics to various types of studies in the social sciences. Students analyze social science journal articles that utilize statistics.

SOC A487  Sociology Practicum  3 CR
Contact Hours: 1 + 6
Registration Restrictions: Faculty permission.
Special Note: May be repeated once for credit.
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.

SOC A488  Capstone Seminar  3 CR
Contact Hours: 3 + 0
Prerequisites: SOC A361 and SOC A402.
Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses and senior standing.
Course Attributes: UAA GER Integrative Capstone.
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.

SOC A490  Special Topics in Sociology  1-4 CR
Contact Hours: 1-4 + 0
Prerequisites: SOC A101.
Class Standing Restriction: Must be Junior.
Registration Restrictions: Junior standing.
Special Note: May be repeated for a maximum of 8 credits with a change of subtitle.
An intensive and detailed study of a topic in contemporary sociology in a seminar format.

SPAN - Spanish

Offered through the College of Arts and Sciences
Administration/Humanities Building (ADM) Suite 287, 786-4030
www.uaa.alaska.edu/languages

SPAN A101  Elementary Spanish I  4 CR
Contact Hours: 4 + 0
Course Attributes: UAA GER Humanities Requirement.
Special Fees.
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.

SPAN A101E  Elementary Spanish I  3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Humanities Requirement.
Offered only at extended colleges.
Special Fees.
Foundations of Spanish: alphabet, proper pronunciation, basic vocabulary and sentence structure. Grammar covers articles, gender of nouns, adjectives, pronouns, and regular/irregular verb patterns through preterite tenses. Emphasizes speaking and understanding Spanish through frequent classroom practice and lab exercises.

SPAN A102  Elementary Spanish II  4 CR
Contact Hours: 4 + 0
Prerequisites: SPAN A101.
Course Attributes: UAA GER Humanities Requirement.
Special Fees.
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.


**SPAN A102E  Elementary Spanish II  3 CR**
- Contact Hours: 3 + 0
- Prerequisites: SPAN A101E
- Course Attributes: UAA GER Humanities Requirement.
- Offered only at extended colleges.
- Special Fees.
  - Foundations of oral and written Spanish: continuation of basic Spanish vocabulary and grammar. Imperfect, future and conditional tenses, including their compound forms, will be studied along with other verbal patterns.

**SPAN A201  Intermediate Spanish I  4 CR**
- Contact Hours: 4 + 0
- Prerequisites: SPAN A102.
- Course Attributes: UAA GER Humanities Requirement.
- Special Fees.
  - 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.

**SPAN A201E  Intermediate Spanish I  3 CR**
- Contact Hours: 3 + 0
- Prerequisites: SPAN A102E.
- Course Attributes: UAA GER Humanities Requirement.
- Offered only at extended colleges.
- Special Fees.
  - Reviews fundamental structures of Spanish grammar and vocabulary. Gives special attention to command forms and present and past subjunctive. Familiarizes students with normal sound and usage of the language by taking dictation, reading and writing short compositions. Enhances essentials of conversational fluency through study of thematic vocabularies and idiomatic expressions.

**SPAN A202  Intermediate Spanish II  4 CR**
- Contact Hours: 4 + 0
- Prerequisites: SPAN A201.
- Course Attributes: UAA GER Humanities Requirement.
- Special Fees.
  - 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.

**SPAN A301  Advanced Spanish I  4 CR**
- Contact Hours: 4 + 0
- Prerequisites: SPAN A202 with minimum grade of C.
- Registration Restrictions: If prerequisite not met, students can gain entrance to course with departmental approval.
- Course Attributes: UAA GER Humanities Requirement.
- Special Fees.
  - 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.

**SPAN A302  Advanced Spanish II  4 CR**
- Contact Hours: 4 + 0
- Prerequisites: SPAN A301 with minimum grade of C.
- Registration Restrictions: If prerequisite not met, students can gain entrance to course with departmental approval.
- Course Attributes: UAA GER Humanities Requirement.
- Special Fees.
  - 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.

**SPAN A310  Spanish Readings and Conversations  3 CR**
- Contact Hours: 3 + 0
- Registration Restrictions: Two years of college Spanish or equivalent.
- Special Fees.
- Special Note: May be repeated for credit.
  - Students will improve their conversational skills by participating in skits, interviews, debates, and discussions based on material read. Some grammar introduced informally, but emphasis is on improving listening and speaking skills. Books and activities vary from semester to semester.

**SPAN A390A  Selected Topics: Studies in Translation and Interpretation  4 CR**
- Contact Hours: 4 + 0
- Prerequisites: SPAN A302 with minimum grade of C.
- Special Fees.
- Special Note: May be repeated twice for credit with a change in subtitle.
  - 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.

**SPAN A432  Studies in Literature and Culture (Selected Topics)  3 CR**
- Contact Hours: 3 + 0
- Prerequisites: SPAN A302.
- Special Fees.
- Special Note: May be repeated twice for credit with a change of subtitle. Conducted in Spanish. Offered as Demand Warrants.
  - Intensive study of authors, literary movements, periods, and/or genres. Students will also analyze cultural material other than texts. Introduces students to Hispanic literature or various periods and genres in its historical and cultural context.

**SPAN A470  Spanish Linguistics-History of the Language  3 CR**
- Contact Hours: 3 + 0
- Prerequisites: SPAN A302.
- Special Fees.
- Special Note: Conducted in Spanish
  - Survey of the history of Spanish from the fall of the Roman Empire to the present. The student will learn the history of some of the most important linguistic changes in Spanish from a synchronic and a diachronic perspective. Special attention will be paid to the linguistic changes (both vocalic, consonantal, and structural) that most affected the transformation of Late Latin into what can be known as Castilian in the Middle Ages from its inception in the IX century in a small, isolated area of the Iberian Peninsula. Through readings and contemporary discussions of the intersection between power and language in a cultural setting, the course will analyze the social, political, and historical forces that go into the creation of a national language.

**SPAN A490  Selected Topics in Hispanic Culture and Civilization  3 CR**
- Contact Hours: 3 + 0
- Prerequisites: SPAN A302.
- Special Fees.
- Special Note: Conducted in Spanish. May be repeated twice for credit with a different subtitle.
  - Surveys Spain's or Latin America's history and culture. Literature, painting, folklore, dance, film, and other artistic traditions are studied from a social, political, and economic perspective. Readings and lectures emphasize the multicultural patterns and the rich artistic traditions of the various peoples composing the Spanish and the Latin American worlds from ancient to modern times. Concentrates on either Spain and its culture and civilization, or Latin America and its cultures and civilizations, or in any one particular period thereof.

**STAT - Statistics**

*Offered through the College of Arts and Sciences*

**Social Sciences Building (SSB), Room 154, 786-1744**

[http://math.uaa.alaska.edu](http://math.uaa.alaska.edu)

Each student enrolled in a STAT course (except STAT A307) will be charged a lab fee.

**STAT A252  Elementary Statistics  3 CR**
- Contact Hours: 3 + 0
- Prerequisites: MATH A105 with minimum grade of C or MATH A107 or MATH A108 or MATH A109 or MATH A172 or MATH A200 or MATH A201 or MATH A272.
- Registration Restrictions: If prerequisite is not satisfied, appropriate SAT, ACT, or AP scores or approved UAA placement test required.
- Course Attributes: UAA GER Quantitative Skill Requirement.
- Special Fees.
- Special Note: A student may apply no more than 3 credits from STAT A252 or BA A273 toward the graduation requirements for a baccalaureate degree.
  - Introduction to statistical reasoning. Emphasis on concepts rather than in-depth coverage of traditional statistical methods. Topics include sampling and experimentation, descriptive statistics, probability, binomial and normal distributions, estimation, single-sample and two-sample hypothesis tests. Additional topics will be selected from descriptive methods in regression and correlation, or contingency table analysis.
A major statistical software package will be utilized.

**STAT A307**  
**Probability**  
Contact Hours: 3 + 0  
Prerequisites: MATH A200 with minimum grade of C or MATH A272 with minimum grade of C.  
Course Attributes: UAA GER Quantitative Skill Requirement.  
Probability, applied combinatorics, random variables, multivariate random variables, discrete distributions, continuous distributions, expectations, and estimation.

**STAT A308**  
**Intermediate Statistics for the Sciences**  
Contact Hours: 3 + 0  
Prerequisites: STAT A252 or STAT A253 or STAT A307.  
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.  
Course Attributes: UAA GER Integrative Capstone.  
Special Fees.  
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.

**STAT A402**  
**Scientific Sampling**  
Contact Hours: 3 + 0  
Prerequisites: STAT A252 or STAT A253 or STAT A307.  
Special Fees.  
Sampling methods including simple random, stratified, systematic, and cluster. Special emphasis is placed 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.

**STAT A403**  
**Regression Analysis**  
Contact Hours: 3 + 0  
Prerequisites: STAT A308.  
Special Fees.  
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 software package is used as a tool to aid calculations required for many of the techniques.

**STAT A404**  
**Analysis of Variance**  
Contact Hours: 3 + 0  
Prerequisites: STAT A308.  
Special Fees.  
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 software package is used as a tool to aid calculations required for many of the techniques.

**STAT A405**  
**Nonparametric Statistics**  
Contact Hours: 3 + 0  
Prerequisites: STAT A308.  
Special Fees.  
Nonparametric methods including the binomial test and sign test. Contingency tables with Chi-square tests and goodness-of-fit tests. Tests based on ranks including the Wilcoxon signed ranks test, Mann-Whitney U-test, Kruskal-Wallis test, Friedman test, rank correlation, and Kolmogorov-Smirnov type tests. A major statistical software package is used as a tool to aid calculations required for many of the techniques.

**STAT A407**  
**Time Series Analysis**  
Contact Hours: 3 + 0  
Prerequisites: STAT A307 or STAT A308.  
Special Fees.  
Decomposition of time series, seasonal adjustment methods, and index numbers. Forecasting models, including causal models, trend models, and smoothing models. Additional topics include autoregressive (AR) forecasting models, moving average (MA) forecasting models, and integrated (ARIMA) forecasting models. A major statistical software package is used as a tool to aid calculations required for many of the techniques.

**STAT A408**  
**Multivariate Statistics**  
Contact Hours: 3 + 0  
Prerequisites: STAT A308.  
Special Fees.  
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. A major statistical software package is used as a tool to aid calculations required for many of the techniques.

**SWK - Social Work**

Offered through the College of Health & Social Welfare  
Gordon Hartlieb Hall (GHH), Room 106, 786-6900  
http://socwork.uaa.alaska.edu

**SWK A106**  
**Introduction to Social Welfare**  
Contact Hours: 3 + 0  
Prerequisites: SOC A101.  
Crosslisted with: HUMS A106.  
Course Attributes: UAA GER Social Sciences Requirement.  
Analyzes social inequality and the American social welfare state. Traces historical evolution of government and non-government response to the provision of basic needs, opportunities, and rights for its citizenry, especially vulnerable populations. Investigates historical and persisting dilemmas—ethical, political, cultural, and economic—explicit and implicit, in achieving social justice. Assists in understanding of social welfare problems and solutions.

**SWK A206**  
**Introduction to Social Work**  
Contact Hours: 3 + 0  
Prerequisites: HUMS A106 or SWK A106.  
Introduces the profession of social work and its place in the social welfare institution. Emphasis is placed upon consumer-centered, generalist social work and the knowledge, skills, abilities, and values necessary for professional practice. Fields of social work practice are studied in terms of the programs and services provided to consumer systems and social work’s role within these fields.

**SWK A243**  
**Cultural Diversity and Community Service Learning**  
Contact Hours: 3 + 0  
Course Attributes: UAA GER Social Sciences Requirement.  
An introduction to the issues of diversity in the United States from a social work perspective. Focuses on sensitivity to populations at risk of discrimination and oppression. Knowledge and insights gained through the readings, class discussions, and activities will be applied to students’ interactions with clients of community-based partner organizations as part of a required service learning component.
SWK A290 Special Topics in Social Work 1-3 CR
Contact Hours: 1-3 + 0
Special Note: May be repeated for credit with a change of topics for a maximum of 6 credits.
Introduction to special topics related to social work practice.

SWK A330 Social Work Practice I 4 CR
Contact Hours: 3 + 2
Prerequisites: SWK A206.
Introduces basic interviewing skills and the planned change process for the social work profession. Emphasis will be on understanding and implementing a planned change process with individuals, supported by social work values, ethics, skills, and theory. Course includes lecture and interviewing lab.

SWK A331 Social Work Practice II: Organizations and Communities 3 CR
Contact Hours: 3 + 0
Prerequisites: SWK A330.
Generalist social work practice course with emphasis on using the planned change process with organizations and communities. Covers selected theoretical frameworks applicable to professional practice with these macro client systems.

SWK A342 Human Behavior in the Social Environment 3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A150 and [BIOL A102 or BIOL A111 or BIOL A112 or BIOL A115 or BIOL A116 or LSIS A102 or LSIS A201].
Identification and analysis of various theoretical frameworks for understanding human behavior with emphasis on interactions between the individual and the environment. A social systems model serves as the organizing framework for addressing the behavior and development of individuals, groups, families, organizations, and communities with emphasis on the reciprocal influences between individuals, societal institutions, and diverse economic, political, and psychological variables which influence behavior, growth, development, and change.

SWK A363 Great Books in Social Work 3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A111 and [HUMS A106 or SWK A106].
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.

SWK A406 Social Welfare: Policies and Issues 3 CR
Contact Hours: 3 + 0
Prerequisites: SWK A206.
Formulation of social welfare policy as the result of interacting social, political, and economic factors. Emphasis is placed on analyzing various current social welfare policies and on methods of influencing policy development and change.

SWK A409 Introduction to Child Welfare 3 CR
Contact Hours: 3 + 0
Survey of public and private child welfare services from a historical perspective and examination of current child welfare services available to children and their families. National standards for services are reviewed along with policy development, legislation, funding and research related to programs, and service delivery. Services such as in-home support, permanency planning, child protection, foster care, adoption and residential care will be addressed.

SWK A424 Social Work Research 3 CR
Contact Hours: 3 + 0
Prerequisites: SWK A206.
Introduces students to fundamental research principles and practices in social work. Emphasis is on preparing students to be informed consumers of the professional research literature.

SWK A430 Social Work Practice III: Groups and Families 3 CR
Contact Hours: 3 + 0
Prerequisites: SWK A331.
Registration Restrictions: Admission to the BSW program at the University of Alaska Anchorage.
Corequisite: SWK A495A.
Focuses on generalist social work practice with groups and families. Emphasis will be on understanding and implementing a planned change process with groups and families, supported by social work theories, skills, values, and ethics.

SWK A431 Social Work Practice IV: Integrative Capstone 3 CR
Contact Hours: 3 + 0
Prerequisites: SWK A430 and SWK A495A.
Registration Restrictions: Admission to BSW Program at the University of Alaska Anchorage. Completion of GER Tier 1 (basic college-level skills) courses and junior standing.
Corequisite: SWK A495B.
Course Attributes: UAA GER Integrative Capstone.
Recaps and expands upon the material in Social Work Practice I-III as well as other Social Work major requirements. Special attention is paid to the transition from student to emerging professional, with emphasis on professional competence, evidence-based practice, ethics, and diversity in 21st century Alaska.

SWK A440 Social Work Practice in Mental Health and Addictions 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Junior or senior standing. Consent of instructor.
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.

SWK A450 Child Protective Services 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Junior or senior standing. Consent of instructor.
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.

SWK A463 Social Work Senior Honors Research Project 3 CR
Contact Hours: 3 + 0
Prerequisites: [HNRS A310 or SWK A243] and SWK A363.
Design and complete a project which demonstrates advanced scholarship in the social work field and which is grounded by theory and professional standards of social work practice. Emphasis of the seminar will be on assisting students to identify and clarify project ideas in a peer-critiqued environment, and on refining knowledge and skills to successfully complete a project of a quantitative or qualitative nature at a micro, mezzo, or macro social work level.

SWK A470 Social Work with the Aging and Elderly 3 CR
Contact Hours: 3 + 0
Development of concepts related to psychological, biological and economic issues of aging and the role of social work in responding to those issues. Gerontological content from human behavior, social policy, research and direct/indirect practice is analyzed in relation to social work practice with people who are aging and elderly.

SWK A481 Case Management in Social Work Practice 3 CR
Contact Hours: 3 + 0
Prerequisites: SWK A330.
Covers the identification of issues, procedures, responsibilities, skills, and processes for effective case management. Includes theory-based skills regarding client identification and outreach, assessment, service planning, coordination, monitoring, advocacy, and evaluation along with written communication skills for coordinated service delivery. Issues relevant to special client populations are identified and analyzed.

SWK A490 Selected Topics in Social Work 1-3 CR
Contact Hours: 1-3 + 0
Registration Restrictions: Junior or Senior level standing. Special Fees.
Focus on current topics related to social work services, diverse client groups and field of practice.

SWK A495A Social Work Practicum I 6 CR
Contact Hours: 3 + 15
Prerequisites: SWK A331.
Registration Restrictions: Admission to the BSW program at the University of Alaska Anchorage.
Corequisite: SWK A430.
Special Fees.
Initial social work practicum/field placement in which knowledge, skills, values, and ethics of generalist social work are applied to client-centered planned change. Emphasis is on application of generalist practice skills in the areas of interviewing, assessment, and planning for client system intervention.
SWK A495B  Social Work Practicum II  6 CR
Contact Hours: 3 + 15
Prerequisites: SWK A430 and SWK A495A.
Registration Restrictions: Admission to the BSW program at the University of Alaska Anchorage.
Corequisite: SWK A431.
Special Fees:
\( \text{Continuation of social work practice/field placement in which knowledge,}
\text{skills, values, and ethics of generalist social work are applied to client-centered}
\text{planned change. Emphasis is on application of generalist practice skills in the areas}
\text{of planning, implementing, evaluating, and terminating client system intervention.}
\text{Application of social work roles and readiness for entry into the profession are key}
\text{objectives.} \)

SWK A607  Social Welfare Policy and Services  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Admission to the MSW program at the University of
Alaska Anchorage.

Provides a basic understanding of the history and current patterns of provision
of social welfare services in the United States. Content includes the response of
the social welfare system to those in need and the role of the legislature, interest
groups, and advocates in the policy-making process. Problems and issues that
people confront as a result of discrimination are examined. Policy analysis
frameworks are used to identify key issues, understand policy development, and
assess the impact of social welfare policy in providing economic and social justice
for poor and at-risk populations.

SWK A608  Social Policy for Advanced  3 CR
Generalist Practice
Contact Hours: 3 + 0
Prerequisites: SWK A607.
Registration Restrictions: Admission to the MSW program at the University of
Alaska Anchorage.

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.

SWK A624  Foundation Research Methods  4 CR
Contact Hours: 3 + 2
Registration Restrictions: Admission to the MSW program at the University of
Alaska Anchorage.

Introduces students to fundamental research principles and practices in
social work. Emphasis is on preparing students to be informed consumers of the
professional research literature.

SWK A628  Program Evaluation  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Successful completion of MSW foundation requirements
or admission as advanced standing, or graduate standing in Health Sciences.
Crosslisted with: HS A628.
Special Fees:
Theory and practice of agency or community-based research and evaluation.
Course topics include commonly used evaluation models and research designs,
politics and ethics of conducting and using research in an applied setting,
communicating findings.

SWK A630  Practice Skills Lab  1 CR
Contact Hours: 0 + 3
Registration Restrictions: Admission to the MSW program at the University of
Alaska Anchorage.
Grade Mode: Pass/No Pass.
Knowledge and understanding of basic interpersonal skills needed for
generalist social work practice. Experience in applying the skills to individual,
family, and group settings. Attention to cross-cultural communication skills and
nontraditional settings.

SWK A631  Foundation Practice  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Admission to the MSW Program at the University of
Alaska Anchorage.

Introduction to generalist social work practice, focusing on problem-solving
and planned change for clients and systems in need of professional intervention.
Emphasis is on professional identity, values, ethical and legal issues in practice,
functioning on multidisciplinary teams, technical writing, and evidence-based
practice.

SWK A632  Direct Practice I  3 CR
Contact Hours: 3 + 0
Prerequisites: SWK A631.
Registration Restrictions: Admission to the MSW Program at the University of
Alaska Anchorage.

Continues the problem-solving/planned change approach with attention
to assessment, intervention, and termination. Emphasis is on ways of knowing.
Includes evidence-based practice and introduction to bio/psycho/social theories
which inform social work practice with individuals, families, and groups. The
course also addresses “being a practitioner” within an agency setting.

SWK A633  Direct Practice II  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Admission to the MSW Program at the University of
Alaska Anchorage with advanced standing or completion of foundation practice
sequence.

Focuses on the application of practice theory in the context of advanced
generalist practice. Emphasizes the refinement of skills for assessment,
intervention, and evaluation of social work practice with a variety of client systems
focusing on the theoretical and empirical justification for those interventions.

SWK A634  Organizational Practice  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Admission to the MSW Program at the University of
Alaska Anchorage and successful completion of the foundation practice sequence
or advanced standing or admission to the Graduate Certificate in Social Work.

Provides an ecosystemic perspective for organizational social work practice
with programs, staff, organizations, and larger systems. Covers advanced
generalist roles such as agency administrator, program planner, supervisor, and
community organizer. Specific attention is also given to the challenges encountered
when working with larger systems.

SWK A635  Advanced Generalist Integrative Seminar  3 CR
Contact Hours: 3 + 0
Prerequisites: SWK A633 and SWK A634.
Registration Restrictions: Admission to the MSW Program at the University of
Alaska Anchorage and successful completion of foundation curriculum or
advanced standing.

Capstone course for the advanced generalist practice sequence. Provides
students with the opportunity to integrate ecosystemic theory and problem-solving
approaches with direct and organizational practice. Fulfills competency exam
requirement.

SWK A636  Community Practice  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Admission to the MSW Program at the University of
Alaska Anchorage.

Focuses on practice roles and skills in community development, community
planning and community organizing, and analysis of community practice models.

SWK A639  Advanced Generalist Intensive Practicum  7 CR
Contact Hours: 3 + 36
Registration Restrictions: Admission to the MSW Program at the University of
Alaska Anchorage with concurrent enrollment in an MSW practice course and
either successful completion of foundation curriculum or advanced standing status.
Corequisite: SWK A633 or SWK A634 or SWK A635.
Special Fees:
Advanced generalist block practicum in which student performs as an
advanced generalist social worker within an organization and/or community
context. The student completes seminar and 540 practicum hours in an approved
setting under the supervision of a MSW field instructor.

SWK A642  Human Behavior  3 CR
in the Social Environment
Contact Hours: 3 + 0
Registration Restrictions: Admission to the MSW Program at the University of
Alaska Anchorage.

Identification and advanced analysis of various theoretical frameworks for
understanding human behavior with emphasis on the reciprocal interactions
between the individual and the systems of social environment including families,
groups, organizations, and communities.

SWK A643  Human Diversity in Social Work Practice  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Admission to the MSW Program at the University of
Alaska Anchorage.

Examination of human diversity in relation to discrimination, oppression,
and populations at risk. Exploration of strategies that advance social and economic
justice. Historical and contemporary influences on group membership and
affiliation are addressed along with values, knowledge, and skills for effective
generalist social work practice with diverse populations and clients.
### SWK A644 Generalist Practicum I
3 CR
- **Contact Hours:** 3 + 16
- **Registration Restrictions:** Admission to the MSW Program at the University of Alaska Anchorage with concurrent enrollment in a MSW practice course.
- **Corequisite:** SWK A632.
- **Special Fees.**
- **Part one of generalist practicum sequence.** Student applies social work knowledge, skills, values, and ethics within an organization and/or community context. The student completes 240 practicum hours in an approved setting under the supervision of a MSW field instructor appointed by the University.

### SWK A645 Generalist Practicum II
3 CR
- **Contact Hours:** 3 + 16
- **Prerequisites:** SWK A644.
- **Registration Restrictions:** Admission to the MSW Program at the University of Alaska Anchorage with concurrent enrollment in a MSW practice course.
- **Corequisite:** SWK A636.
- **Special Fees.**
- **Part two of generalist practicum sequence.** Student applies social work knowledge, skills, values, and ethics within an organization and/or community context. The student completes 240 practicum hours in an approved setting under the supervision of a MSW field instructor appointed by the University.

### SWK A646 Advanced Generalist Practicum I
3 CR
- **Contact Hours:** 3 + 16
- **Prerequisites:** SWK A633 or concurrent enrollment (or SWK A634 or concurrent enrollment).
- **Registration Restrictions:** Admission to the MSW Program at the University of Alaska Anchorage with concurrent enrollment in an MSW practice course.
- **Corequisite:** SWK A635.
- **Special Fees.**
- **Part one of advanced generalist practicum sequence in which student performs as an advanced generalist social worker within an organization and/or community context.** The student completes 240 practicum hours in an approved setting under the supervision of a MSW field instructor.

### SWK A647 Advanced Generalist Practicum II
4 CR
- **Contact Hours:** 4 + 20
- **Prerequisites:** SWK A646.
- **Registration Restrictions:** Admission to the MSW Program at the University of Alaska Anchorage with concurrent enrollment in an MSW practice course.
- **Corequisite:** SWK A635.
- **Special Fees.**
- **Part two of advanced generalist practicum sequence in which student performs as an advanced generalist social worker within an organization and/or community context.** The student completes 300 practicum hours in an approved setting under the supervision of a field instructor.

### SWK A651 Social Work Practice in Addictions and Mental Health
3 CR
- **Contact Hours:** 3 + 0
- **Level Restriction:** Must be Graduate - UAA level.
- **Registration Restrictions:** Graduate standing.
- **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.

### SWK A654 Supervisory Management in Social Work
3 CR
- **Contact Hours:** 3 + 0
- **Registration Restrictions:** Graduate Standing.
- **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.

### SWK A656 Treatment of Families
3 CR
- **Contact Hours:** 3 + 0
- **Level Restriction:** Must be Graduate - UAA level.
- **Registration Restrictions:** Graduate standing.
- **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.

### SWK A659 Leadership and Decision Making in Social Work
3 CR
- **Contact Hours:** 3 + 0
- **Level Restriction:** Must be Graduate - UAA level.
- **Registration Restrictions:** Graduate standing.
- **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.

### SWK A660 Financial Leadership for Social Work Administrators
2 CR
- **Contact Hours:** 2 + 0
- **Prerequisites:** SWK A634.
- **Level Restriction:** Must be Graduate - UAA level.
- **Registration Restrictions:** Graduate standing.
- **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.

### SWK A665 Comparative Group Work
3 CR
- **Contact Hours:** 3 + 0
- **Level Restriction:** Must be Graduate - UAA level.
- **Registration Restrictions:** Graduate standing.
- **Equip students with theoretical and practical knowledge to differentially implement group interventions in a variety of settings with diverse populations.** This course focuses on professional practice with groups.

### SWK A667 Clinical Group Therapy
2 CR
- **Contact Hours:** 2 + 0
- **Prerequisites:** SWK A665.
- **Level Restriction:** Must be Graduate - UAA level.
- **Registration Restrictions:** Graduate standing.
- **Equip students with knowledge and skills to independently practice clinical group therapy.** Theoretical concepts and scientific findings will be applied to understand the practice of clinical group therapy that is short-term, structured, and theme-centered.
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**Course Descriptions**

**SWK A668  Group Supervision I**  
**Contact Hours:** 1 + 0  
**Prerequisites:** SWK A651.  
**Registration Restrictions:** Post-graduate MSW, admission to Graduate Certificate in Clinical Social Work Practice, employed in an approved clinical social work position.  
Provides the beginning phase of clinical group supervision of entry-level MSW graduates. Group supervision is a forum for learning values, knowledge, and skills as a disciplined approach to clinical social work practice.

**SWK A669  Group Supervision II**  
**Contact Hours:** 1 + 0  
**Prerequisites:** SWK A668 with minimum grade of B.  
**Registration Restrictions:** Post-graduate MSW; admission to Graduate Certificate in Clinical Social Work Practice; employed in an approved clinical social work position.  
Provides the middle phase of clinical group supervision of entry-level MSW graduates. Group supervision is a forum for learning values, knowledge, and skills as a disciplined approach to clinical social work practice.

**SWK A670  Group Supervision III**  
**Contact Hours:** 1 + 0  
**Prerequisites:** SWK A669 with minimum grade of B.  
**Registration Restrictions:** Post-graduate MSW; admission to Graduate Certificate in Clinical Social Work Practice; employed in an approved clinical social work position.  
Provides the ending phase of clinical group supervision of entry-level MSW graduates. Group supervision is a forum for learning values, knowledge, and skills as a disciplined approach to clinical social work practice.

**SWK A672  Social Work with Families and Couples**  
**Contact Hours:** 2 CR  
**Prerequisites:** SWK A666.  
**Level Restriction:** Must be Graduate - UAA level.  
**Registration Restrictions:** Graduate standing.  
**Special Note:** May be repeated for credit with a different subtitle for a maximum of 9 credits.  
Focus on current topics related to social work with various system levels (individuals, families, groups, communities, and organizations), fields of practice, and settings.

**SWK A690  Selected Topics in Social Work**  
**Contact Hours:** 1-3 CR  
**Level Restriction:** Must be Graduate - UAA level.  
**Registration Restrictions:** Graduate standing.  
**Special Note:** May be repeated for credit with a different subtitle for a maximum of 9 credits.  
Focus on current topics related to social work with various system levels (individuals, families, groups, communities, and organizations), fields of practice, and settings.

**SWK A698  MSW Research Project**  
**Contact Hours:** 1 + 9  
**Prerequisites:** SWK A628.  
**Registration Restrictions:** Admission to the MSW Program at the University of Alaska Anchorage.  
Students complete an applied research project of use to a social service program and/or the profession. Completion of the project, including statement of the problem, literature review, design methodology, data analysis, and implications of the findings. Public presentation of the project culminates in the research sequence.

**TECH - Technology**

**Offered through the Community & Technical College**

**University Center (UC), Room 130, 786-6423**

**www.uaa.alaska.edu/ctc**

**TECH A101  Introduction to Technological Principles**  
**Contact Hours:** 2 + 2  
**Prerequisites:** (MATH A105 or concurrent enrollment) or MATH A107 or MATH A108 or MATH A109 or MATH A172 or MATH A200 or MATH A201 or MATH A272.  
Introduces basic physical properties commonly found in a technical field.  
Emphasizes data collection and test equipment procedures.

**TECH A295  Technical Internship**  
**Contact Hours:** 0 + 3-18  
**Registration Restrictions:** Instructor permission required.  
**Grade Mode:** Pass/No Pass.  
**Special Fees:**  
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.

**TECH A302  Operational Safety**  
**Contact Hours:** 3 + 0  
**Registration Restrictions:** Tier 1 basic college-level skills.  
**Special Fees:**  
Study of safety as a vital element of human behavior. Covers governmental influence, hazard awareness and control, operational considerations in the workplace, accidents and planning.

**TECH A305  Technology Management**  
**Contact Hours:** 3 + 0  
**Registration Restrictions:** Tier 1 basic college-level skills.  
**Special Fees:**  
Presents information to help students manage technology challenges in relation to technical skills and experiences. Analyzes history of the technology that students have been trained in and researches future issues and trends likely to affect technical experts or those who manage the technology.

**TECH A315  Leading Technical Employees**  
**Contact Hours:** 3 + 0  
**Registration Restrictions:** Completion of at least 3 credits each of oral and written communication skills courses from GER approved list.  
Introduces principles of management and leadership of technical employees, defined as those who research, develop, design, build, test, install and support technology. Explores the nature and challenges of technical work, productivity and competitiveness in the global economy. Includes strategies for recruiting, developing, motivating and retaining qualified technical employees.

**TECH A412  Advanced Technical Experiences**  
**Discipline Area**  
**Contact Hours:** 0-9 + 0-27  
**Registration Restrictions:** Faculty approval required.  
**Crosslisted with:** VE A412.  
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.

**TECH A423  Process Improvement Fundamentals**  
**Contact Hours:** 3 + 0  
**Prerequisites:** BA A273 or STAT A252 or STAT A253.  
**Registration Restrictions:** Completion of at least 3 credits each of oral and written communication skills courses from GER approved list.  
Explores business process improvement fundamentals, techniques, and the history of the quality movement that supports organizational efforts to become and remain competitive. Covers principles, standards and tools of process improvement and quality management in integrating technical functions towards customer satisfaction and technical innovation.

**TECH A433  Project Design, Implementation, and Control**  
**Contact Hours:** 3 + 0  
**Prerequisites:** [MATH A107 or MATH A109] and TECH A305.  
**Registration Restrictions:** Tier 2 high college-level skills.  
Comprehensive study of the principles and practices of project planning, implementation, and control as applied by technicians and technical managers.

**TECH A443  Quality Leadership**  
**Contact Hours:** 3 + 0  
**Prerequisites:** MATH A107 or MATH A109.  
**Registration Restrictions:** Junior standing.  
**Special Fees:**  
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.

**TECH A453  Capstone Project**  
**Contact Hours:** 3 + 0  
**Prerequisites:** TECH A305.  
**Registration Restrictions:** Junior standing and faculty approval required.  
**Completion of GER Tier 1 (basic college-level skills) courses.  
**Course Attributes:** UAA GER Integrative Capstone.  
**Special Note:** This is an independent project which requires at least 135 hours of commitment including bi-weekly meetings with faculty advisor and other Bachelor of Science, Technology students.  
Integrates technical and general education knowledge to complete a project that demonstrates community involvement related to typical problems or issues in students' career fields.
Course Descriptions

**THR - Theatre**

**Offered through the College of Arts and Sciences**

**Fine Arts Building (ARTS), Room 302, 786-1792**

**http://theatre.uaa.alaska.edu**

**THR A111 Introduction to the Theatre**

- **Contact Hours:** 3 + 0
- **Course Attributes:** UAA GER Fine Arts Requirement.
- Survey of theatre with focus on artists who contribute to theatrical production viewed within the context of historical styles and development.

**THR A121 Introduction to Acting**

- **Contact Hours:** 2 + 3
- An introduction to basic acting techniques with emphasis on creativity, concentration, relaxation, physical and vocal awareness, and the Stanislavsky method of acting.

**THR A124 Dance for Musical Theatre I**

- **Contact Hours:** 1 + 2
- Crosslisted with: DNCE A124.
- **Special Fees:**
- 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.

**THR A125 Theatre Practicum: Performance**

- **Contact Hours:** 0 + 3-9
- **Special Note:** May be stacked with: THR A395.
- May be repeated three times for credit.
- Continuation of Theatre Practicum: Performance. Improvisational technique created by Sanford Meisner to help actors feel, based on tempo/rhythm, facial posture, pitch range, resonance focus, lilt pattern, and in improving audition skills and perfecting performance ability. Encompasses a range of time periods, from the 1920s to the present.

**THR A131 Theatrical Production Techniques**

- **Contact Hours:** 2 + 2
- Corequisite: THR A131L.
- **Special Fees:**
- 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 A141 Stagecraft I**

- **Contact Hours:** 2 + 2
- Corequisite: THR A141L.
- **Special Fees:**
- Workshop in principles and techniques of contemporary theatrical production technical direction, drafting, scenery construction and rigging.

**THR A151 Makeup for the Theatre**

- **Contact Hours:** 3 + 0
- **Special Fees:**
- 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**

- **Contact Hours:** 0 + 3-9
- **Registration Restrictions:** Faculty permission and audition.
- May be stacked with: THR A395.
- Participation in mainstage production as an actor, director, or assistant director.

**THR A221 Movement for the Actor**

- **Contact Hours:** 3 + 0
- **Prerequisites:** THR A121.
- **Special Fees:**
- Study of movement and its specific relationship to acting skills. Work includes analysis of nonverbal communication and developmental physical skills.

**THR A222 Voice for the Actor**

- **Contact Hours:** 3 + 0
- **Prerequisites:** THR A121.
- **Special Fees:**
- Introduces the acting student to exercises designed to free and increase the expressive power of the voice, with the primary goal being emotional honesty.

**THR A224 Dance for Musical Theatre II**

- **Contact Hours:** 1 + 2
- Crosslisted with: DNCE A224.
- **Special Fees:**
- Special Note: May be repeated three times for credit.
- 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.

**THR A243 Scene Design**

- **Contact Hours:** 3 + 0
- **Prerequisites:** THR A131 and THR A141.
- **Special Fees:**
- Fundamental principles of design for the stage, including drafting, rendering, theory, analysis, and practice.

**THR A257 Costume Design and Construction I**

- **Contact Hours:** 2 + 2
- **Prerequisites:** THR A131.
- **Corequisite:** THR A257L.
- **Special Fees:**
- Basic principles of costume design with emphasis on research and rendering techniques. Overall study of costume and fashion history and its relation to theatre productions and designs.

**THR A306 Stage Management**

- **Contact Hours:** 3 + 0
- **Prerequisites:** THR A131.
- **Special Fees:**
- 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.

**THR A311 Representative Plays I**

- **Contact Hours:** 3 + 0
- **Registration Restrictions:** Junior or senior standing and the completion of GER Tier 1 Written Communication requirements.
- **Course Attributes:** UAA GER Fine Arts Requirement UAA GER Humanities Requirement.
- A survey course of dramatic literature from Greek drama to 1800. Emphasis is placed upon the playwrights' work and relationship to the production of these plays in their own time and in today's theatre.

**THR A312 Representative Plays II**

- **Contact Hours:** 3 + 0
- **Registration Restrictions:** Junior or senior standing and the completion of GER Tier 1 Written Communication requirements.
- **Course Attributes:** UAA GER Fine Arts Requirement UAA GER Humanities Requirement.
- A survey of dramatic literature from 1800 to the present. Emphasis is placed upon the playwrights' work and relationship to the production of these plays in their own time and in today's theatre.

**THR A315 Playwriting Workshop**

- **Contact Hours:** 3 + 0
- **Registration Restrictions:** Completion of GER Tier 1 (basic college-level skills) courses.
- **Special Fees:**
- Study and practice of script development for the stage. Class will involve staged readings of student work.

**THR A321 Meisner Acting Technique**

- **Contact Hours:** 2 + 3
- **Prerequisites:** THR A121.
- **Registration Restrictions:** Instructor permission.
- Improvisational technique created by Sanford Meisner to help actors feel, rather than think, their way through a scene by responding to inner impulses.

**THR A325 Theatre Speech and Dialects**

- **Contact Hours:** 3 + 0
- **Prerequisites:** THR A222.
- **Special Fees:**
- Continuation of THR A226 starting with the production and energizing of vowels and consonants. In addition to the International Phonetic Alphabet, students will develop a systematic approach for the acquisition of a foreign dialect based on tempo/rhythm, facial posture, pitch range, resonance focus, lilt pattern, topography, history, and national character.
Course Descriptions

THR A328 Act ing Shakespeare 3 CR
Contact Hours: 2 + 3
Prerequisites: THR A121.
Special Note: THR A221 and THR A222 are recommended.

THR A329 Combat for the Stage I 3 CR
Contact Hours: 2 + 3
Prerequisites: THR A121 and THR A221.
Special Fees.

THR A330 Combat for the Stage II 3 CR
Contact Hours: 2 + 3
Prerequisites: THR A329.
Special Fees.

THR A347 Lighting Design 3 CR
Contact Hours: 3 + 0
Prerequisites: DNCE A185 or THR A141.

THR A357 Costume Design and Construction II 3 CR
Contact Hours: 1 + 4
Prerequisites: THR A257.
This course is a continuation of THR A257. Advanced work in costume design and construction.

THR A376 CAD for the Arts 3 CR
Contact Hours: 2 + 2
Prerequisites: ART A357 or THR A141.
Crosslisted with: ART A376.

THR A395 Advanced Practicum: Performance 1-3 CR
Contact Hours: 0 + 3-9
Registration Restrictions: Faculty permission and audition.
May be stacked with: THR A195.
Performance practicum for juniors and seniors: advanced participation in mainstage productions as an actor, director, or assistant director.

THR A411 History of the Theatre I 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Junior or senior standing and the completion of GER Tier 1 Written Communication requirements.
Course Attributes: UAA GER Fine Arts Requirement UAA GER Humanities Requirement.

THR A412 History of the Theatre II 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Junior or senior standing and the completion of GER Tier 1 Written Communication requirements.
Course Attributes: UAA GER Fine Arts Requirement UAA GER Humanities Requirement.

THR A431 Directing I 3 CR
Contact Hours: 3 + 0
Prerequisites: THR A243 and THR A257 and THR A306.

THR A435 Directing II 3 CR
Contact Hours: 3 + 0
Prerequisites: THR A431.
Special Note: May be repeated once for credit.

THR A445 Advanced Theatre Production 3 CR
Contact Hours: 0 + 6
Prerequisites: THR A131.
Registration Restrictions: Theatre major and Junior level.

THR A480 Theatre Internship 5-15 CR
Contact Hours: 0 + 15-45
Registration Restrictions: Junior standing and permission of department chair.

THR A490 Selected Topics in Performance 3 CR
Contact Hours: 3 + 0
Prerequisites: THR A243 or THR A257.

THR A491 Selected Topics in Technical Theatre 3 CR
Contact Hours: 3 + 0
Prerequisites: THR A243 or THR A257.

THR A492 Senior Seminar 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses and these Tier 2 Disciplinary Areas: Fine Arts, Humanities and Social Sciences; Junior or Senior level.
Course Attributes: UAA GER Integrative Capstone.

THR A495 Advanced Practicum: Technical 1-3 CR
Contact Hours: 0 + 3-9
Prerequisites: THR A295.
Registration Restrictions: Permission of instructor.
May be stacked with: THR A295.

THR A498 Individual Research 3 CR
Contact Hours: 1 + 6
Registration Restrictions: Junior standing in Theatre and department chair’s signature.

THR A499 Senior Thesis 3 CR
Contact Hours: 0 + 9
Prerequisites: THR A498 with minimum grade of B.
Registration Restrictions: Admission to the Theatre Honors program and department chair’s signature.

THR A499 Senior Thesis 3 CR
Contact Hours: 0 + 9
Prerequisites: THR A498 with minimum grade of B.
Registration Restrictions: Admission to the Theatre Honors program and department chair’s signature.

VE - Vocational Education

Offered through the Community & Technical College
University Center (UC), Room 130, 786-6423
www.uaa.alaska.edu/ctc

VE A301 Principles of Technology 3 CR
Contact Hours: 2 + 3
Special Fees.

University of Alaska Anchorage 2010-2011 Catalog
www.uaa.alaska.edu
VE A412  Advanced Technical Experiences: 1-9 CR
Discipline Area
Contact Hours: 0-9 + 0-27
Registration Restrictions: Faculty approval required.
Crosslisted with: TECH A412.
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.

VE A495  Technical Internship 1-3 CR
Contact Hours: 0 + 5-15
Registration Restrictions: Faculty approval required.
Crosslisted with: TECH A495.
Special Fees.
Special Note: Requires at least 75 hours of work internship per credit hour plus additional instructor contact time.
Supports supervisory and management practices used in business operations through a work experience internship.

VETT - Veterinary Assisting
Offered through Matanuska-Susitna College
Palmer, Alaska, (907) 745-9774
www.matsu.alaska.edu

VETT A101  Introduction to the Veterinary Profession 1 CR
Contact Hours: 1 + 0
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 CR
Contact Hours: 3 + 0
Prerequisites: (VETT A101 or concurrent enrollment).
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.

VETT A122  Basic Handling and Behavior: 2 CR
Small Animals
Contact Hours: 2 + 0
Prerequisites: (VETT A101 or concurrent enrollment).
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.

VETT A123  Basic Handling and Behavior: 2 CR
Large Animals
Contact Hours: 2 + 0
Prerequisites: (VETT A101 or concurrent enrollment).
Introducory 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.

VETT A124  Introduction to Small Animals 3 CR
Contact Hours: 3 + 0
Prerequisites: (VETT A101 or concurrent enrollment).
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.

VETT A125  Introduction to Large Animals 3 CR
Contact Hours: 3 + 0
Prerequisites: (VETT A101 or concurrent enrollment).
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.

VETT A201  Veterinary Anatomy and Physiology 4 CR
Contact Hours: 3 + 2
Prerequisites: (VETT A101 or concurrent enrollment).
Registration Restrictions: Placement into PRPE A108 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).
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.

VETT A295  Veterinary Assistant Practicum 3 CR
Contact Hours: 0 + 9
Prerequisites: (VETT A101 or concurrent enrollment).
Major Restriction: Must be Veterinary Assisting major.
Special Note: Majors only.
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.

VS - Vocational Skills
Offered through Kodiak College
117 Benny Benson Drive, Kodiak, Alaska 99615, (907) 486-4161
www.koc.alaska.edu

VS A125  Woodworking I 3 CR
Contact Hours: 1 + 2
Offered only at Kenai Peninsula College Kachemak Bay branch.
Basic course designed to familiarize the student with the safe use of a variety of modern hand and power tools. Completion of the course may result in the construction of items of personal choice.

VS A126  Woodworking II 3 CR
Contact Hours: 1 + 2
Prerequisites: VS A125.
Offered only at Kenai Peninsula College Kachemak Bay branch.
Special Note: May be repeated once for degree credit.
Continuation of VS A125 with emphasis on more advanced projects and greater individual initiative.

VS A131  Construction for the Owner/Builder I 3 CR
Contact Hours: 3 + 0
Familiarizes students with standard practice construction and alternatives to that practice. Includes the terms/systems involved in construction. Concepts and systems covered are foundations, floors, walls, roof, alternative energy in structures, and alternative structures.

WELD - Welding Technology
Offered through the Community & Technical College
Gordon Hartlieb Hall (GHH), Room 111, 786-6474
www.uaa.alaska.edu/ctc/programs/transportation/welding-ndt

WELD A101  Gas and Arc Welding 4 CR
Contact Hours: 2 + 6
Special Fees.
Introduces basic principles of welding. Covers oxyacetylene welding, brazing, silver soldering and oxyacetylene flame cutting in the first half of the course. Covers shielded metal arc welding the second.

WELD A102  Gas Welding 2 CR
Contact Hours: 1 + 2
May be stacked with: WELD A103 and A104.
Special Fees.
Develops basic oxy-acetylene welding, brazing, and cast iron welding skills, emphasizing hands-on class assignments.

WELD A103  Arc Welding 4 CR
Contact Hours: 1 + 6
May be stacked with: WELD A102 and A104.
Special Fees.
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.
WELD A104 Arc Welding: Low-Hydrogen Electrodes 4 CR
Contact Hours: 1 + 6
Prerequisites: WELD A101 or WELD A103.
Registration Restrictions: Arc welding experience can substitute for prerequisites.
May be stacked with: WELD A102, A103.
Special Fees.
- 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.

WELD A105 Pipe Welding 4 CR
Contact Hours: 1 + 6
Prerequisites: WELD A103 and WELD A104.
Registration Restrictions: Current certification of plate, open root, vertically upward, or pre-test during registration.
May be stacked with: WELD A106.
Special Fees.
- 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.

WELD A106 Pipe Certification 4 CR
Contact Hours: 1 + 6
Prerequisites: WELD A105.
May be stacked with: WELD A105.
Special Fees.
- 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.

WELD A108 Wire Welding 4 CR
Contact Hours: 1 + 6
Special Fees.
- 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 CR
Contact Hours: 1 + 6
Prerequisites: WELD A101 or WELD A102.
Special Fees.
- 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.

WELD A112 Shielded Metal Arc Welding (SMAW) 4 CR
Contact Hours: 2 + 6
Special Fees.
- Introduces the welding of mild steels with covered electrodes. Includes welding safety, electrical welding equipment, electrode identification and selection, basic welding joint design, and welding practice on low carbon steel with mild steel electrodes.

WELD A114 Welding of High Strength Steels 4 CR
Contact Hours: 2 + 6
Prerequisites: WELD A112.
Special Fees.
- Introduces the welding of high strength steels with covered electrodes. Includes welding safety, low hydrogen electrodes selection process, high strength welding joint design, and welding practice on alloyed steels with high hydrogen and alloyed electrodes.

WELD A115 Basic Shielded Metal Arc Welding 2 CR
Contact Hours: 1 + 2
Offered only at Kodiak College.
- Beginning course designed to teach basics in welding steel, using the shielded metal arc welding (SMAW) process. TV-tape lessons and demonstrations consist of a series of intensive, highly structured skill building exercises in stick welding. Covers four basic joints in all four positions. Also includes brief exposure to cutting techniques with stick, arc/air and oxyacetylene torch.

WELD A117 Basic Pipefitting 4 CR
Contact Hours: 3 + 2
Special Fees.
- Presents theory and basic calculations for the layout and assembly of piping offsets and pipe spool assemblies common to the oil and gas industry.

WELD A118 Welding Fabrication and Manufacturing 4 CR
Contact Hours: 1 + 6
Prerequisites: WELD A101.
Special Fees.
- Provides relevant topics and skill enhancement in the area of welding and fabrication for manufactured products.
WELD A263  Radiographic Testing Safety  2 CR
Contact Hours: 2 + 0
Prerequisites: MATH A105 or MATH A107 or MATH A108 or MATH A109 or
MATH A172 or MATH A200 or MATH A201 or MATH A272.
Registration Restrictions: VE A301 Principles of Technology or similar science
course work is recommended prior to taking this course.
Special Fees.
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 (ASINT).

WELD A264  Radiographic Testing  3 CR
Contact Hours: 2 + 3
Prerequisites: WELD A263 and WELD A112.
Special Fees.
Presents theory and application of industrial radiography and meets ASNT
initial training hour requirements for level I and level 11 radiographer. Includes
operation of equipment, film exposure and development, radiographic procedure
specifications, interpretation of radiographs, and a brief review of radiation safety.

WELD A281  Welding Inspection and Code Review  4 CR
Contact Hours: 4 + 0
Prerequisites: WELD A112 and WELD A157.
Presents numerous welding inspection methods and a study of various
welding codes and standards in preparation for the American Welding Society
(AWS) Certified Welding Inspector (CWI) Examination.

WELD A287  Welding Metallurgy Applications  5 CR
Contact Hours: 3 + 4
Prerequisites: MATH A055 and WELD A112.
Special Fees.
Presents technical information in welding metallurgy. Includes laboratory
practice in metallography, heat-treating, and mechanical properties testing.

WS - Women's Studies
Offered through the College of Arts and Sciences
Social Sciences Building (SSB), Room 355, 786-4837
http://womens.uaa.alaska.edu

WS A200  Introduction to Women's and Gender Studies  3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Social Sciences Requirement.
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.

WS A355  Women in Politics  3 CR
Contact Hours: 3 + 0
Prerequisites: PS A101 or PS A102 or WS A200.
Crosslisted with: PS A355.
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.

WS A400  Feminist Theory  3 CR
Contact Hours: 3 + 0
Prerequisites: WS A200.
Interdisciplinary examination of historical and contemporary feminist and
gender theories.

WS A401  Seminar in Women's Studies  3 CR
Contact Hours: 3 + 0
Prerequisites: WS A200.
Special Note: May be repeated once with change of topic.
Discuss issues related to women's studies. Content varies every semester.

WS A495  Internship in Women's Studies  3 CR
Contact Hours: 3 + 0
Prerequisites: WS A200.
Special Note: Internships vary; may be repeated once for credit with a different
internship.
An opportunity for students to apply the subject matter of Women's Studies to
the practical life of the community.
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Faculty & Administration
The Regents of the University of Alaska are appointed by the Governor and approved by the Legislature.

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Ashton Compton, Student Regent  2011
Fuller Cowell II, Regent, Anchorage  2015
Erik Drygas, Regent, Fairbanks  2011
Kenneth Fisher, Regent, Sitka  2017
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Patricia Jacobson, Regent, Kodiak  2017
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FISCHER, VICTOR.

FITCH, MARK A.
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FITZGERALD, DAVID A.

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FLORNOY, RUTH S. (DECEASED)

FOREST, EDWARD J.

FORSTER, SUZANNE M.
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FORSYTHE, BRENDA L.

FORT, C. PATRICK.

FOSTER, LARRY M.
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FOX, DEBORAH H.
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<th>Title</th>
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<th>Degree(s)</th>
<th>Years</th>
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<tbody>
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<td></td>
<td>Justice, College of Health and</td>
<td>Pennsylvania</td>
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<td>M.S. (1988); Government Documents</td>
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