Message from the Chancellor

Dear Students,

Welcome to UAA, where amazing stories are being written every day!

We are dedicated to providing you with a wide range of academic programs – from occupational endorsement certificates to Ph.Ds. I encourage you to make it a priority to talk with an advisor on how UAA can best meet your higher education needs and goals.

You’ve picked a terrific time to come to UAA. The Alaska Airlines Center is nearing completion, we are breaking ground on a new engineering building, our students are earning national and international academic honors, and Seawolf athletes are breaking records.

College, of course, is more than classroom activities. Get involved in student clubs, go to events, cheer on our Seawolf athletes, volunteer, take on leadership roles, get to know your faculty and fellow students.

I encourage you to take advantage of all that UAA offers and write your own amazing story at UAA.

Best regards,

Tom Case
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, sexual orientation, 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).
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SOURCES OF INFORMATION

UAA Colleges and Schools

College of Arts and Sciences
www.uaa.alaska.edu/collegeofartsandsciences
(907) 786-1707, Fax (907) 786-4630
Dr. John R.D. Stalvey, Dean
Social Sciences Building (SSB), Room 335

College of Business and Public Policy
www.uaa.alaska.edu/cbpp
(907) 786-4121, Fax (907) 786-4131
Dr. Rashmi Prasad, Dean
Edward and Cathryn Rasmuson Hall (RH), Room 301

College of Education
www.uaa.alaska.edu/coe
(907) 786-4613, Fax (907) 786-4445
Dr. Heather Ryan, Dean
Professional Studies Building (PSB), Room 234

College of Health
www.uaa.alaska.edu/collegeofhealth
(907) 786-4406, Fax (907) 786-4440
William Hogan, 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.uaa.alaska.edu/schoolofengineering
(907) 786-1900, Fax (907) 786-1079
Dr. Tien-Chien Jen, Dean
Engineering Building (ENGR), Room 201

University Honors College
www.uaa.alaska.edu/honorscollege
(907) 786-1086, Fax (907) 786-1060
Ronald Spatz, Dean
Edward and Cathryn Rasmuson Hall (RH), Room 115

UAA Extension Sites

Chugiak-Eagle River Campus
www.uaa.alaska.edu/eagleriver
(907) 694-3313, Fax (907) 694-1491
Cynthia Rogers, Director
10928 Eagle River Road, Suite 115
Eagle River, Alaska 99577

Elmendorf Air Force Base
(907) 753-0204, Fax (907) 753-8390
Mel Kalkowski, Director
3 FSS/DPE 4109 Bullard Ave., Suite 107
JBER-E, Alaska 99506

Fort Richardson Army Post
(907) 428-1228, Fax (907) 428-1002
Mel Kalkowski, Director
Building 7 Chilkoot Ave., Room 228
JBER-R, Alaska 99505

Community Campuses

Kenai Peninsula College
www.kpc.alaska.edu
(907) 262-0330, (877) 262-0330, Fax (907) 262-0322
Gary J. Turner, Director
156 College Road
Soldotna, Alaska 99669

Anchorage Extension Site
www.kpc.alaska.edu/AES
(907) 786-6421, Fax (907) 786-6414
Lynda Kreps, Program Support
University Center (UC), Suite 118
3901 Old Seward Highway
Anchorage, Alaska 99503

Kachemak Bay Campus
www.kpc.alaska.edu/KBC
(907) 235-7743, Fax (907) 235-1686
Carol Swartz, Campus Director
533 E. Pioneer Ave.
Homer, Alaska 99603

Kenai River Campus
www.kpc.alaska.edu/KRC
(907) 262-0330, Fax (907) 262-0322
156 College Road
Soldotna, Alaska 99669

Resurrection Bay Extension Site
www.kpc.alaska.edu/RBES
(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) 486-1250
Barbara J. Bolson, Director
117 Benny Benson Drive
Kodiak, Alaska 99615

Matanuska-Susitna College
matsu.alaska.edu
(907) 745-9774, Fax (907) 745-9711
Dr. Talis Colberg, Director
P.O. Box 2889
Palmer, Alaska 99645

Affiliate College

Prince William Sound Community College
www.pwscc.edu
(907) 834-1600, Fax (907) 834-1691
Jacob Ng, President
P.O. Box 97
Valdez, Alaska 99686
with centers at Cordova and Copper Basin
**ACADEMIC PROGRAMS**

UAA offers over 200 certificate, associate, baccalaureate and graduate 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 lists of certificates and degrees offered by the University of Alaska Anchorage indicate the diverse educational opportunities available to students.

**Campus Key**
AI Programs offered through Anchorage
KO Programs offered through Kodiak
KP Programs offered through Kenai
MA Programs offered through Mat-Su

**Undergraduate Programs**

**Occupational Endorsement Certificates**

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**Associate Degrees**

**Associate of Applied Science**

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**Baccalaureate Degrees**

**Bachelor of Arts**
- Anthropology (AI) 94 CAS
- Art (AI) 96 CAS
- Biological Sciences (AI) 101 CAS
- Computer Science (AI) 255 SOE
- Early Childhood Education (AI) 154 COE
- Economics (AI) 149 CBPP
- Elementary Education (AI) 156 COE
- English (AI) 106 CAS
- Environment and Society (AI) 108 CAS
- History (AI) 112 CAS
- Hospitality and Restaurant Management (AI) 226 CTC
- Interdisciplinary Studies (AI) 91 CAS
- International Studies (AI) 113 CAS
- Journalism and Public Communications (AI) 115 CAS
- Justice (AI) 173 COH
- Languages (AI) 117 CAS
- Legal Studies (AI) 177 COH
- Mathematics (AI) 119 CAS
- Music (AI) 122 CAS
- Philosophy (AI) 130 CAS
- Political Science (AI) 132 CAS
- Psychology (AI) 134 CAS
- Sociology (AI) 135 CAS
- Theatre (AI) 136 CAS

**Bachelor of Business Administration**
- Accounting (AI) 140 CBPP
- Economics (AI) 143 CBPP
- Finance (AI) 143 CBPP
- Global Logistics and Supply Chain Management (AI) 143 CBPP
- Management (AI) 143 CBPP
- Management Information Systems (AI) 147 CBPP
- Marketing (AI) 143 CBPP

**Bachelor of Fine Arts**
- Art (AI) 97 CAS

**Bachelor of Human Services (AI)**
- 172 COH

**Bachelor of Liberal Studies (AI)**
- 118 CAS

**Bachelor of Music**
- Music Education Emphasis (AI) 122 CAS
- Music Performance (AI) 122 CAS

**Bachelor of Science**
- Anthropology (AI) 94 CAS
- Aviation Technology (AI) 212 CTC
- Biological Sciences (AI) 102 CAS
- Chemistry (AI) 104 CAS
- Civil Engineering (AI) 252 SOE
- Computer Science (AI) 256 SOE
- Construction Management (AI) 223 CTC
- Dental Hygiene (AI) 164 COH
- Dietetics (AI) 227 CTC
- Engineering (AI) 258 SOE
- Environment and Society (AI) 108 CAS
- Geological Sciences (AI) 110 CAS
- Geomatics (AI) 264 SOE
- Health Sciences (AI) 167 COH
- Interdisciplinary Studies (AI) 91 CAS
- Mathematics (AI) 120 CAS
- Medical Laboratory Science (AI) 183 COH
- Natural Sciences (AI) 125 CAS
- Nursing Science (AI) 188 COH
- Nutrition (AI) 229 CTC
- Physical Education (AI) 233 CTC
- Psychology (AI) 134 CAS
- Sociology (AI) 135 CAS
- Technology (AI) 247 CTC

**Bachelor of Social Work (AI)**
- 192 COH

**Minors**
- Accounting (AI) 141 CBPP
- Addiction Studies (AI) 173 COH
- Air Traffic Control (AI) 208 CTC
- Alaska Native Studies (AI) 93 CAS
- Anthropology (AI) 96 CAS
- Art (AI) 98 CAS
- Art Education (AI) 98 CAS
- Athletic Training (AI) 234 CTC
- Aviation Technology (AI) 214 CTC
- Biological Sciences (AI) 103 CAS
- Business Administration (AI) 146 CBPP
- Canadian Studies (AI) 114 CAS
- Chemistry (AI) 105 CAS
- Civil Engineering (AI) 254 SOE
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- Computer Systems Engineering (AI) 261 SOE
- Creative Writing and Literary Arts (AI) 107 CAS
- Dance (AI) 138 CAS
- Early Childhood Special Education (AI) 159 COE
- Economics (AI) 149 CBPP
- Electrical Engineering (AI) 261 SOE
- English (AI) 107 CAS
- Environmental Studies (AI) 109 CAS
- General Engineering (AI) 262 SOE
- Geographic Information Systems (GIS) (AI) 265 SOE
- Geography (AI) 109 CAS
- Geological Sciences (AI) 111 CAS
- Gerontology (AI) 167 COH
- Health and Fitness Leadership (AI) 235 CTC
- History (AI) 112 CAS
- International North Pacific Studies (AI) 114 CAS
- Journalism and Public Communications (AI) 116 CAS
- Justice (AI) 174 COH
- Languages (AI) 118 CAS
- Legal Studies (AI) 178 COH
- Mathematics (AI) 121 CAS
- Mechanical Engineering (AI) 262 SOE
- Music (AI) 125 CAS
Post-Baccalaureate Certificate Programs

Early Childhood: Pre-K through Third Grade (AI)* 274 COE
Elementary Education (AI) 276 COE
Paralegal Studies (AI) 278 COE

Graduate Programs

Master’s Degrees

Master of Applied Environmental Science and Technology (AI) 335 SOE

Master of Arts

Anthropology (AI) 292 CAS
English (AI) 296 CAS
Interdisciplinary Studies (AI) 288 CAS

Master of Arts in Teaching (AI) 307 COE

Master of Business Administration
General Management (AI) 302 CBPP

Master of Civil Engineering (AI) 338 SOE

Master of Education

Counselor Education (AI) 311 COE
Early Childhood Special Education (AI) 312 COE
Educational Leadership (AI) 313 COE
Special Education (AI) 315 COE
Teaching and Learning (AI) 314 COE

Master of Fine Arts
Creative Writing and Literary Arts (AI) 296 CAS

Master of Public Administration (AI) 305 CBPP

Master of Public Health
Public Health Practice (AI) 321 COH

Master of Science

Applied Environmental Science and Technology (AI) 334 SOE
Arctic Engineering (AI) 336 SOE
Biological Sciences (AI) 294 CAS

Career and Technical Education (AI) 331 CTC
Civil Engineering (AI) 337 SOE
Clinical Psychology (AI) 299 CAS
Computer Science (AI) 340 SOE
( Joint collaborative program)
Engineering Management (AI) 340 SOE
Global Supply Chain Management (AI) 304 CBPP
Interdisciplinary Studies (AI) 288 CAS
Nursing Science (AI) 324 COH
Project Management (AI) 341 SOE
Science Management (AI) 340 SOE

Master of Social Work (AI) 327 COH

Graduate Certificates

Advanced Human Service Systems (AI)* 323 COH
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Clinical Social Work Practice (AI)* 329 COH
Coastal, Ocean and Port Engineering (AI)* 339 SOE
Counselor Education (AI)* 316 COE
Dietetic Internship (AI)* 332 CTC
Earthquake Engineering (AI)* 339 SOE
Educational Leadership: Principal (AI)* 317 COE
Educational Leadership: Superintendent (AI)* 317 COE

Financial Management (AI)* 318 COE
Environmental Regulation and Permitting (AI)* 335 SOE
Family Nurse Practitioner (AI)* 326 COH
Language Education (AI)* 318 COE
Nursing Education (AI)* 327 COH
Psychiatric and Mental Health Nurse Practitioner (AI)* 326 COH
Social Work Management (AI)* 330 COH
Special Education (AI)* 319 COE

Supply Chain Management (AI)* 304 CBPP

Doctoral Programs

Biological Sciences 295 CAS
( Cooperative program with UAF)
Clinical-Community Psychology 300 CAS
( Jointly offered with UAF)
WWAMI School of Medical Education 289 COH
( Collaborative with the University of Washington)

Specialty Programs

Air Force ROTC 195 CTC
Army ROTC 200 CTC
Forty-Ninth State Fellows 267 HC
Natural and Complex Systems (NCS) 267 HC
University Honors Scholar 266 HC

* These programs have been defined as gainful employment programs. For more information regarding program costs and graduation and job placement rates, please visit our gainful employment website at www.uaa.alaska.edu/financialaid/gainful_employment_disclosures.cfm.

Non-Academic Programs

Workforce Credentials

Contact the College of Health for more information
Leadership Education in
Neurodevelopmental Disabilities (LEND) COH
Tapestry Postsecondary Transition Program COH
## Community Campus Program Offerings

### Kenai Peninsula College

#### Occupational Endorsement Certificates
- Bookkeeping Support (AI, KO, KP, MA) 216 CTC
- Corrections (KP)* 224 CTC
- Medical Office Support (AI, KO, KP, MA) 217 CTC
- Office Digital Media (AI, KO, KP, MA) 217 CTC
- Office Foundations (AI, KO, KP, MA) 216 CTC
- Office Support (AI, KO, KP, MA) 218 CTC
- Technical Support (AI, KO, KP, MA)* 218 CTC

#### Undergraduate Certificates
- Corrections (KP)* 224 CTC
- Mechanical Technology (KP)* 236 CTC
- Petroleum Technology (KP)* 240 CTC
- Small Business Management (KP)* 141 CBPP
- Welding Technology (KP)* 250 CTC

#### Associate of Applied Science
- Computer Electronics (KP) 215 CTC
- Computer Information and Office Systems (AI, KO, KP, MA) 218 CTC
- Digital Art (KP) 99 CAS
- General Business (KO, KP, MA) 142 CBPP
- Industrial Process Instrumentation (KP) 236 CTC
- Occupational Safety and Health (KP) 257 CTC
- Paramedical Technology (KP, MA) 238 CTC
- Process Technology (KP) 240 CTC

#### Associate of Arts (AI, KO, KP, MA) 92 CAS

### Kodiak College

#### Occupational Endorsement Certificates
- Bookkeeping Support (AI, KO, KP, MA) 216 CTC
- Medical Office Support (AI, KO, KP, MA) 217 CTC
- Office Digital Media (AI, KO, KP, MA) 217 CTC
- Office Foundations (AI, KO, KP, MA) 216 CTC
- Office Support (AI, KO, KP, MA) 218 CTC
- Technical Support (AI, KO, KP, MA)* 218 CTC

#### Undergraduate Certificates
- Construction Technology (KO)* 246 CTC
- Industrial Safety Program Support (KO)* 246 CTC
- Welding (KO)* 245 CTC

#### Associate of Applied Science
- Accounting (AI, KO, MA) 139 CBPP
- Computer Information and Office Systems (AI, KO, KP, MA) 218 CTC
- Computer Systems Technology (KO, MA) 221 CTC
- General Business (KO, KP, MA) 142 CBPP
- Technology (KO) 246 CTC

#### Associate of Arts (AI, KO, KP, MA) 92 CAS

### Matanuska-Susitna College

#### Occupational Endorsement Certificates
- Bookkeeping Support (AI, KO, KP, MA) 216 CTC
- Cisco-Certified Network Associate (CCNA) (AI, MA)* 219 CTC
- Commercial HVAC Systems (MA)* 242 CTC

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* These programs have been defined as gainful employment programs. For more information regarding program costs and graduation and job placement rates, please visit our gainful employment website at www.uaa.alaska.edu/financialaid/gainful_employment_disclosures.cfm.
Institutional Accreditation
The University of Alaska Anchorage is accredited by the Northwest Commission on Colleges and Universities (NWCCU).

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

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

Inquiries regarding an institution’s accreditation status by the NWCCU should be directed to the administrative staff of the institution. Individuals may also contact:

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

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 ASEP
Undergraduate Certificate in Automotive Technology
- Accredited by the National Institute for Automotive Service Excellence

**Aviation Technology**
Undergraduate Certificate and Associate of Applied Science in Aviation Maintenance Technology
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**
Undergraduate 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

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

Medical Laboratory Technology
Associate of Applied 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
Undergraduate 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

Public Health
Master of Public Health
• Accredited by the Council on Education for Public Health (CEPH)

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

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Welcome to UAA

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

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

Today, some 20,000 students attend UAA, a growing and expanding university of first choice. More than 200 programs, ranging from certificate programs to associate, baccalaureate 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, 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

This set of core themes was approved by the Chancellor’s Cabinet 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 prompt initiatives aimed at improvement of programs and services.

Institutional Learning Outcomes
Five institutional learning outcomes were endorsed by the Faculty Senate in 2009. In support of the university’s mission, the curriculum of various programs is designed such that UAA graduates will be able to:

1. Communicate effectively,
2. Employ critical thinking skills,
3. Employ independent learning and information literacy skills,
4. Demonstrate a knowledge base in the required general education areas, and
5. Demonstrate specific knowledge and skills in the degree or major discipline.

International and Intercultural Learning Outcomes
To be a credible university of the 21st century and to meet the needs and goals of both students and employers, UAA is committed to international and intercultural education. The following outcomes, developed over a two-year period in consultation with faculty, students and staff, embody the goals for all UAA students, as well as indicating the learning that faculty, staff and administrators need to attain in order to help students meet these goals.

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

These outcomes were approved by the International and Intercultural Task Force on March 9, 2012, and approved by the provost and executive vice chancellor and the vice chancellor for Student Affairs on May 2, 2012. They will be integrated into university programs and services and incorporated into ongoing processes and reporting.

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 listings in the front of this catalog for further information.
Welcome to UAA

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 the academic schools and colleges, Enrollment Services, the Advising and Testing Center and Accounting Services. 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, Suite 115
Eagle River, Alaska 99577
(907) 786-7600
www.uaa.alaska.edu/eagleriver

Located 10 miles north of Anchorage, the University of Alaska Anchorage extension site at the scenic Chugiak-Eagle River Campus (CERC) provides instruction and related activities to meet the Chugiak and Eagle River communities’ needs for post-secondary courses, workforce development, professional and continuing education, and student support services. The Chugiak and Eagle River communities have experienced rapid growth over the last decade, now comprising 35,000 people. First established in 1976, CERC has been located in the Eagle Center on Eagle River Road since 1989.

CERC is administered under the Community & Technical College. The CERC campus is responsive to the needs of the local community by working collaboratively with the College of Arts and Sciences, the College of Business and Public Policy, and other university, K-12 and industry partners in the region. CERC facilities include classrooms, computer labs, a learning resources center, and a testing center. Advising, tutoring and other support services are provided on campus, which is also home to the Alaska Middle College School, a partnership between the Mat-Su Borough School District and UAA. CERC offers an average of 90 course sections each semester.

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

Kenai Peninsula College (KPC) is located south of Anchorage at two campuses in Soldotna and Homer and at extension sites in Anchorage and Seward. KPC offers 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, Anthropology, Elementary Education and Psychology and the Bachelor of Liberal Studies, can be obtained entirely at KPC. A number of four-year degree programs are available at KPC via distance delivery through other UAA campuses. KPC has a robust e-learning program with more than 110 courses in 160 sections 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 (UC), Suite 118
3901 Old Seward Highway
Anchorage, Alaska 99503
(907) 786-6143
www.kpc.alaska.edu/AES

KPC offers two programs through an extension site at the University Center in Anchorage. More than 170 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 Ave.
Homer, Alaska 99663
(907) 235-7743
www.kpc.alaska.edu/KBC

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

The campus delivers KPC’s programs and services on the southern Kenai Peninsula, serving more than 750 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 buildings with 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/KRC

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

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

KPC also offers classes 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 about 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 250 miles south of Anchorage on Kodiak Island, serves the city of Kodiak, seven rural communities and the nation’s largest U.S. Coast Guard base. Kodiak College provides face-to-face and distance education courses leading to occupational endorsement and undergraduate certificates, associate and baccalaureate degrees, and college preparatory developmental education, adult basic education and GED preparation.
In addition to supporting for-credit college-level courses, the college also supports community-based instruction by providing services such as tutoring, research and testing for special interest, dual credit high school/college-level courses, and continuing professional education, vocational training and workforce development. The campus provides a support network for students taking e-learning courses from other college campuses. The campus is also a cultural center in the community that sponsors events such as readings by current authors, lectures, seminars, art shows and exhibits.

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

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

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

**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.

**National Student Exchange**  
www.uaa.alaska.edu/futurestudents/nse.cfm

UAA is a member of the National Student Exchange (NSE) program. This is a domestic student exchange with a consortium of over 205 colleges within the United States, Canada, Guam, Virgin Islands and Puerto Rico. For more information, contact the UAA Office of Admissions or visit the NSE website at www.nse.org.

**Office of International and Intercultural Affairs (OIIA)**

Rasmuson Hall, Suite 115  
(907) 786-4135  
www.uaa.alaska.edu/oiia

The Office of International and Intercultural Affairs coordinates and promotes student abroad programming. Students consult the office for information on international educational opportunities, including research, internships and engaged service learning. Early in their studies, students should seek counsel from their academic advisors as well as the study abroad 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 prepare themselves academically while advancing toward timely graduation.

It is important to plan ahead. OIIA provides support, guidance, 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 U.S. life. By working through OIIA, participants in UAA’s approved programs earn resident credit. Federal financial aid and many scholarships are available to help students pay for these programs.

Detailed information about UAA’s international exchanges and affiliated education abroad programs and applications are available from OIIA. 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**

The University Honors College Office of Undergraduate Research and Scholarship (OURS) is the center for undergraduate research and experiential learning at UAA. The Honors College supports and funds research and scholarship for students across all UAA disciplines, schools, colleges, and within a global community of scholars. Fostering inspired teaching and active student learning, OURS advances the involvement of UAA students in research and creative activities—whether they be independent or with UAA faculty. OURS supports a wide variety of opportunities, including 14 campus-wide award programs.

Every April, the Undergraduate Research and Discovery Symposium celebrates and connects undergraduate research taking place across UAA and fosters scholarly discussion between students, faculty and the community. Participation in the symposium provides undergraduates with opportunities to gain valuable experience in both oral and visual presentation of their research. Attending the symposium is also a great way for students who want to become involved in undergraduate research to learn about the opportunities to do so at UAA. The symposium and UAA’s annual Student Showcase 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 UAA’s diverse student population to reach their greatest potential. The UAA Student Affairs administrative units have broad responsibilities for supporting students at every point in their UAA experience, from pre-enrollment through graduation and on to job placement. Student Affairs cultivates a culture of openness and inclusion, as well as respectful and collaborative leadership. Student Affairs employees take an active interest in students and place student needs at the center of all they do.

Services are facilitated by centers that focus on academic excellence, student health, learning resources, advising, counseling, career development, academic accommodations for students experiencing disabilities, and educational opportunities. Other services assist students with financial aid or individualized needs or interests. See Chapter 6 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 or the UAA Fact Finder/Student Handbook (www.uaa.alaska.edu/studentaffairs/ fact-finder.cfm).
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 that monitors civil rights, federal and state laws, orders and decisions to ensure that access, inclusion and equity are practiced at UAA. Students and prospective students are afforded educational services, such as admission decisions, financial aid, access to academic programs and health and counseling services, without regard to race, color, religion, national origin, age, sex, sexual orientation, 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 ................................. (907) 786-4608
- Native Student Services ................................. (907) 786-4000
- 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) 271-2864
- U.S. Department of Education, Office of Civil Rights ................................. (206) 220-7900

Additionally, all members of the campus community are expected to conduct themselves in a manner that does not infringe upon the rights of others.

Harassment

The University of Alaska Anchorage is a community that cherishes the free and open exchange of ideas in the pursuit of knowledge. Maintaining this freedom and openness requires the presence of safety and trust; it requires the absence of coercion, intimidation and exploitation. Therefore, harassment of any kind has no place in the university. Sexual and other kinds of harassment are against the laws of the nation and the state of Alaska, Board of Regents policy, and the Student Code of Conduct. It subjects its victims to pressures that destroy the conditions necessary for true learning. Faculty and supervisors, the members of the university community who exercise the most authority and leadership, are principally responsible for maintaining a positive, harassment-free learning environment.

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, the U.S. Department of Labor (Office of Federal Contract Compliance Programs, Federal Building, Anchorage, Alaska), or the U.S. Department of Education, Office of Civil Rights.

UAA takes all matters of sexual harassment, sexual assault and sexual violence seriously. Title IX prohibits gender discrimination in all programs and activities. In accordance with Title IX regulations, UAA has designated Marva Watson, director of the Office of Campus Diversity and Compliance, as the university’s Title IX coordinator responsible for overseeing UAA’s Title IX compliance effort. Dean of Students and Associate Vice Chancellor for Student Development Dr. Dewain L. Lee is designated as the Title IX deputy coordinator. If you have concerns or need to report an incident, please contact the Title IX coordinators.

Safety

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.

Free Speech and Academic Inquiry

In-progress or after-hours emergencies can be reported to emergency dispatchers by calling 911. For more safety information and the most recent campus crime report, visit www.uaa.alaska.edu/safety.

Welcome to UAA

Kachemak Bay Branch Security ................................. (907) 235-1656
Kodiak Campus Security ................................. (907) 486-1219
Mat-Su Campus Security ................................. (907) 745-9789

Students and prospective students are afforded educational services, such as admission decisions, financial aid, access to academic programs and health and counseling services, without regard to race, color, religion, national origin, age, sex, sexual orientation, 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:

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- Disability Support Services ................................. (907) 786-4530
- Human Resource Services ................................. (907) 786-4608
- Native Student Services ................................. (907) 786-4000
- 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) 271-2864
- U.S. Department of Education, Office of Civil Rights ................................. (206) 220-7900

Additionally, all members of the campus community are expected to conduct themselves in a manner that does not infringe upon the rights of others.

Harassment

The University of Alaska Anchorage is a community that cherishes the free and open exchange of ideas in the pursuit of knowledge. Maintaining this freedom and openness requires the presence of safety and trust; it requires the absence of coercion, intimidation and exploitation. Therefore, harassment of any kind has no place in the university. Sexual and other kinds of harassment are against the laws of the nation and the state of Alaska, Board of Regents policy, and the Student Code of Conduct. It subjects its victims to pressures that destroy the conditions necessary for true learning. Faculty and supervisors, the members of the university community who exercise the most authority and leadership, are principally responsible for maintaining a positive, harassment-free learning environment.

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, the U.S. Department of Labor (Office of Federal Contract Compliance Programs, Federal Building, Anchorage, Alaska), or the U.S. Department of Education, Office of Civil Rights.

UAA takes all matters of sexual harassment, sexual assault and sexual violence seriously. Title IX prohibits gender discrimination in all programs and activities. In accordance with Title IX regulations, UAA has designated Marva Watson, director of the Office of Campus Diversity and Compliance, as the university’s Title IX coordinator responsible for overseeing UAA’s Title IX compliance effort. Dean of Students and Associate Vice Chancellor for Student Development Dr. Dewain L. Lee is designated as the Title IX deputy coordinator. If you have concerns or need to report an incident, please contact the Title IX coordinators.

Safety

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.

Free Speech and Academic Inquiry

In-progress or after-hours emergencies can be reported to emergency dispatchers by calling 911. For more safety information and the most recent campus crime report, visit www.uaa.alaska.edu/safety.
## Centers & Institutes

| Alaska Center for Rural Health, Alaska’s Area Health Education Center |
| Center for Alcohol & Addiction Studies |
| Center for Behavioral Health Research & Services |
| Center for Community Engagement & Learning |
| Center for Economic Development |
| Center for Economic Education |
| Center for Human Development |

| Alaska Center for Supply Chain Integration |
| Environment & Natural Resources Institute |
| Ethics Center |
| Institute for Circumpolar Health Studies |
| Institute of Social & Economic Research |
| Justice Center |
| Montgomery Dickson Center for Japanese Language & Culture |
| Psychological Services Center |
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/Alaska’s Area Health Education Center (ACRH/AHEC)**

(A907) 786-6579
[www.uaa.alaska.edu/acrh-ahec](http://www.uaa.alaska.edu/acrh-ahec)

The Alaska Center for Rural Health is housed within the Office of Health Programs Development and is closely affiliated with the School of Nursing in the College of Health. The mission of ACHR/AHEC is to help strengthen systems to deliver comprehensive and culturally relevant health care to rural Alaskans and to diversify and improve the distribution of the health workforce. It achieves this mission through health workforce development, research and communications. Activities span the workforce spectrum and focus on engaging secondary students in health careers, providing support to students enrolled in health training programs and assisting health providers to gain access to continuing education opportunities. Organizational partners include the University of Alaska’s three major academic units — UAA, UAF, UAS — and the University of Alaska Statewide Office, plus regional host organizations Fairbanks Memorial Hospital, Yukon Kuskokwim Health Corporation, Providence Health and Services Alaska, Ilisagvik College, and PeaceHealth Ketchikan Medical Center.

Outcomes and programs include the Alaska CACHE: Clearinghouse for Alaska’s Continuing Health Education, the Northwest Allied Health Camp, Rural/Urban Opportunities Program, the Health Workforce Vacancy Study, and the Healthcareersinalaska.info and AHEC Clinical Rotations Clearinghouse websites.

**Alaska Center for Supply Chain Integration (ACSCI)**

(A907) 786-1792
[afdjp1@uaa.alaska.edu](mailto:afdjp1@uaa.alaska.edu)

The Alaska Center for Supply Chain Integration supports business system research and development of Alaskan logistics and supply chain management capabilities. As a center within the College of Business and Public Policy, ACSCI enriches educational opportunities for students and fosters the development of university, government and industry-partnered activities by addressing significant Alaskan business and economic issues. ACSCI focuses on the growing importance of logistics and supply chain activities within Alaska, from air cargo transits at Ted Stevens Anchorage International Airport to Alaska seafood supply chains spanning the globe. ACSCI offers a wide range of opportunities for University of Alaska students and faculty, including exploring solutions for current business challenges, investigating emerging technologies such as radio-frequency identification, and researching changes in public policy such as increased emphasis on homeland security.

**Alaska Natural Heritage Program (AKNHP)**

(A907) 786-6350
[http://aknhp.uaa.alaska.edu](http://aknhp.uaa.alaska.edu)

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

AKNHP’s fields of expertise include zoology, botany, aquatic ecology, vegetation and conservation planning.

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

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

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

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

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

In addition to serving conservation data to the public, 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)**

(A907) 274-7232
Toll free: 1-800-478-7232
[http://aksbdc.org](http://aksbdc.org)

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

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

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

All Alaska SBDC network services encourage involvement of the University of Alaska to business communities throughout the state.

**Center for Alaska Education Policy Research (CAEPR)**
(907) 786-5413
www.iser.uaa.alaska.edu/CAEPR
CAEPR@uaa.alaska.edu

The Center for Alaska Education Policy Research enhances decision-making by policymakers, education professionals and the public through collaborative interdisciplinary research, analysis and dissemination. CAEPR conducts nonpartisan research on policy issues around educational access, equity and excellence in the Alaska context across early childhood, primary, secondary, higher and adult education.

CAEPR activities include:

- Working with an advisory board representing a broad range of stakeholders and policymakers to identify and address the most important educational policy issues facing Alaska.
- Conducting and disseminating research on key education policy issues. Much of this work will be in collaboration with researchers around the state, as well as from outside Alaska, including those at Education Northwest and the National Education Policy Center at the University of Colorado.
- Analyzing and summarizing education policy initiatives at the local, state and national levels.
- Building research capacity throughout Alaska through mini-grant funding, proposal development assistance and methodology consultations around education policy research.
- Doing rapid response research for time-sensitive requests from federal, state and local policymakers.
- Sponsoring undergraduate researchers to assist with research projects through the Office of Undergraduate Research and Scholarship at UAA, as well as through the First Alaskans Institute summer internship program.

**Center for Alcohol and Addiction Studies (CAAS)**
(907) 786-6582
www.uaa.alaska.edu/instituteforcircumpolarhealthstudies/caas

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

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

**Center for Behavioral Health Research and Services (CBHRS)**
(907) 786-6381
www.uaa.alaska.edu/cbhrs
cbhrs@uaa.alaska.edu

The Center for Behavioral Health Research and Services is a research center in the College of Arts and Sciences that has been in existence since 1999. CBHRS comprises 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, health promotion, mental health delivery issues in Alaska, suicide prevention, fetal alcohol spectrum disorders, 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 (SAMHSA), Centers for Disease Control and Prevention (CDC), and the National Institutes of Health. CBHRS is home to several major research grants from the National Institute on Drug Abuse, the National Institute of Mental Health and the National Institute on Alcohol Abuse and Alcoholism. CBHRS also houses the CDC-funded Arctic Fetal Alcohol Spectrum Disorders Regional Training Center (www.uaa.alaska.edu/arcticfasdrc) and the SAMHSA-funded Integrated Suicide Prevention Initiative.

In addition to being a major research center, CBHRS provides education and consulting services in the areas of mental health, substance use, suicide prevention, health promotion, and the translation of research into practice and community settings that are helpful to faculty, care providers, administrators and policymakers at the local, state and national levels. CBHRS is approved by the American Psychological Association to offer continuing education.

**Center for Community Engagement and Learning (CCEL)**
(907) 786-4062
www.uaa.alaska.edu/engage
www.facebook.com/uaaccel
engage@uaa.alaska.edu

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

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

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

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

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

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

Center for Economic Education (CEE)
(907) 786-1916
www.cee.uaa.alaska.edu
aycee@uaa.alaska.edu

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

Center for Human Development (CHD)
(907) 272-8270
Toll free: 1-800-243-2199
www.alaskachd.org
info@alaskachd.org

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

CHD is authorized under the Developmental Disabilities Assistance and Bill of Rights Act of 1999 as a Center for Excellence to build state and community capacity to respond to the needs of individuals who experience developmental and other persistent conditions requiring long-term or specialized support, and to the needs of their families. CHD serves as a liaison between the academy and the service delivery system. It collaborates with state agencies and community providers to support the independence, productivity and community integration of people who experience developmental and related disabilities by:
• Providing interdisciplinary pre-service and continuing education of students;
• Providing community service, training and technical assistance for individuals requiring long-term support, their families and support staff;
• Conducting formal and applied research, evaluation and analysis of public policy in areas affecting individuals requiring long-term support and their families; and
• Disseminating information about disabilities, long-term support and professional best practices.

Environment and Natural Resources Institute (ENRI)
(907) 786-4909
www.uaa.alaska.edu/enri

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

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

Natural Resources
ENRI continues to serve its mandated mission of providing scientific information for resource managers, policymakers, the scientific community and the general public. Data, research findings and discoveries are furnished to these user groups in order to increase the understanding of relevant natural processes and to ensure that prudent decisions regarding Alaska’s natural resources are made. Researchers in the Natural Resources Research Focus Area (NR-RFA) examine the ecology and population health of biological resources and the ecological impacts of resource extraction. ENRI faculty fellows and research scientists have active research programs in the following areas: physiological ecology; population biology of plants, animals and microbes; and ecosystem biogeochemistry and geology, with a focus on Alaskan and high-latitude systems. Many of their research projects examine the effects of large-scale environmental changes such as those that accompany climate change and extractive land uses.

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

Alaska Resources Library and Information Service (ARLIS)
(907) 272-ARLIS or (907) 272-7547
www.arlis.org

ENRI continues to serve its mission to provide scientific information to Alaskans by providing support for the Alaska Resources Library and Information Service.

Ethics Center
(907) 786-4437

The mission of the Ethics Center at the University of Alaska Anchorage is to promote research and dialogue, inform debate, and engage the community on ethical issues relevant to the people of Alaska and its diverse communities. The center aims to serve the communities, businesses, professions and universities of Alaska by providing training, workshops, white papers, consultation and continuing education.
Institute for Circumpolar Health Studies (ICHS)
(907) 786-6573
http://ichs.uaa.alaska.edu
ayichs@uaa.alaska.edu
The Institute for Circumpolar Health Studies is a health research and policy research institute that provides support, coordination, information and training for health-related public and private institutions in Alaska. The ICHS is a leader in addressing a wide variety of health problems and issues facing Alaskans. Its 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.

ICHLS works closely with faculty throughout the University of Alaska system, providing technical assistance and support to increase the health research capacity in Alaska through conferences, guest lectures and other teaching activities. ICHS also encourages student involvement through internships and research assistantships. The institute maintains collaborative relationships with other universities, state and federal agencies, Alaska Native health organizations, and Alaska communities to provide relevant health information, support local planning, and inform the development of health policy. Cooperative activities in research, instruction and service link Alaska and the university with international health research and practice. ICHS provides professional development and training through conferences and workshops for public health and medical professionals, and informational services and educational programs for the general public.

Institute of Social and Economic Research (ISER)
(907) 786-7710
www.iser.uaa.alaska.edu
ayiser@uaa.alaska.edu
The Institute of Social and Economic Research 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 myriad major public policy issues in Alaska. ISER studies have included relevant topics such as the effects of natural resource development, fiscal policies of state and local governments, transportation and energy requirements of developing regions, effects of change on Alaska’s Native people, and the quality of life in the state. ISER is part of the College of Business and Public Policy (CBPP). ISER faculty teach in CBPP as well as other UAA disciplines, and the institute provides opportunities for student involvement through internships and research assistantships. ISER also forms research partnerships with other universities, Native organizations, school districts and community groups.

Justice Center
(907) 786-1810
http://justice.uaa.alaska.edu
uua_justice@uaa.alaska.edu
The UAA Justice Center, established by the Alaska Legislature in 1975, has a mandate to provide statewide justice-related education, research and service. The Justice Center is an interdisciplinary unit that provides undergraduate, graduate and professional education; conducts research in the areas of crime, law and justice; and provides service to government units, justice agencies and community organizations throughout urban and rural Alaska to promote a safe, healthy and just society.

Through its work, the center promotes understanding of the justice system throughout rural and urban Alaska. The Justice Center offers courses in the areas of crime, delinquency, legal studies, and police, judicial and correctional policy and administration. Within the Justice program, the center also offers certificate and degree programs approved by the American Bar Association and Justice Honors for those undergraduate students who develop exceptional social science research skills. The center also participates in an interdisciplinary graduate program with the UAA Department of Public Policy and 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 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.

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 research publication, the Alaska Justice Forum, permit the exchange of ideas in the justice field.

Montgomery Dickson Center for Japanese Language and Culture
786-4038
www.uaa.alaska.edu/mdc
The Montgomery Dickson Center for Japanese Language and Culture is committed to developing Japanese language education at UAA and throughout Alaska, as well as to promoting mutual understanding between the U.S. and Japan in honor of UAA alumnus Montgomery Dickson, who perished in the 2011 Tohoku Great Earthquake and Tsunami in Japan. The center is housed in the College of Arts and Sciences.

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

Psychological Services Center (PSC)
(907) 786-1795
www.uaa.alaska.edu/psych/services
The Psychological Services Center is the UAA on-campus training clinic for graduate students in the MS Clinical Psychology program and the joint Ph.D. program in Clinical-Community Psychology with a Rural and Indigenous Emphasis. Student trainees at the PSC provide a range of psychological services under supervision by licensed psychologists. Services are available at affordable, low fees and on a sliding fee scale. The clinic is open to students and to members of the community.

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

**Get Involved at UAA**
- Alaska Native Oratory Society
- Arts
- Athletics
- Honor Societies
- Pacific Rim Literary Conference
- Seawolf Speech & Debate Team
- Student Life & Leadership
- Student Union & Commuter Student Services

**Health & Wellness**
- Student Health & Counseling Center
- Counseling Services
- Insurance
- Psychological Services Center

**Living & Learning at UAA**
- Campus Housing & Residence Life

**Seawolf Services**
- Bookstore
- Food Service
- General Support Services

**Information Technology Services**
- Parking Services
- WOLFcard

**Your Campus**
- Alcohol Policies
- Lost & Found
- Outdoor Life
- Pets on Campus
- Safety
- Smoke-Free Environment
- Wildlife on Campus
Get Involved at UAA

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

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.

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.

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

Theatre facilities include a 175- to 230-seat thrust/arena mainstage, the 99-seat Jerry Harper 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
www.uaa.alaska.edu/www

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

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/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

UAA Invitational 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.

UAA sports receive national television exposure thanks to the annual Carrs/Safeway Great Alaska Shootout basketball tournament, held at the Sullivan Arena. The Kendall Hockey Classic is one of the top preseason college hockey tournaments in the country, and the Seawolf volleyball team hosts some 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 program serves as a means of improving quality of life, which allows all participants, regardless of degree of skill, an opportunity to develop new friendships, group loyalty,
sportsmanship and respect for 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.

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.

Pacific Rim Literary Conference
(907) 786-4355
www.uaa.alaska.edu/english/pacific-rim-conference.cfm
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.

Seawolf Speech and Debate Team
(907) 786-4390
www.uaa.alaska.edu/seawolfdebate
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.

Student Life and Leadership
(907) 786-1215
www.uaa.alaska.edu/SLL
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 (student government), clubs and Greek Life.

Bartlett Lecture Series
(907) 786-1215
www.uaa.alaska.edu/SLL/about/bartlett.cfm
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 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 philosophical and cultural, as well as social and economic, issues. The Bartlett Lecture Committee comprises 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. This program is coordinated through Student Life and Leadership.

Campus Programming Board
(907) 786-1215
www.uaa.alaska.edu/SLL/cpb
The primary purpose of the Campus Programming Board is to expand on-campus opportunities for students to develop leadership skills and contribute to campuswide programming efforts.

Student Leadership
(907) 786-1371
www.uaa.alaska.edu/SLL/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 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.

**Student Showcase Academic Competition and Journal**  
*(907) 786-1215  
www.uaa.alaska.edu/showcase*

This annual academic conference recognizes student excellence in all disciplines. The 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. This program is coordinated through Student Life and Leadership.

**Union of Students (USUAA)**  
*(907) 786-1205  
www.usuaa.org*

The Union of Students at UAA is the university’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.

**Student Union and Commuter Student Services**

**Student Union (SU), Room 214**  
*(907) 786-1204 (V/TTY)  
belong.uaa.alaska.edu*

Student Union and Commuter Student Services provides opportunities for students to naturally connect with one another, promote an ethos of belonging and engagement, and advance community on campus. Student Union and Commuter Student Services provides programs and services that foster a sense of belonging and promote student success. Programs and services focus on off-campus housing, transportation, health and wellness, food, belongingness, voter information, and civic engagement.

The Student Union facility has soft seating and two commuter student lounges for students to relax between classes. Food options in the Student Union include Subway, Meinbowl, Union Station Coffee kiosk and the Student Union and Commuter Student Services Information Desk. Other services provided at the information desk are outdoor gear rentals, off-campus housing assistance, Anchorage and UAA transportation information, voter registration, UAA ticket sales, locker rentals, notary services, and a lost and found. Students have access to a computer lab, game room, Student Union Gear Room, TV lounge, Denali Alaskan ATM and the Student Union Gallery.

Offices located in the Student Union are the Dean of Students Office, Student Life and Leadership, USUAA (student government), Student Clubs and Greek Life Office, The Northern Light student newspaper, New Student Orientation, and the KRUA satellite studio. UAA student organizations, departments and community groups may reserve space in the Student Union for a variety of activities. Locations include the Den, North and South Cafeterias, the Lyla Richards Conference Room, and the Leadership Lab. These locations can accommodate 15 to 300 people and are equipped with tables, chairs and wireless Internet. Audio-visual equipment is also available. For more information on scheduling room reservations in the Student Union and in other areas on campus, refer to the Room Reservations section of the UAA Fact Finder/Student Handbook.

**Health and Wellness**

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

The Student Health and Counseling Center provides eligible UAA students with health prevention, health education and diagnostic health and counseling services. The SHCC is staffed by advanced nurse practitioners and physicians with specialties in family health, adult health and mental health primary care. The health care benefits available to eligible students who have paid the SHCC fee include routine office visits at no charge and reduced costs for procedure visits and laboratory and imaging services. Limited pharmacy items are also available at reduced cost. Medical services include family planning, immunizations, 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 meeting diagnostic criteria. 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 appointments.

**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.

**Insurance**

**Student Health Insurance**  
*(907) 786-4040  
www.uaa.alaska.edu/studenthealth*

Health insurance is mandatory for international students on student visas. Contact the Office of Admissions for specific requirements. A student health insurance plan is available for purchase by enrolled UAA students who meet the eligibility criteria of 6 or more credits. For an additional premium, dependent coverage and major medical coverage may be purchased. Students can obtain more information through the Student Health and Counseling Center website at www.uaa.alaska.edu/studenthealth or by calling (907) 786-4040.

**Accident and Travel Insurance**  
*(907) 474-5278  
www.alaska.edu/risksafety/b_insurance/insurance-coverage*

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.

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

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

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Living and Learning at UAA

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 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 the First-Year Experience course, a 3-credit academic class focusing on creating success in college, 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 are also admitted to the University Honors College.

• 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.

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.

Seawolf Services

UAA Bookstore

Main campus location adjacent to the Student Union
(907) 786-1151
Limited Edition Bookstore in the University Center
(907) 786-1186
www.uaa.alaska.edu/bookstore

With two locations plus online shopping, the UAA Bookstore is a convenient source for textbooks — both traditional and e-books — college apparel, school supplies, snacks, and limited health and beauty items. The main campus location carries numerous fair trade and handcrafted gift items and has a well-stocked section of fiction, nonfiction and reference books as well as other reading materials. Textbook reservations and online ordering of books, apparel and other merchandise is available through the bookstore website, or experienced staffers are accessible to help students in stores. The bookstore employs numerous student workers in various positions and hosts community events allowing students and others to interact with faculty authors and renowned thinkers in a comfortable atmosphere. Up-to-date information regarding events, textbook deadlines, special sales and hours may be found on the UAA Campus Bookstore page on Facebook.

UAA Tech Zone

Main Campus Bookstore Mezzanine
(907) 786-4760
www.uaa.alaska.edu/bookstore

Located on the second floor of the UAA Bookstore, Tech Zone is an Apple-authorized campus store and carries iPads, Macs, iPods and a wide array of computer software for both Mac and PC at special academic pricing. Tech Zone also offers headsets and mics, calculators, USB drives, clickers for classroom use, and many other accessories.

Food Service

(907) 751-7246
www.uaa.alaska.edu/housing/campus-dining.cfm

The campus dining contract is currently operated by NMS Sodexo, a joint venture between a local Alaska Native corporation and a national food service company. Collectively managed as Seawolf Dining, the following cafes and eateries are provided throughout campus for the convenience of resident and commuter students:

• Bear Necessities: offers espresso, snacks, groceries and sundries in Gorsuch Commons
• Creekside Eatery: an “all-you-care-to-eat” dining hall in Gorsuch Commons
• Cuddy Marketplace: a food court-style eatery in Cuddy Hall
• Daily Grind: an espresso stand in the atrium of Cuddy Hall

Necessities:

• an espresso stand in the atrium of Cuddy Hall
• a food court-style eatery in Gorsuch Hall
• an “all-you-care-to-eat” dining hall in Gorsuch Commons

Grind:

• a food court-style eatery in Cuddy Hall
• an “all-you-care-to-eat” dining hall in Gorsuch Commons

Marketplace:

• an espresso stand in the atrium of Cuddy Hall
• a food court-style eatery in Cuddy Hall
• an “all-you-care-to-eat” dining hall in Gorsuch Commons

About UAA

The University of Alaska Anchorage (UAA) is Alaska’s largest university and a member of the University of Alaska system. UAA offers more than 200 degree and certificate programs and provides a wide range of academic, cultural, and recreational opportunities. The university is located in Anchorage, Alaska’s largest city and cultural hub, which is only a few miles from the Chugach Mountains and the sea. Anchorage is a vibrant and diverse city with a population of about 300,000 people. It is the heart of Alaska’s economy, with a rich history and a thriving arts and cultural scene.

UAA is committed to providing a student-centered learning experience that prepares graduates for success in a global society. The university offers a variety of degree programs that are designed to meet the needs of students from all walks of life. UAA’s faculty and staff are dedicated to helping students achieve their academic goals and succeed in their chosen fields.

For more information about UAA, please visit our website at www.uaa.alaska.edu.
• **Fireside Cafe**: a contemporary cafe behind the ConocoPhillips Integrated Science Building and the Administration/Humanities Building

• **Kaladi Brothers Coffee**: a comfortable cafe in the throughway between the Social Sciences Building and the Consortium Library

• **Mein Bowl**: offers Asian entrees and sushi in the lower level of the Student Union

• **Subway**: a national franchise sandwich shop in the lower level of the Student Union

• **Union Station**: an espresso stand on the second floor of the Student Union.

Additional venues operated independently include:

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

• **UAA Perk**: a coffee stand in the University Center.

Please note that meal plans may not be used at UAA Perk or the Lucy Cuddy Dining Room.

**General Support Services (GSS)**

(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.

**Information Technology Services**

(907) 786-4646

www.uaa.alaska.edu/informationtechnologyservices

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.

**Customer Support**

www.uaa.alaska.edu/informationtechnologyservices
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 Services**

www.uaa.alaska.edu/distanceeducation

The Distance Education Services website is the primary web source for information about e-learning and associated technologies. Many UAA instructors use this resource and place course materials online. From this website, students, prospective students, faculty and the community can learn about UAA’s e-learning courses, Blackboard, support services and faculty training workshops. (See Chapter 8 for further information.)

**E-mail Services**

www.uaa.alaska.edu/informationtechnologyservices

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 for more details.)

**Open-Access Computer Labs**

www.uaa.alaska.edu/informationtechnologyservices

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.

**Telephone Services**

www.uaa.alaska.edu/informationtechnologyservices

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**

www.uaa.alaska.edu/informationtechnologyservices

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**

www.uaa.alaska.edu/informationtechnologyservices

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.

**Parking Services**

(907) 786-1119

www.uaa.alaska.edu/parking

UAA Parking Services offers many options for commuters who drive to campus, providing over 5,500 parking spaces and covered parking in two multi-deck garages. Parking permits are required for all vehicles on 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.thepermitstore.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, or by visiting the Parking Services office in the Bookstore lower level.

The UAA Call Team is available at no additional charge for assistance with pedestrian escorts, vehicle jumpstarts and classroom or vehicle unlocks by calling 786-1103. Campus lots and walking trails are paved, lighted, patrolled and maintained with funding from permit sales and citation fees.

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.

**ADA Accessible Parking**

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. A valid ADA placard issued by the 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.

**WOLFcard**

(907) 786-4695

www.uaa.alaska.edu/wolfcard

The UAA WOLFcard serves students as their official ID, as a U-Pass to obtain 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.

**Your Campus**

**Alcohol Policies**

The university and Student Affairs promote the education of the whole student. The university is concerned about ways in which alcohol use and abuse may affect the primary academic mission of the institution, its overall atmosphere and the personal well-being of university community members. 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 will be granted on designated premises for private university-sanctioned events for a limited period of time.

The sale of alcoholic beverages at university-sanctioned events on campus is not permissible and may not be 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 for further information.)

**Residence Life Alcohol Policy**

The alcohol policy for the UAA residence halls and apartments permits some residents who are a minimum of 21 years of age to possess and consume limited quantities of alcoholic beverages in certain apartments or suites in accordance with Department of Residence Life policies. All other restrictions on personal alcohol consumption outlined under Campus Alcohol Policy and the Student Code of Conduct apply. The Residence Life policy is subject to annual review by the university administration and the Residence Hall Association (RHA).

**Drug and Alcohol Counseling Resources**

www.uaa.alaska.edu/students/drugsandalcohol.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 Notification, 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 and can be reached at (907) 272-2312.

**Drug-Free Schools Notification**

www.uaa.alaska.edu/students/drugfreeschoolsreport.cfm

The Drug-Free Schools Notification contains UAA’s alcohol and other drug policies and behavioral expectations for students and employees, disciplinary actions for violations of these policies, and resources available for assistance with alcohol and other drug issues. This notification contains physiological effects, risks and criminal penalties associated with alcohol and other drug use. Access the report online or request a paper copy from the UAA Dean of Students Office, Room 204 of the Student Union on the Anchorage campus.

**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. 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 and Activities Office. Recreation and 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 (Thanksgiving, winter and spring breaks), Recreation and 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

**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 on-campus phones.

**Safety Escorts**

(907) 786-1103

www.uaa.alaska.edu/parking/callteam

The UAA Call Team provides walking safety escorts for students, faculty and staff to any UAA campus location between 7:30 a.m. and 8 p.m. Monday through Friday. For safety escorts after hours, call the University Police Department at 786-1120.

**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](http://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 off-campus phones or by dialing 6-1120 from on-campus phones.

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

**Campus Security and Fire Safety Report**  
[www.uaa.alaska.edu/safety](http://www.uaa.alaska.edu/safety)

The Campus Security and Fire Safety Report is required by federal law and contains policy statements and crime statistics for UAA. The policy statements address UAA’s policies, procedures and programs concerning safety and security — for example, policies for responding to emergency situations and sexual offenses. Three years’ worth of statistics are included for certain types of crimes that were reported to have occurred on campus, in or on off-campus buildings or property owned or controlled by UAA, and on public property within or immediately adjacent to the campuses. In addition, the report includes fire safety information and statistics pertaining to the residential community on the Anchorage campus. Access the report online or request a paper copy from the UAA Dean of Students Office, Room 204 of the Student Union on the Anchorage campus.

**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.
Tuition, Fees & Financial Aid

Resident Tuition Assessment
Nonresident Tuition Surcharge
Western Undergraduate Exchange
Tuition Summary
Fees
Financial Obligations

Payment Procedure
Refund Policy
Senior Citizen Tuition Waiver
Office of Student Financial Assistance
Satisfactory Academic Progress
Financial Aid Appeal Policy

Return of Federal Financial Aid Policy
Types of Financial Aid
Student Employment
Veterans Assistance
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 one 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;
   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. Honorably discharged United States veterans and their spouses 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, 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, Alaska 99801
Phone: 1-800-441-2962

WICHE Student Exchange Program
3035 Center Green Drive, Suite 200
Boulder, Colorado 80301-2204
Phone: (303) 497-0210
http://wiche.edu/wue
Tuition Summary
Preparatory and Lower Division: Undergraduate
(Course Numbers A050 – A299)

<table>
<thead>
<tr>
<th>Tuition Costs</th>
<th>Resident</th>
<th>Nonresident</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resident</td>
<td>$168 per credit hour</td>
<td>$600 per credit hour</td>
</tr>
<tr>
<td>*Nonresident</td>
<td>$204 per credit hour</td>
<td>$636 per credit hour</td>
</tr>
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</table>

Upper Division: Undergraduate
(Course Numbers A300 – A499)

<table>
<thead>
<tr>
<th>Tuition Costs</th>
<th>Resident</th>
<th>Nonresident</th>
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</thead>
<tbody>
<tr>
<td>Resident</td>
<td>$391 per credit hour</td>
<td>$799 per credit hour</td>
</tr>
<tr>
<td>*Nonresident</td>
<td>$404 per credit hour</td>
<td>$836 per credit hour</td>
</tr>
</tbody>
</table>

Professional Development
(Course Numbers A500 – A599)

Tuition costs vary.

Graduate
(Course Numbers A600 – A699)

<table>
<thead>
<tr>
<th>Tuition Costs</th>
<th>Resident</th>
<th>Nonresident</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resident</td>
<td>$500 per credit hour</td>
<td>$800 per credit hour</td>
</tr>
<tr>
<td>*Nonresident</td>
<td>$525 per credit hour</td>
<td>$825 per credit hour</td>
</tr>
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</table>

* 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 that necessitate an additional fee. Fees may also be charged for administrative and/or instructional services. All resident and non-resident tuition rates and student activity fees are approved by the Board of Regents of the University of Alaska. The university reserves the right to change tuition rates or fees at any time. Fees will vary at community campuses.

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

<table>
<thead>
<tr>
<th>Fee Type</th>
<th>Resident</th>
<th>Nonresident</th>
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</thead>
<tbody>
<tr>
<td>Administrative Fee</td>
<td>Varies</td>
<td>Varies</td>
</tr>
<tr>
<td>Admission Fee (nonrefundable)</td>
<td>$40</td>
<td>$40</td>
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<tr>
<td>Undergraduate Certificate</td>
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<td>$40</td>
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<tr>
<td>Associate Degree</td>
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<tr>
<td>Baccalaureate Degree</td>
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<td>$60</td>
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<tr>
<td>Graduate Certificate</td>
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<td>$60</td>
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<tr>
<td>Graduate Degree</td>
<td>$60</td>
<td>$60</td>
</tr>
<tr>
<td>Auditing Fee</td>
<td>Varies</td>
<td>Varies</td>
</tr>
<tr>
<td>Continuing Education Unit (CEU)</td>
<td>Varies</td>
<td>Varies</td>
</tr>
<tr>
<td>Continuous Registration Fee</td>
<td>Varies</td>
<td>Varies</td>
</tr>
</tbody>
</table>

(Graduate students) $391

Course Fees: Lab, Materials, Learner Services, Special and Other Fees Varies
Credit-by-Examination Fee $40 per credit
Distance Fee Varies
Graduation Application Fee $50
Language Credit-by-Placement Fee $20 per course
Late Payment Fees $125 – $175
Noncredit Course Fee Varies
Parking Fee Varies
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)
Green Fee $3 per semester (starting spring 2013; fall and spring semesters thereafter)

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.

A distance fee is charged for each e-learning course. The fee amount varies.

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

Late Payment Fees
A $125 fee will be assessed on all accounts that are not paid by the payment deadline. An additional $175 fee will be assessed on all accounts that are not paid prior to the published late payment assessment date. Students who pay for or drop their courses prior to the published deadline will not be required to pay these 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 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 basement of the UAA Bookstore on the main campus. Permit fees are nonrefundable. For further details, call the Parking Office at (907) 786-1119 or visit www.uaa.alaska.edu/parking.

Placement Test Fee
This fee is for testing for course placement.

Self-Support Fee
Fee for a course that is funded entirely through the revenues collected when students sign up for that specific course. Costs vary by course and
may include salaries, supplies, advertising, facilities and travel. Separate refund policies apply.

**Student Life Fee**
All students, with the exception of senior citizens, enrolled in 3 or more credits are assessed a $13 fee to support campus shuttle service, U-Pass People Mover program (citywide bus pass), bicycle racks, trail/sidewalk maintenance and Call Team walking escorts.

**Technology Fee**
A fee to provide up-to-date technology equipment, software, maintenance, training, and support for student use.

**Transcript Fee**
A per-copy fee is charged for routine or rush processing and must be paid in advance.

**Two Percent Network Charge**
The network charge covers rapidly rising costs, especially in the maintenance and enhancement of the university-wide 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 is automatically processed. Refund processing dates are listed in the class listing.

Students called to active duty or involuntarily activated, deployed or relocated during an academic term may be able to make arrangements with their faculty members to complete their courses via e-learning.

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

**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 are 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 add/drop 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.
- Senior citizens who register for a course before the first day of the semester, drop the course, then register for the same course during the add/drop period are not able to use the tuition waiver.
- 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

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

**Financial Aid Application Procedures**

Interested students should apply for financial aid at least six months before the beginning of the semester for which they plan to attend. Applications received after this date will be considered if funds are available. Specific procedures are as follows:

1. New students must first apply for 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) online at www.fafsa.gov. Be sure to include UAA’s school code: 011462.
3. Students who wish to apply for scholarships may complete an online application available in UAOnline at uonline.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 receive most financial aid, including all federal aid, a student must:

1. Be accepted for admission with no conditions in an eligible degree program;
2. Demonstrate financial need for federal assistance as determined by the FAFSA (except for certain loan programs);
3. Meet satisfactory academic progress as defined by Student Financial Aid regulations (available at www.uaa.alaska.edu/financialaid);
4. Have a high school diploma or its equivalent;
5. Be a U.S. citizen or eligible noncitizen;
6. Have a valid Social Security number;
7. Register with Selective Service if required;
8. Certify that they are not in default on a federal student loan and do not owe money on a federal student grant;
9. Certify that they will use federal student aid only for educational purposes;

*Beginning July 1, 2012, there are strict new federal regulations regarding financial aid and individuals who have not graduated from high school or do not hold a GED. These regulations do not affect admitted degree-seeking students enrolled in classes prior to July 1, 2012. New students and non-degree-seeking students should refer to Chapter 7 and the sections entitled Admission and Financial Aid for Non-High School Graduates and Special Information for Home School Applicants for more information.*

**Federal Verification**

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

- Internal Revenue Service (IRS) tax transcripts
- Verification of household size
- Child support payments
- Verification of Supplemental Nutrition Assistance Program (SNAP) or food stamp benefits
- 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 for all federal financial aid purposes. If documentation is not received, federal financial aid cannot be awarded. Certain types of state and institutional aid also require verification to be complete before awarding and/or disbursement can occur.

**Satisfactory Academic Progress**

In order to receive financial aid from any of the federal, state or institutional aid programs, a student must maintain satisfactory academic progress toward his/her educational goal. A complete copy of the Satisfactory Academic Progress Policy is available at www.uaa.alaska.edu/financialaid/policies.cfm or at the One Stop counter at the University Center.

**Financial Aid Appeal Policy**

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

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

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

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

**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.

**University of Alaska Grant (UAG)**
The UAG provides need-based assistance to Alaska residents in the first 60 credits of their academic program. It is not available to students who have already earned an associate degree or higher.

**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 the Native regional corporations.

**Loans**

**Emergency Loan Fund (ELF)**
Thirty-day loans are available to students who can document extenuating need. An admitted full-time student making satisfactory progress may borrow a maximum of $600 for up to 30 days. A $10 administrative fee is charged. Students may receive one ELF per semester, subject to Financial Aid Disbursement approval.

**Federal Direct Stafford Loan Program**
The Stafford Loan Program enables students to borrow directly from the U.S. 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), which 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, and
   - $5,500 as a third-, fourth- and fifth-year undergraduate student.

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 that accumulates from the time the unsubsidized loan is disbursed.

3. **Aggregate Maximums:** Dependent students can borrow up to $13,000 as a first-year student; $16,000 as a second-year student; and $19,000 as a third-, fourth- and fifth-year student.

**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. Completion of the FAFSA is required to borrow a PLUS loan. The interest on the PLUS loan begins to accrue with disbursement. Payments usually begin 60 days after the loan is fully disbursed.

**Student Employment**
The University of Alaska provides employment opportunities for qualified students. Student employment will normally not exceed 20 hours per week during a semester. For information on eligibility criteria for student employment, refer to the UAA Student Employment Guidelines and Procedures online at www.uaa.alaska.edu/students/guidelines.cfm.

**Career Services Center (CSC)**
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.

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 attendance (9 credits). Graduate assistantships are awarded in spring for the upcoming academic year. For additional information and applications, contact the appropriate dean’s office.

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

The University of Alaska Anchorage is approved to provide training to veterans, service members and eligible dependents of veterans. 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 notify the UAA Office of Student Financial Assistance by submitting an online request for certification at www.uaa.alaska.edu/financialaid/veterans.

Students using DVA educational benefits must apply for admission to a degree or certificate program at UAA. In accordance with federal regulations, UAA must report this information to the DVA, along with information regarding students’ enrollment, grades, academic progress and eligible tuition and fee rates, if the student is using the Post 9-11 G.I. Bill. Only coursework that is applicable to the student’s current degree or certificate program is eligible for funding under DVA programs.

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.
<table>
<thead>
<tr>
<th>Freedom of Expression</th>
<th>Academic Rights of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freedom of Access</td>
<td>Academic Honesty</td>
</tr>
<tr>
<td>Freedom of Association</td>
<td>Student Code of Conduct</td>
</tr>
<tr>
<td>Freedom From Unreasonable Search &amp; Seizure</td>
<td>University Student Judicial Review Procedure</td>
</tr>
<tr>
<td>Student Participation in Institutional Government</td>
<td>Sex Offenses Policy</td>
</tr>
<tr>
<td>University Student Educational Records Policy</td>
<td>Student Dispute/Complaint Resolution Process</td>
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<td>Academic Dispute Resolution Procedure</td>
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<td>Communications via E-mail</td>
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<td>Computer Use</td>
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<tr>
<td></td>
<td>&amp; Software Copyright Policy</td>
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<tr>
<td></td>
<td>Copyright &amp; Intellectual Property</td>
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</tbody>
</table>
The role of UAA is to encourage people of all ages to develop their skills and talents according to their individual abilities and interests so that, collectively, they contribute to the continuum of democracy. University policies, procedures and regulations are formulated to guarantee each student’s freedom to learn and to protect the rights of others.

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

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 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, sexual orientation, 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
The Family Educational Rights and Privacy Act (FERPA) affords eligible students certain rights with respect to their education records. (An “eligible student” under FERPA is a student who is 18 years of age or older or who attends a postsecondary institution.) These rights include:

1. The right to inspect and review the student’s education records within 45 days after the day the university receives a request for access. A student should submit to the Office of the Registrar a written request (letter or fax) that identifies the education record(s) the student wishes to inspect. The registrar will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the registrar, registrar-designated staff shall advise the student of the correct official to whom the request should be addressed.

2. The right to request the amendment of the student’s education records that the student believes is inaccurate, misleading, or otherwise in violation of the student’s privacy rights under FERPA. If the university decides not to amend the record as requested, the university will notify the student in writing of the decision and the student’s right to a hearing regarding the request for amendment. If the university decides not to amend the record as requested, the student may submit a written response which will be included in the student’s education record, clearly identify the part of the record the student wants changed, and specify why it should be changed.

3. The right to provide written consent before the university discloses personally identifiable information from the student’s education records, except to the extent that FERPA authorizes disclosure without consent.

The university discloses education records without a student’s prior written consent under the FERPA exception for disclosure to school officials with legitimate educational interests. A school official is a person employed by the university in an administrative, supervisory, academic, research or support staff position (including law enforcement unit personnel and health staff); a person serving on the Board of Regents; or a student serving on an official committee, such as a disciplinary or grievance committee. A school official also may include a volunteer or contractor outside of the university who performs an institutional service or function for which the university would otherwise use its own employees and
who is under the direct control of the university with respect to the use and maintenance of personally identifiable information from education records, such as an attorney, auditor, or collection agent or a student volunteering to assist another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibilities for the university.

Upon request, the university also discloses education records without consent to officials of another school in which a student seeks or intends to enroll.

The university also discloses information without a student’s prior written consent under the FERPA exception for disclosure of information that it has designated as “directory information.” See the list below of the other disclosures that the university may make without consent.

4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by the university to comply with the requirements of FERPA. The name and address of the Office that administers FERPA is:

   Family Policy Compliance Office
   U.S. Department of Education
   400 Maryland Ave., SW
   Washington, DC 20202

The following information is designated as directory information by the university:

1. Names of students
2. Dates of attendance at the university
3. Program/major field(s) of study
4. Degrees and certificates received, including dates
5. Participation in officially recognized university activities
6. Academic and co-curricular awards, honors and scholarships received and dates received
7. Weight and height of students on athletic teams
8. Students’ electronic mail addresses
9. Hometown; city and state

A student may inform the Office of the Registrar in writing that he/she does not give permission for the university to release his/her directory information or may submit the request through UAOnline at http://uonline.alaska.edu. The request is valid until a subsequent request to release directory information is received in writing or through UAOnline.

FERPA permits the disclosure of personally identifiable information from students’ education records, without consent of the student, if the disclosure meets certain conditions found in §99.31 of the FERPA regulations. Except for disclosures to school officials, disclosures related to some judicial orders or lawfully issued subpoenas, disclosures of directory information, and disclosures to the student, §99.32 of FERPA regulations requires the institution to record the disclosure. Eligible students have a right to inspect and review the record of disclosures.

A postsecondary institution may disclose personally identifiable students have a right to inspect and review the record of disclosures. Eligible students have a right to inspect and review the record of disclosures. Regulations require the university to record the disclosure. Eligible students have a right to inspect and review the record of disclosures. These entities may make further disclosures of personally identifiable information to outside entities that are designated by them as their authorized representatives to conduct any audit, evaluation, or enforcement or compliance activity on their behalf. (§§99.31(a)(3) and 99.35)

In connection with financial aid for which the student has applied or which the student has received, if the information is necessary to determine eligibility for the aid, determine the amount of the aid, determine the conditions of the aid, or enforce the terms and conditions of the aid. (§99.31(a)(4))

To organizations conducting studies for, or on behalf of the university, in order to: (a) develop, validate, or administer predictive tests; (b) administer student aid programs; or (c) improve instruction. (§99.31(a)(6))

To accrediting organizations to carry out their accrediting functions. (§§99.31(a)(7))

To parents of an eligible student if the student is a dependent for IRS tax purposes. (§99.31(a)(8))

To comply with a judicial order or lawfully issued subpoena. (§99.31(a)(9))

To appropriate officials in connection with a health or safety emergency, subject to §99.36. (§99.31(a)(10))

To a victim of an alleged perpetrator of a crime of violence or a non-forcible sex offense, subject to the requirements of §99.39. The disclosure may only include the final results of the disciplinary proceeding with respect to that alleged crime or offense, regardless of the finding. (§99.31(a)(13))

To the general public, the final results of a disciplinary proceeding, subject to the requirements of §99.39, if the university determines the student is an alleged perpetrator of a crime of violence or non-forcible sex offense and the student has committed a violation of the university’s rules or policies with respect to the allegation made against him or her. (§99.31(a)(14))

To parents of a student regarding the student’s violation of any federal, state, or local law, or of any rule or policy of the university, governing the use or possession of alcohol or a controlled substance if the university determines the student committed a disciplinary violation and the student is under the age of 21. (§99.31(a)(15))

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 point average for degree requirements. Students have the right to be informed at the beginning of each term of the nature of the course, course expectations, evaluation standards, and the grading system.

Academic Honesty

Academic integrity is a basic principle that requires students 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 in 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 that, 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 that 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.,
      i) the action occurred during an event authorized by the
   university;
      ii) 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
      iii) 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, that 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 that 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

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

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.

Copyright and Intellectual Property
www.alaska.edu/active/copyright-issues

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.
Advising & Academic Support

Academic Advising
Advising & Testing Center
Career Services Center
College Preparatory & Developmental Studies
Consortium Library
Disability Support Services

Learning Communities
Learning Resources Center
Military & Veteran Student Resource Center
Multicultural Center
Native Student Services

Office of Undergraduate Research & Scholarship
Pre-Professional Health Careers Advising
Testing & Assessment
TRIO Programs
Tutoring & Labs
**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**

<table>
<thead>
<tr>
<th>College of Arts and Sciences</th>
<th>(907) 786-1357</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fine Arts and Humanities</td>
<td></td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>(907) 786-4378</td>
</tr>
<tr>
<td>Social and Mathematical Sciences</td>
<td>(907) 786-1356</td>
</tr>
<tr>
<td>College of Business and Public Policy</td>
<td>(907) 786-4100</td>
</tr>
<tr>
<td>College of Education</td>
<td>(907) 786-4401</td>
</tr>
<tr>
<td>College of Health</td>
<td>(907) 786-4417</td>
</tr>
<tr>
<td>School of Nursing</td>
<td>(907) 786-4550</td>
</tr>
<tr>
<td>Community &amp; Technical College</td>
<td>(907) 786-6400</td>
</tr>
<tr>
<td>School of Engineering</td>
<td>(907) 786-1900</td>
</tr>
<tr>
<td>University Honors College</td>
<td>(907) 786-1086</td>
</tr>
</tbody>
</table>

Advising is also available at the community campuses:

- 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
- Kodiak College, Student Services: (907) 486-1214
- Mat-Su College, Student Services: (907) 745-9762

**Advising and Testing Center**

(907) 786-4500

www.uaa.alaska.edu/advising-testing

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.

**Career Services Center (CSC)**

(907) 786-4513

www.uaacareerservices.com

The Career Services Center provides a number of excellent career-related services and resources. In its lending library, the center houses over 1,000 career-related books 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 portfolio for employers to review. Other resources include the Professional Clothes Closet where current UAA students can “shop” for an interview outfit to wear and keep. A variety of literature and handouts assist with exploring career paths or launching a job search. CSC provides career advising, academic internship programs, a videotaped mock interview program, resume assistance, workshops, and campus and community presentations. Many well-known local and national employers utilize the CSC for recruiting and interviewing candidates, and several career fairs take place each year.

**College Preparatory and Developmental Studies (CPDS)**

(907) 786-6856

www.uaa.alaska.edu/cpds

The College Preparatory and Developmental Studies program offers academic support to all UAA students through specific courses, programs, labs and tutoring. Students who need to improve their English, 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.

**Consortium Library**

(907) 786-1871

http://consortiumlibrary.org

The UAA/APU Consortium Library is the second-largest research library in Alaska. The library offers networking and wireless technology, space for individual and group study, meeting rooms, a multimedia room, and the world’s farthest north Foucault pendulum. The library shares its space with the Alaska Resources Library and Information Services (ARLIS), the Alaska Moving Image Preservation Association (AMIPA), the Justice Center, the Faculty Technology Center (FTC), the Center for Advancing Faculty Excellence (CAFE), the Center for Community Engagement and Learning (CCEL) and a general-use computer lab. On the roof of the library is a “beacon of knowledge,” a 60-foot LED display welcoming inquiring minds to the library.

The library has more than 878,000 volumes on-site. It licenses for UAA (including the community campuses) more than 290 databases and 70,000 electronic books and journals that can be accessed via the Internet or at the library. In addition to its general collection, the library houses archives of photographs and personal papers, organizational records relating to Alaska history, a specialized collection of health and medical resources and publications, and a large collection of popular movies, educational films and classical and jazz music. The library is a designated select federal and state depository library and belongs to a regional system in Southcentral Alaska that supports the Anchorage Public Library and its five libraries, the Anchorage Museum, ARLIS, the Valdez Consortium Library, the Alzheimer’s Resource Library, the UAA Career Services Center, the Learning Resources Center, the Small
Advising & Academic Support

Business Development Center, and the UAA libraries located at the Anchorage, Mat-Su, Kodiak, Homer and Soldotna campuses.

UAA students need a valid WOLFCard to check out materials. Books from other Southcentral libraries may be requested online and picked up and returned to the Consortium Library. Students can also request materials at no minimum charge from libraries around the world through interlibrary loan.

Reference librarians are available in person or by phone most of the hours the library is open and will respond to questions sent to ayref@ uaa.alaska.edu, or via instant messaging from the library’s website.

The Instruction and Reference Services Department offers credit and continuing education courses and course-specific lectures on the use of the library and its resources. Library faculty serve as liaisons to UAA academic departments, providing research instruction in their subject liaison areas.

Disability Support Services (DSS)
(907) 786-4530
(907) 786-4536 (TTY)
www.uaa.alaska.edu/dss
aydss@uaa.alaska.edu

Disability Support Services 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 adjustments, 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
www.ansep.net

The Alaska Native Science and Engineering Program 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; and develop an interest in graduate study.

ANSEP focuses on undergraduates who have shown an interest in 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
www.uaa.alaska.edu/anpsych

The Alaska Natives into Psychology program’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)
(907) 786-6978
Toll free: (877) 891-4321
www.uaa.alaska.edu/schoolofnursing/rrann-nwdp

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. The Recruitment and Retention of Alaska Natives into Nursing program 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 Seminars
(907) 786-6858

The Smart Start Seminars offer 6-credit, semester-length learning communities in which students build essential English skills in a nurturing, exciting and interdisciplinary context. Interested students must take a UAA-approved placement test and speak to a 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 also 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) 786-4401

The mission of the College of Education is to prepare educators, support the lifelong learning of professionals, embrace diversity, and 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/honorscollege

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 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/lrc

The mission of the Learning Resources Center is to provide all UAA students with resources and opportunities to learn and achieve academic success. As a provider of academic support services, the LRC is an inclusive, supportive learning environment in which students can study or get extra help for their classes. We offer a number of services, including tutoring; computer access; study materials; and open, quiet and small group study areas. Tutoring is available in a range of subjects, including reading, writing, English as a second language (ESL), world languages and mathematics. The LRC Library provides access to many course-related and self-tutoring materials, including textbooks, reference
## Tutoring and Labs

<table>
<thead>
<tr>
<th>Title</th>
<th>Sponsor(s)</th>
<th>Services</th>
<th>Eligible Students</th>
<th>Location</th>
<th>Cost</th>
<th>Resources Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center for Language Learning</td>
<td>Languages Department and LRC</td>
<td>Tutoring assistance in American Sign Language (ASL), Chinese, French, German, Japanese, Russian and Spanish</td>
<td>All language students</td>
<td>Sally Monserud Hall (SMH), Room 112</td>
<td>Lab fee</td>
<td>Tutoring, computers, language software and other language resources</td>
</tr>
<tr>
<td>English as a Second Language (ESL) Tutoring</td>
<td>LRC</td>
<td>Tutoring assistance for ESL students in reading, writing, listening and speaking</td>
<td>All ESL students and community members</td>
<td>Sally Monserud Hall (SMH), Room 118</td>
<td>None</td>
<td>Tutoring, ESL computer software</td>
</tr>
<tr>
<td>Learning Resources Center (LRC)</td>
<td><a href="http://www.uaa.alaska.edu/lrc">www.uaa.alaska.edu/lrc</a></td>
<td>LRC Math Lab, Reading &amp; Writing Center, Learning Skills Lab, ESL tutoring, Center for Language Learning, LRC Open Computer Lab, student athlete tutoring, and other UAA-sponsored tutoring programs</td>
<td>All students</td>
<td>Sally Monserud Hall (SMH)</td>
<td>None</td>
<td>Tutoring, computer labs, textbooks, study materials, library and study areas</td>
</tr>
<tr>
<td>Learning Skills Lab</td>
<td>LRC</td>
<td>Open computer lab and assistance with basic computer applications</td>
<td>All students</td>
<td>Sally Monserud Hall (SMH), Room 119</td>
<td>None</td>
<td>Computer lab</td>
</tr>
<tr>
<td>Live Homework Help</td>
<td>SLED, Alaska’s Virtual Library program</td>
<td>Online tutoring for basic college courses in math, sciences, social sciences and English</td>
<td>All students</td>
<td>Online at <a href="http://sled.alaska.edu/homework">http://sled.alaska.edu/homework</a></td>
<td>None</td>
<td>Service is available 1 p.m. to midnight, seven days a week</td>
</tr>
<tr>
<td>LRC Math Lab</td>
<td>LRC</td>
<td>Open tutoring lab for students in MATH courses, especially MATH A054, MATH A055 and MATH A105</td>
<td>All students</td>
<td>Sally Monserud Hall (SMH), Room 120</td>
<td>None</td>
<td>Tutoring, computers and mathematical software</td>
</tr>
<tr>
<td>Mathematical Sciences Math Lab</td>
<td>Mathematical Sciences Department</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>Reading and Writing Center</td>
<td>LRC</td>
<td>Tutoring assistance with reading and writing assignments and study skills</td>
<td>All students and community members</td>
<td>Sally Monserud Hall (SMH) Room 118</td>
<td>None</td>
<td>Computers, style guides and other writing resources</td>
</tr>
</tbody>
</table>
A division of the University Honors College, the Office of Undergraduate Research and Scholarship fosters undergraduate research opportunities and presentations, 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 presentations. Every spring, the office hosts the Undergraduate Research and Discovery Symposium, highlighting the work of UAA undergraduates and their faculty mentors. OURS funds undergraduate research and creative/artistic projects in all disciplines, including Undergraduate Research Awards, Discovery Grants, the Consortium Library Prize, Alaska Heart Institute Fellowships, Undergraduate Research in the Community, sponsored travel to the Student Conference on United States Affairs, and the Fran Ulmer Transformative Research Award.

Pre-Professional Health Careers Advising
(907) 786-1747
www.uaa.alaska.edu/wwami

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) School of Medical Education, which is affiliated with the University of Washington School of Medicine. MEDEX Northwest is a source of physician assistant training for qualified Alaskans. For more information on MEDEX Northwest, please go to www.uaa.alaska.edu/wwami/programs/medex.cfm.

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 successful progression into a professional program. Premedical students maintain the UAA American Medical Student Association (AMSA) Premed Chapter and 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. WWAMI sponsors 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.

Della Keats Health Sciences Summer Programs
(907) 786-4789
www.uaa.alaska.edu/wwami/programs

The Della Keats summer programs are provided by UAA’s WWAMI School of Medical Education. They are residential programs that help junior and senior high school students from underrepresented and underserved backgrounds, especially Alaska Native and rural students, make the transition into college and on into medical, nursing and health careers. DK students spend six weeks on campus to experience the campus environment and culture and to adjust to life as an urban undergraduate.

The DK Health Sciences Summer Program combines coursework intended to prepare students for college with job-shadowing opportunities, tours of medical facilities and guest lectures from health professionals. This program also includes for selected students a psychology stream in collaboration with the Alaska Native Community Advancement in Psychology (ANCAP) program.

The DK Summer Research Program gives students the opportunity to return to the DK program for a second summer to conduct their own biomedical or public health research projects under the supervision of UAA faculty.

Testing and Assessment
(907) 786-4525
www.uaa.alaska.edu/advising-testing/testing-and-assessment

The Advising and Testing Center’s testing and assessment lab is nationally recognized and certified by the National College Testing Association (NCTA) and subscribes to the NCTA Professional Standards and Guidelines. The program serves the needs of the university and the local community and is committed to delivering testing and assessment services that are used for course placement, admission, earning college credit, employment certification and psychological testing. There is a fee for all testing services offered. Our professional staff members are certified and dedicated to implementing the mission of the Division of Student Services.

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 youths and
adults prepare for, enter and complete programs of postsecondary education.

**Educational Opportunity Center (EOC)**
*(907) 786-6707*

The Educational Opportunity Center provides information and assistance to adults age 19 and older 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 (ETS)**
*(907) 786-6700*

[www.uaa.alaska.edu/trio/ets/index.cfm](http://www.uaa.alaska.edu/trio/ets/index.cfm)

The Educational Talent Search program serves students in 6th through 12th grade in seven 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.

**Student Support Services (SSS)**
*(907) 786-1380*

[www.uaa.alaska.edu/sss](http://www.uaa.alaska.edu/sss)

Student Support Services seeks to supplement student success by providing academic support services (tutorial assistance, persistence workshops, academic mentoring) to 160 eligible students per year. Students eligible for services come from families earning a lower wage (by federal standards), are the first in their families (first generation) to pursue a baccalaureate degree, or experience a doctor-diagnosed disability.
Academic Standards & Regulations

Admissions
Academic Planning
Special Students
Resident Credit
Catalog Year
Age Limit of Credits
Credit Requirements
Transfer Credits
Class Standing
Academic Petition
Registration
Exception to University Policy for Records & Registration
Course Performance
Course Completion
Academic Standing
Program Completion
Admissions
(907) 786-1480
www.uaa.alaska.edu/admissions

The University of Alaska Anchorage is an open-access public university. Our mission is to provide access to higher education for all students. To achieve this, the university offers a wide variety of academic and vocational programs and different paths to admission:

- General interest and non-degree seeking: Community members may take classes for personal and professional enrichment or to begin preparation to enter a degree program.
- Occupational endorsement certificates (OECs): There are no minimum academic requirements for admission; submission of transcripts is not required unless the applicant is applying for financial aid.
- Undergraduate certificates and associate degrees: Applicants must submit transcripts.
- Baccalaureate degrees: Applicants must submit transcripts and test scores (if fewer than 30 college-level credits) and meet minimum grade point average (GPA) requirements for admission.
- Graduate and post-graduate programs: Applicants must submit transcripts, test scores for some programs and meet minimum GPA requirements for admission; some departments have additional admissions requirements.

All students intending to take any course must apply for admission. Individuals intending to take courses for personal and professional enrichment should use the non-degree student application.

Detailed information and instructions for each type of admission are in this chapter. This chapter defines UAA policy, admission requirements, and student rights and responsibilities in the admission process that apply to all applicants. Individual certificate and degree programs may have additional requirements, selective admission criteria or limited space. See Chapter 10 for specific undergraduate program requirements. See chapters 11 and 12 for admission requirements that apply to post-baccalaureate and graduate programs and students.

Questions about admission to UAA should be directed to the UAA One Stop, University Center, 3901 Old Seward Highway in Anchorage or mailed to P.O. Box 141629, Anchorage, Alaska 99514-1629.

How to Apply

Most applicants will apply using the UAA online application accessible through www.uaa.alaska.edu/admissions or uaonline.alaska.edu. The online application requires payment of the application fee by credit card. The fee is $40 for undergraduate certificate and associate’s degree applications, $50 for bachelor’s degree applications and $60 for post-baccalaureate and graduate program applications. Application fee waivers are available should the fee pose a bona fide and documented financial hardship; contact the director of Admissions for more information.

Paper applications are available for download at www.uaa.alaska.edu/admissions or for pickup at the UAA One Stop. Application fees for paper applications are the same as online applications and can be paid by check or money order; please do not send cash. Paper applications can be dropped off at the UAA One Stop, University Center, 3901 Old Seward Highway in Anchorage or mailed to P.O. Box 141629, Anchorage, Alaska 99514-1629.

Freshmen Applicants

Students applying during their senior year of high school and those who have fewer than 29 college-level semester credits prior to entering UAA are considered freshmen applicants. Application and transcript requirements are described in detail in this chapter for each academic level.

When selecting the appropriate application on UAOnline, select “No College” if no college-level credits have been earned. Select “Prior College” if at least one college-level course has been completed.

Transfer Applicants

Students who have earned 30 college-level semester credits or more at one or more regionally accredited colleges or universities are considered transfer applicants. Application and transcript requirements are described in detail in this chapter for each academic level.

When selecting the appropriate application on UAOnline, select “Prior College.”

Application Deadlines

In order to expedite processing of applications for admission, UAA has the following application deadlines:

- Fall semester admission, June 15
- Spring semester admission, November 1
- Summer term admission, May 1

Applicants should complete an Application for Admission by the listed dates. Those who meet the application deadline will receive an admission decision and, if they have submitted a Free Application for Federal Student Aid (FAFSA) by the application deadline, a financial aid award prior to the start of classes.

Application for Admission After the Application Deadline

Applications for Admission may be submitted until the first day of class in the semester to which a student wishes to be admitted, but there are limitations and special procedures to follow:

1. Students applying after the application deadline must also submit the UAA Late Application Agreement with their Application for Admission. The agreement outlines the limitations of applying late and gives applicants the ability to register for courses while their application is in process.
2. No action will be taken on an Application for Admission or financial aid award until an Application for Admission is complete — all transcripts, test scores (if required), and the Late Application Agreement received by the Office of Admissions.
3. Applications will be processed in the order in which they become complete.
4. Students in need of financial aid should submit a FAFSA as early as possible.
5. Applicants who complete their applications after the deadline may not receive a financial aid award or disbursement before the first day of class. See the Admission and Financial Aid section in this chapter for more information.

Application and Admission as a General Interest/Non-Degree-Seeking or Secondary School Student

Students who wish to take classes for general interest or personal/professional development but do not wish to earn a certificate or degree may apply for admission as a non-degree-seeking student. To apply for admission as a non-degree-seeking student, please submit the following:

- Non-Degree Application for Admission.
To apply for admission to an OEC program, please submit the following:

1. Application and Admission Certificate Application for Admission
2. $40 nonrefundable application fee
3. High school transcript or GED scores (freshmen applicants only)
   a. Students in high school at the time of application should submit a current in-progress transcript. An official final transcript is required after graduation; please see both the Transcripts and Special Information for Home School Applicants sections in this chapter for more information.
   b. Students who have completed high school should submit an official final high school transcript showing a graduation date or GED scores.
   c. Students who have not graduated from high school or do not hold a GED should refer to the Admission and Financial Aid for Non-High School Graduates section in this chapter.
4. College or university transcripts from all regionally accredited institutions attended (except other University of Alaska campuses). This is required of all applicants who have completed at least one college-level course.
   a. Students currently in college should submit a current in-progress transcript at the time of application. An official final transcript is required after completion of the term or graduation; please see Transcripts in this chapter for more information.
   b. The Admissions Office will automatically retrieve records for courses taken at other UA campuses and via UA distance education.
5. Late Application Agreement if applying after the deadline. An Associate/Certificate Application for Admission is complete when all required items listed above are received. An initial admission decision will be made once in-progress transcripts are received and reviewed by the Office of Admissions. Final transcripts are required to bring applicants to the Complete Admission status so the student can receive financial aid. See the Admission and Financial Aid section in this chapter for more information.

To qualify for admission to an undergraduate certificate or associate degree program, a student must meet one of the following requirements:

- Have earned a high school diploma or GED, or
- Be at least 18 years old, or
- Have completed UAA’s secondary school student enrollment process as described in this chapter.

No majors or degrees are offered in the general interest and non-degree-seeking options. Students initially admitted as non-degree-seeking must submit a new Application for Admission and all required documents and meet corresponding admission requirements for the certificate or degree program. Admission as a non-degree-seeking student does not guarantee future admission to a certificate or degree program. Credits earned as a non-degree-seeking student may be applied to certificate or degree programs only as specified in admission to individual programs.

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

Application and Admission to Occupational Endorsement Certificate (OEC) Programs

To apply for admission to an OEC program, please submit the following:

- Occupational Endorsement Certificate Application for Admission.

Optional:
- High school transcript showing graduation date or GED scores if applying for financial aid. Not all OEC programs are approved for financial aid; contact the UAA One Stop for more information.

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

- Have earned a high school diploma or GED, or
- Have earned at least 30 college-level semester credits*, or
- Be 18 years of age or older and have participated in UAA’s Ability to Benefit process* as described in this chapter.

Some OEC programs have additional admission requirements, selective admission criteria or limited space. See Chapter 10 for specific information.
Application and Admission to Baccalaureate Programs

Freshmen baccalaureate applicants are those who have earned 0-29 college-level semester credits at regionally accredited institutions.

Transfer baccalaureate applicants are those who have earned 30 or more college-level semester credits at regionally accredited institutions.

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

1. Baccalaureate Application for Admission
2. $50 nonrefundable application fee
3. High school transcript or GED scores (freshmen applicants only)
   a. Students in high school at the time of application should submit a current in-progress transcript. An official final transcript is required after graduation; please see both the Transcripts and Special Information for Home School Applicants sections in this chapter for more information.
   b. Students who have completed high school should submit an official final high school transcript showing a graduation date or GED scores.
   c. Students who have not graduated from high school or do not hold a GED should refer to Admission and Financial Aid for Non-High School Graduates in this chapter.
4. College or university transcripts from all institutions attended (except other University of Alaska campuses). This is required of all applicants who have completed at least one college-level course.
   a. Students currently in college should submit a copy of their current or in-progress transcript at the time of application. An official final transcript is required after completion of the term or graduation; please see Transcripts in this chapter for more information.
   b. The Office of Admissions will automatically retrieve records for courses taken at other UA campuses and via UA distance education.
5. SAT, ACT or Accuplacer scores (freshmen applicants only).
6. Late Application Agreement if applying after the deadline.

A Baccalaureate Application for Admission is complete when all required items listed above are received. An initial admission decision will be made once in-progress transcripts are received and reviewed by the Office of Admissions. Final transcripts are required to bring applicants to the Complete Admission status. See the Admission and Financial Aid section in this chapter for more information.

To qualify for admission to baccalaureate programs, a student must meet one of the following requirements:

- Graduation from high school with a GPA of at least 2.50 and completion of either the SAT, ACT or Accuplacer test; or
- Successful completion of the GED and completion of either the SAT, ACT or Accuplacer test; or
- 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
- Completion of at least 60 college-level semester credits with a GPA of at least 2.00.*

* Please also see sections Admission and Financial Aid and Admission and Financial Aid for Non-High School Graduates in this chapter for important information about financial aid eligibility.

International students must meet minimum English language and documentation requirements as described in the Application and Admission as an International Student section in this chapter.

Students in the following categories may be admitted to certain baccalaureate programs with academic advising as a requirement:

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

Additional criteria apply to students who have been removed from baccalaureate-seeking status at UAA. See the Reinstatement policy in this chapter.

Some baccalaureate programs have additional or more selective admission requirements. See Chapter 10 for specific program information.

Application and Admission to Post-Baccalaureate Certificate and Graduate Programs

For admission requirements for post-baccalaureate certificate programs, see Chapter 11.

For admission requirements for graduate programs, see Chapter 12.

Application and Admission as an International Student

International students who intend to reside in the United States for the purpose of pursuing a UAA certificate or degree as an F-1 visa student and who need a Form I-20 Certificate of Eligibility for Non-Immigrant F-1 Student Status, must fully meet university and degree program admission requirements before an I-20 will be issued. Occasionally, UAA certificate and degree programs and courses have limited capacity to enroll students. International student admission decisions must therefore consider the availability of courses and programs before admitted students are issued a Form I-20.

International students in F-1 visa status must be and remain admitted, full-time degree-seeking students. Health insurance is mandatory and proof of insurance must be kept up-to-date. Visit the international student services website at www.uaa.alaska.edu/iss for more information.

Application deadlines for international students:

- Fall semester, May 1
- Spring semester, October 1
- Summer term is open only to students who meet the English language exam requirements if they:
  a. International students may request an exemption from the language exam requirements if they:
     i) are a native speaker of English, or
     ii) have earned a grade of C or better in a course equivalent to ENGL A111 or higher at a regionally accredited U.S. institution, or
     iii) have earned a bachelor’s or master’s degree from a regionally accredited U.S. institution.
  b. The Office of Admissions reserves the right to require additional English proficiency evidence, even from those who are eligible for an examination exemption.
- 4. Submit 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. Loss of financial
A completed Admissions Agreement for Prospective F-1 Students.

6. Students transferring from other institutions in the U.S. must request the F-1 Transfer Eligibility Form from their current institution.

Students enrolled in secondary school or another university at the time of application should submit the most up-to-date transcripts available at time of application. While a student may receive provisional admission status based upon these transcripts, the admission decision will not be final and an I-20 will not be issued until final transcripts are evaluated and received by UAA.

All academic credentials, WES ICAP evaluations, affidavits of support and financial documentation should be sent directly to the UAA Office of Admissions, P.O. Box 141629, Anchorage, AK 99514-1629.

To qualify for admission as an international student, all three of these qualifications must be met:

1. Have fulfilled all international application and documentation requirements described above.
2. Meet the required program admission qualifications as listed in this chapter.
3. Meet one of the following English language proficiency standards:
   - A TOEFL score of 45, 450 (PBT), or
   - An IELTS score of 5.0, or
   - Have an approved exemption from the English language proficiency exam requirement.

First-time international students not receiving UAA grants or scholarships who have a TOEFL score ranging from 45 to 71 (iBT), 450 to 530 (PBT), or an IELTS score ranging from 5.0 to 6.0, are required to pay a $500 nonrefundable deposit no less than 60 days before the start of the first term of enrollment. An I-20 will not be issued without this deposit on file. Students are strongly encouraged to complete their application and pay the tuition deposit 90 days in advance to allow sufficient time to visit a U.S. embassy or consulate and secure a visa. The deposit will be applied toward the student’s intended first semester tuition. Should the student not attend UAA for the term in which they applied for admission, the deposit is forfeited.

Admission and Financial Aid

A financial aid award lists the different types of financial aid and the dollar amount for which a student is eligible. In order for financial aid to be paid or disbursed, all of the following criteria must be met:

1. Students must be admitted to an aid-eligible degree program (Admission Complete status for new students).
2. Students must meet satisfactory academic progress requirements.
3. Students must submit a FAFSA, or request FAFSA data be sent to UAA if the student is currently attending another college or university.
4. Students must have responded to all requests for additional information from the UAA Office of Financial Assistance.
5. Students using veterans or active duty military educational benefits must have submitted all requested applications and documentation as requested by UAA, the U.S. Department of Veterans Affairs and/or the U.S. Department of Defense.

Students applying after the application deadline will receive a financial aid award during the first four weeks of class. This means financial aid may not be disbursed before the payment deadline. Students should be prepared to pay the charges out of pocket (a refund will be issued once financial aid is awarded) or be prepared to pay the late fees for missing the payment deadline while waiting for financial aid to be disbursed.

Beginning July 1, 2012, there are strict new federal regulations regarding financial aid and individuals who have not graduated from high school or do not hold a GED. Please refer to the sections Admission and Financial Aid for Non-High School Graduates and Home School Applicants and Financial Aid in this chapter for more information.

Admission and Registration

Applicants may register for courses approximately three to five business days after they submit an Application for Admission via UAOnline or mail and after they have paid the application fee. Registration for new applicants begins on the second Monday of the priority registration period. Late applicants may register three to five business days after UAA has received a signed Application for Admission, a Late Application Agreement and application fee.

All students are encouraged to meet with a faculty or academic advisor prior to registration. Advising helps students clarify their goals, make suitable course selections and understand academic expectations. UAA also uses powerful tools, including the Map Works program and Degree Works, to help students succeed. These tools help students build and manage an academic plan that contributes to their success and on-time graduation. The most successful UAA students meet with their advisors regularly to review academic progress and update their degree plan in Degree Works.

New certificate- and degree-seeking students are directed to an appropriate advisor during the admission process. Applicants may contact the UAA One Stop or the Advising and Testing Center for assistance with advising and registration.

Some programs require that students meet with an advisor prior to registration. See Chapter 6 for more information.

Test Scores

ACT, SAT and Accuplacer scores are used as part of UAA’s admission process to determine a student’s readiness to study in their desired program and course placement. Test scores should be sent to the UAA Office of Admissions directly from the testing agency or be printed on the student’s official high school transcript. UAA will not accept copies of student score reports.

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

Transcripts

Transcripts are required for most types of admissions. Please review the instructions for each type of admission and contact the UAA One Stop with any questions.

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

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, applicants must complete the Ability to Benefit process or the home school applicant process for admission.

Transfer applicants should submit official transcripts from all regionally accredited colleges and universities attended so they can be evaluated for transfer of credit. UAA evaluates transcripts for transfer of credit as they arrive. If an applicant is currently attending a college or university, they should submit an official in-progress transcript from that institution so UAA can make an initial admission decision. Please see Final Transcripts in this chapter.

Students transferring from the University of Alaska Fairbanks, the University of Alaska Southeast or one of their community campuses do not need to submit transcripts from these institutions. The Office of Admissions will automatically retrieve records from courses taken at other UA campuses and via UA distance education.

All non-U.S. and French Canadian transcripts must be translated and evaluated using World Evaluations Service’s (WES) International Credential Advantage Package (ICAP) Course-by-Course Evaluation.
Final Transcripts
Applicants currently enrolled in high school or another college or university at the time they apply for admission must submit a copy of their official final transcript(s) immediately after they become available in order to complete the admissions process and to receive financial aid. It is important to note that financial aid cannot be disbursed to a student until official final transcript(s) have been received and evaluated by the Office of Admissions and the student’s application is moved to Complete Admission status.

Final transcripts should be sent directly to the UAA Office of Admissions by the issuing authority. Hand-carried transcripts must be in the original sealed envelope. Faxed transcripts are not accepted as final transcripts. Final transcripts will be reviewed upon receipt. Any substantial change in academic performance, failure to finish the term or failure to graduate may lead to revocation of admission to UAA. This will also lead to the immediate termination of financial aid.

It is the applicant’s responsibility to submit required transcripts. The UAA Office of Admissions cannot request transcripts from high schools or other colleges or universities. If a student is conditionally admitted and/or requests to postpone admission by the end of the semester, the student must submit final transcripts and enroll in classes by the end of the following semester. If their admission is not complete by the end of the following semester, their admission will be withdrawn.

Application and Admission Status Definitions

**Application Status**

- **Incomplete Application:** An incomplete application is one that is not accompanied by all required documents; generally, an application is considered incomplete until all required official transcripts and test scores have been received.
- **Departmental Review:** An application requiring 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.
- **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 at the Incomplete Admission status.
- **Provisional Admission:** University admission requirements have been met, but the student still needs to complete one or more department-specific 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.

**Special Information for Home School Applicants**

UAA welcomes applicants from home school environments. Beginning July 1, 2012, there are new federal regulations regarding financial aid that affect home school graduates; applicants are encouraged to review the UAA policy and contact the UAA One Stop with any questions.

Home school students should follow the application process for the type of program they are interested in with these special instructions:

- Transcripts will be accepted from home schools within the state of Alaska affiliated with a diploma-granting educational organization whose accreditation is recognized by the U.S. Department of Education.
- For students from outside Alaska, transcripts will be accepted from home schools registered or licensed by the state in which they are located and those affiliated with a diploma-granting educational organization whose accreditation is recognized by the U.S. Department of Education. The applicant must provide proof of registration, licensure, and/or affiliation with an accredited organization.

Students able to supply a high school transcript that meets one of the two criteria above should apply to UAA as any other high school graduate. They should follow the standard application process and must meet the standard admission criteria publicized in this chapter. Home school applicants who are unable to meet one of the above criteria may be admitted to UAA through one of these routes:

- Submit GED test scores, or
- Take UAA's Ability to Benefit test* offered at the Advising and Testing Center, or
- Submit an official SAT score report with combined Math and Critical Reasoning score of 1210, or an ACT composite score of 27*, or
- Submit official SAT or ACT scores, home school transcripts, a three-page essay on postsecondary educational goals and a letter requesting admission to a specific certificate or degree program.*

* Please note that passing the UAA Ability to Benefit test for admission, or being admitted based upon SAT or ACT scores may not make a student eligible for financial aid. Please see the section Home School Applicants and Financial Aid in this chapter for details.

**Home School Applicants and Financial Aid**

Beginning July 1, 2012, there are strict new federal regulations that impact home school students. In order to receive financial aid, a home school student must meet one of the following criteria:

- Have completed home school in the state of Alaska, or
- Have completed a home school program registered with, licensed by, or otherwise recognized by the state as high school or private school, or
- Have a certificate of completion or diploma issued by the state, or
- Have passed the GED exam.

Please note that there are differences between UAA’s admission policy for home school students and federal financial aid eligibility regulations. Home school students should contact the UAA One Stop to review their individual situation before making the decision to enroll and incur tuition charges.

**Admission and Financial Aid for Non-High School Graduates**

Certificate- and degree-seeking applicants 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 UAA 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 or visit www.uaa.alaska.edu/advising-testing.

Beginning July 1, 2012, there are strict new regulations regarding which students can receive financial aid. New students enrolling after July 1, 2012, must meet one of the following federal criteria to receive financial aid:

- Have a diploma from a public or accredited private high school (this can be from a foreign school if it is equivalent to a U.S. high school diploma), or
- Have the recognized equivalent of a high school diploma, such as a GED certificate, or
- Have completed homeschooling at the secondary level as defined by state law.

An admitted degree-seeking student at UAA may be eligible for financial aid if they have one of these recognized equivalents of a high school diploma:

- A GED certificate, or
- An academic transcript documenting successful completion of at least a two-year program that is acceptable for full credit toward a baccalaureate degree.

UAA has four paths to admission for students who have not graduated from high school or do not have a GED certificate:

1. Pass an Ability to Benefit test administered by the UAA Advising and Testing Center.
2. For certificate and associate degree programs, demonstrate completion of 30 or more semester credits with a GPA of 2.00 or greater.
3. For baccalaureate programs, demonstrate completion of 30 or more semester credits with a GPA of 2.00 and submit SAT or ACT scores.
4. For baccalaureate programs, demonstrate completion of 60 or more semester credits with a GPA of 2.00 or greater.

Students can be admitted through one of these paths, but they will not be eligible to receive financial aid. The only exception would be a student who has completed a transferable associate degree program of at least 60 semester credits (two years) who is applying to a bachelor’s program or higher. Such applicants are strongly advised to contact the UAA One Stop to review their individual situation before enrolling.

A bachelor’s degree student admitted without a high school diploma or GED cannot start receiving financial aid after completing 60 credits toward a degree. The regulations specifically state the student must complete (graduate from) a two-year transferable program first.

**Related Undergraduate Admission Policies**

**Length of Admissions**
Certificate and associate degree students have five years to complete their certificate or degree requirements; baccalaureate degree-seeking 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.

**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 for this process.

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 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 level program, a student must complete and submit a Change of Major Form as described above. Changes from baccalaureate to certificate/associate programs will be processed for the next available semester. If a student later decides to complete a baccalaureate program, he or she will need to reapply for admission to a baccalaureate 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.

**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.

**Returning to UAA After a Break in Enrollment**
Admission to the university and academic program(s) is automatically canceled for undergraduate students who do not attend UAA for two years or more. To return to UAA, students must apply for admission as a new applicant as instructed in this chapter and, if admitted, will be required to follow the program and graduation requirements under the new catalog year.

Undergraduate students who discontinue their enrollment at UAA for two years or less remain admitted and may register for courses during normal registration periods. If applicable, they must submit official transcripts from institutions attended during their absence for transfer credit evaluation. Students return to UAA under the catalog year attached to their original admission.

In all cases, the five-year and seven-year catalog year limitations described in this chapter apply.

Procedures for students academically disqualified are found in this chapter under Reinstatement. Students ineligible to register due to a student conduct suspension should contact the Dean of Students Office for instructions.
Academic Planning

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 200 programs at the certificate, two-year, four-year, and graduate 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, if applicable.
• 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 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.

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 one year 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 class listing 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 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>ACT Score</th>
<th>SAT 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 or higher</td>
<td>620 or higher</td>
</tr>
<tr>
<td>ENGL A212*</td>
<td>30 or higher</td>
<td>620 or higher</td>
</tr>
<tr>
<td>ENGL A213*</td>
<td>30 or higher</td>
<td>620 or higher</td>
</tr>
<tr>
<td>ENGL A214*</td>
<td>30 or higher</td>
<td>620 or higher</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 6 credits. Call the English Department at (907) 786-4355 for questions on test scoring.

Mathematics Course Placement

Mathematics placement testing is available through Advising and Testing (907-786-4500). 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 courses:

<table>
<thead>
<tr>
<th>Mathematics Course</th>
<th>ACT Score</th>
<th>SAT Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH A055</td>
<td>---</td>
<td>400-479</td>
</tr>
<tr>
<td>MATH A105</td>
<td>18-21</td>
<td>480-519</td>
</tr>
<tr>
<td>MATH A107,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH A109</td>
<td>22-25</td>
<td>520-589</td>
</tr>
<tr>
<td>MATH A172</td>
<td>24 or higher</td>
<td>560 or higher</td>
</tr>
<tr>
<td>or STAT A252</td>
<td>26 or higher*</td>
<td>590 or higher*</td>
</tr>
<tr>
<td>MATH A200</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

For MATH placement, ACT and SAT test scores are valid for one year from the date taken. Students will be required to produce proof of test scores on the first day of class.

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 coursework-related work completed outside the classroom to award 1 credit. Some
Academic Standards & Regulations

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 certificates or associate, baccalaureate or graduate degrees, even by petition.

Academic Credit Courses

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

The numbering sequence signifies increasing sophistication in a student's ability to extract, summarize, evaluate and apply relevant class material. Students are expected to demonstrate learning skills commensurate with the appropriate course level, and to meet, 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 degrees and baccalaureate degrees in accordance with certificate and degree requirements.

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

Upper Division Courses

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

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

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

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

Transfer Courses

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

F = Fine Arts
H = Humanities
IC = Integrated Capstone
N = Natural Sciences Lecture only
NL = Natural Sciences Lab only
NS = Natural Sciences Lecture/Lab
O = Oral Communications
Q = Quantitative Skills
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. A directed study requires the approval of the department concerned and final approval by the dean/director.

The policies are as follows:

- Retroactive registration is not permitted.
- Directed Study Forms incorrectly completed will not be processed.
- Courses scheduled for less than a full semester may not be offered for more than 1 credit each week.
- For fall and spring semesters, the deadline for directed study registration is the end of the ninth week.
- For the summer semester, the deadline for directed study registration is the end of the seventh week of the 10-week session.
- There can be no change in the basic content of the course. In particular, this means the number, level, prefix, description,
title, grading policy (A-F, P/NP), credits and course content cannot differ from the permanent course.

- Only regular (tenure track or term) faculty are allowed to supervise or to be the instructor of record for directed study courses. The dean or director may function as instructor of record when no regular faculty is available to fulfill that function. The responsibilities of the instructor of record are to:
  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 faculty member teaching the course must have taught the permanent course or a related course prior to teaching a directed study.
- The initiation of directed studies must come from the faculty in the discipline and must be approved by the dean or director.
- Once the directed study course has been approved, the student will be automatically registered for the course unless holds exist on the student account.
- Student must be an admitted certificate/degree-seeking student.

Independent Study

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

The policies are as follows:
- Retroactive registration is not permitted.
- Independent study courses cannot be used to fulfill GERs. This policy is not petitionable.
- Independent Study Forms incorrectly completed will not be processed.
- Courses scheduled for less than a full semester may not be offered for more than 1 credit each week.
- For fall and spring semesters, the deadline for independent study registration is the end of the ninth week.
- For the summer semester, the deadline for independent study registration is the end of the seventh week of the 10-week session.
- Only regular or term faculty are allowed to be the instructor of record for the independent study courses. The dean or director may function as instructor of record when no regular or term faculty are available to fulfill that function. The responsibilities of the instructor of record are to:
  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.

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.

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.

Internships

An internship is a student work experience in which the employer or agency is the student’s immediate supervisor, is active in planning the expected outcomes and is involved in the evaluation of the student’s achievements. A faculty member must act as instructor and approve the work activities, the student learning outcomes and the evaluation method. The instructor reviews all of the final documents upon completion of the assignment and assigns the final grade. Internships require that the student completes a minimum of 45 hours of work with the employer for each credit earned. Final course grades are generally based on hours worked, outcomes achieved, employer and instructor ratings of work performance, and evaluation of required journals or reports.

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

Practicum

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

Practicum Requirements and General Information

Many academic programs require completion of a practicum, clinical assignment or other field placement. Before applying to such programs, students should familiarize themselves with the requirements for such placements, which may include infectious disease testing, drug testing, criminal background checks or other qualifications. Students are responsible for ensuring that there are no legal or other impediments to their acceptance into a placement.

Criminal History

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

**Health and Safety**

Placements may require documentation of immunity to infectious diseases. The circumstances in which a student with an infectious disease, or who otherwise poses a significant risk to the health and safety of others, may participate in a placement will be determined on a case-by-case basis. A student who poses a significant risk to the health and safety of others 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 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.

Students should consider their graduation timeline when planning their study load. The minimum number of required credits is 60 for an associate degree and 120 for a baccalaureate degree. To complete an associate degree in two years or a baccalaureate degree in four years (excluding summers), a full-time student should plan to take a minimum of 15 credits each semester. 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 university-wide 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 9th, 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**

[http://uaonline.alaska.edu](http://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. Obtain secondary student registration forms online, at the University Center One Stop, or at the community campuses;
2. Obtain signed approvals on the Secondary School Student Signature Form from the local area school district designees. 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 designee;
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 numbers 2 through 5 above 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 UAA Catalog and Fact Finder/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.

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 are those who require a Form I-20 to apply for an F-1 visa (non-immigrant student). See the Admissions section of this chapter for more information.

Senior Citizens
Alaska residents who are senior citizens may qualify for tuition and special fee consideration. See Chapter 4 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 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 chapter for more information.

Non-Degree-Seeking Students

Individuals in this category are not currently seeking a UAA certificate or degree. See the Admissions section of this chapter for more information.

Resident Credit

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

In general, credit earned at 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 toward 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 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

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).

Certificates and Associate Degrees

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

If the requirements for a certificate or associate 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 university-wide undergraduate policy on the age limit of credits. However, to guarantee currency of course content, some departments and degree programs require courses to have been completed within a specified period of time. Contact specific departments for more information.

Transfer Credits

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

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

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.

4. Students who plan to transfer credits from outside the United States must provide an official statement of educational equivalence from World Education Services. Please visit www.uaa.alaska.edu/ records/oei/international.cfm for additional information.

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

6. Challenge examinations, credit by examinations and credit awarded for massive open online courses (MOOCs) posted on another university’s transcript will not be considered for transfer credit (see National Credit by Examination in Chapter 8).

7. Courses from the University of Alaska Fairbanks or the University of Alaska Southeast are transferred to UAA based on applicability toward degree requirements. They are considered non-resident credits.

8. Credits from institutions that are not accredited by one of the regional associations listed above are only accepted under special arrangements that may be initiated upon student request. UAA academic departments determine unaccredited course equivalency (such as 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 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 coursework 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</td>
</tr>
</tbody>
</table>

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Junior cannot be petitioned to meet a GER. Changes in course level, grading or number of credits awarded cannot be noted that the 34-credit common core is a minimum requirement for general education. An institution may require more than 34 general education credits for its baccalaureate degrees, and transfer students must meet the total requirement at the receiving institution. Transfer of GERs beyond the 34 credits described above will be determined on the basis of individual requirements specified by university catalogs.

In its catalog, each University of Alaska institution specifies the courses that meet the GER categories at that institution and can thus be guaranteed to transfer as described above. See Chapter 10 for the GER substitution table.

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 and is used for determining priority registration. Undergraduate degree-seeking students are classified as follows:

<table>
<thead>
<tr>
<th>Class Standing</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman/First Year</td>
<td>0 - 29</td>
</tr>
<tr>
<td>Sophomore/Second Year</td>
<td>30 - 59</td>
</tr>
<tr>
<td>Junior</td>
<td>60 - 89</td>
</tr>
<tr>
<td>Senior</td>
<td>90+</td>
</tr>
</tbody>
</table>

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 online 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 rests 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 included in that semester’s class listings through UAOline. Not every course listed in this catalog is offered each semester.

It is the responsibility of the student to become familiar with UAA policies, procedures and deadlines. Refer to the academic calendar at www.uaa.alaska.edu/records/calendar.cfm for specific deadlines. Students are expected to register only for course sections that they plan to attend and to complete all courses for which they register.

Students may register in person or use the UAOline 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 registration, UAA follows a priority schedule for the opening days of registration based on the student’s class standing. Class standing is determined by total credits earned. Students can check their standing in UAOline on the “Check Your Registration Eligibility” screen. See the UAA class listing each semester for the open registration dates. Registration will open at 12:01 a.m. to each group of students according to the schedule below.

<table>
<thead>
<tr>
<th>Sequence</th>
<th>Class standing</th>
<th>Credits earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Graduate students</td>
<td>90+ credits</td>
</tr>
<tr>
<td>2</td>
<td>Seniors</td>
<td>60-89 credits</td>
</tr>
<tr>
<td>3</td>
<td>Juniors</td>
<td>30-59 credits</td>
</tr>
<tr>
<td>4</td>
<td>Sophomores</td>
<td>1-29 credits</td>
</tr>
<tr>
<td>5</td>
<td>Freshmen</td>
<td>90+ credits</td>
</tr>
<tr>
<td>6</td>
<td>New applicants for degree-seeking admission</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Open registration (all students)</td>
<td></td>
</tr>
</tbody>
</table>

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

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 before dropping or auditing a course. (See Chapter 4 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.

University of Alaska Anchorage 2013-2014 Catalog

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Add, Drop and Withdrawal Deadlines for Semester-Length Courses

The following registration activity deadlines pertain to traditional semester-length courses (15 weeks). Any course that is not full semester or in the 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. via UAOnline.

<table>
<thead>
<tr>
<th>Add classes or late register</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>Faculty signature required if class is closed</td>
<td>Faculty signature required</td>
<td>Not permitted</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Faculty-initiated drop or withdrawal (optional)</th>
<th>Drop</th>
<th>Withdrawal</th>
<th>After week 12 of semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1 through 2 of semester</td>
<td>Weeks 3 through 12 of semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Form filed by faculty member with the Office of the Registrar. Class will not appear on student transcript.</td>
<td>Form filed by faculty member with the Office of the Registrar. Class will appear on student transcript with a grade of W.</td>
<td>Not permitted</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Drop or withdrawal</th>
<th>Drop</th>
<th>Withdrawal</th>
<th>After week 12 of semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weeks 1 through 2 of semester</td>
<td>Weeks 3 through 12 of semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No faculty signature required. Class will not appear on student transcript.</td>
<td>No faculty signature required. Class will appear on student transcript with a grade of W.</td>
<td>Not permitted</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total withdrawal from university</th>
<th>Drop</th>
<th>Withdrawal</th>
<th>Week 13 through last Friday before finals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weeks 1 through 2 of semester</td>
<td>Beginning of week 3 of semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No faculty signature required. Classes will not appear on student transcript.</td>
<td>No faculty signature required. Classes will appear on student transcript with a grade of W.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Add, Drop and Withdrawal Deadlines for Summer Courses

The add/drop deadline for any summer course will be one week after the published start date.

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

The withdrawal deadline will be the third Friday of the first and second five-week terms. All courses with a start date prior to June 10 will be held to the first withdraw deadline; all other summer courses will be held to the second.
**Wait Listing**

Students may waitlist for courses that are currently full through UAOnline. As space becomes available students will be notified through their preferred email on a first-come first-served basis. Students have 48 hours from the time the email is sent in which to register for the course. Students are not billed until registration is complete.

**Registration by Proxy**

Students unable to register in person may have a proxy register for them if they provide the proxy with a signed 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.

**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 requirements must be satisfied. Credit-to-audit 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.

**Cancellation of Classes**

UIAA 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 the number of requests being reviewed will determine the time for response. A minimum of six to eight weeks should be allowed for review of requests involving refunds and/or late fees.

**Exception to University Policy for Registration**

In the event of extenuating circumstances, a student, or person with legal authority to act on behalf of a student, may request an exception to university policy involving registration deadlines and/or refund for tuition. Requests 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 student must submit for review a signed Request for Exception. The form, specific request, and all supporting documents 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 requests submitted by the student or by a person with legal authority to act on behalf of the student will be considered.
3. A request for exception to registration deadlines or refund must be received no later than one year following the semester in which the course was offered. Requests that are not received within this time frame will not be considered.
4. Decisions will be made solely on supporting documentation provided.
5. A request will only be approved if the student 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 UIAA’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. Requests for exceptions will be reviewed periodically and the number of requests being reviewed will determine the time for response. A minimum of six to eight weeks should be allowed for review of requests involving refunds and/or late fees.
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.

10. 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.

**Course Performance**

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

**Class Attendance**

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

Unexcused absences may result in a student being withdrawn from the class or receiving a failing grade. Unreasonable refusal to accommodate an emergency absence or class absence as described below may be appealed under the Academic Dispute Resolution Procedure (see Chapter 5 for more information).

**Class Absences**

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

**Military Students Called to Active Duty or Deployment**

Students called to active duty or involuntary activated, deployed or relocated during an academic term may be able to make arrangements with their faculty members to complete their courses via e-learning. In those cases where this is not possible or desirable, these students are eligible for the 100 percent refund of tuition and fees and a prorated adjustment on housing and meal plans. Returning military students are not required to reapply for admission and are welcomed back as in-state residents for tuition purposes. Military students who return after their admitted catalog expires should meet with an academic advisor for assistance.

**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.
Academic Standards & Regulations

(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 that 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 to avoid a possible faculty-initiated withdrawal.

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.

Required text materials can be found prior to registration through UAOnline. Additional course material will be made available by the instructor at the start of the course.

Assignments and Tests

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 content, policies within the course, procedures that govern the delivery of the course, the learning outcomes, and the grading system used.

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

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.

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

Other Designations

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

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

Credit/No Credit

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

This option may not be used in courses that meet General Education Requirements (GERs) or major or minor requirements in a student’s program. If 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

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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 one semester. Credit is withheld, without academic penalty, until the course requirements are met. If coursework is not completed prior to fulfilling graduation requirements or if the student fails to maintain enrollment for one year, the DF will become a permanent grade and it will be necessary for the student to re-register to obtain credit for the course.

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

An Incomplete Grade Contract Form between the student and the faculty member, stipulating the assignment(s) required to finish the course and the 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 grade (NB) 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/NP) basis. This grading system is established at the time the course is approved and must apply to the class as a whole. Pass/no pass grading is not a student option.

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

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

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

A Change of Grade Form must be submitted to the Office of the Registrar by the appropriate faculty member. Change of Grade Forms will not be accepted if submitted by the student.

Allegations of final grading errors or arbitrary and capricious grading for a final grade assignment are reviewed according to the Academic Dispute Resolution Procedure (See Chapter 5 or the UAA Fact Finder/Student Handbook 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:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.00</td>
</tr>
<tr>
<td>B</td>
<td>3.00</td>
</tr>
<tr>
<td>C</td>
<td>2.00</td>
</tr>
<tr>
<td>D</td>
<td>1.00</td>
</tr>
<tr>
<td>F</td>
<td>0.00</td>
</tr>
</tbody>
</table>

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 2 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, 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, 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. Students may apply for reinstatement 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. These courses must be taken after the loss of degree-seeking status at UAA. Application for Reinstatement Forms are available from University Center One Stop. 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.

Departmental Probation or Removal from a Major Program
Individual departments may establish additional criteria for departmental academic action. Failure to meet or maintain these criteria may result in departmental probation or removal from a major program. Those students’ major program will be changed to undeclared. Students will remain in a certificate or undergraduate degree-seeking status as long as the university’s minimum academic standards are met. Undeclared students must use the Change of Major Form and process to request re-admission or admission to a new program. Forms are available online 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 the Dean’s List, a student must be an admitted undergraduate degree/certificate-seeking student enrolled in at least 12 UAA credits graded with academic letter grades and must have earned a GPA of at least 3.50 for the semester. Regardless of the number of credits a student is enrolled in, temporary grades of I (incomplete) or DF (deferred) will prevent a student from being eligible for the Dean’s List.

Chancellor’s List
To be eligible for the Chancellor’s List, a student must be an admitted undergraduate degree/certificate-seeking student enrolled in at least 12 UAA credits graded with academic letter grades and must have earned a GPA of 4.00 for the semester. Regardless of the number of credits a student is enrolled in, temporary grades of I (incomplete) or DF (deferred) will prevent a student from being eligible for the Chancellor’s List.

Program Completion
Application for Graduation
UAA awards degrees and certificates year-round and prints diplomas monthly. 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 the Friday before finals for the semester in which the student intends to graduate. Students graduating during the spring semester should apply by April 1 in order to have their name produced in the commencement program.

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. Students who complete requirements before the end of the semester may contact degrees@uaa.alaska.edu to request that their certificate/degree be awarded early.

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

Names of students receiving 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 record.

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 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.

Graduation with Honors
To be eligible to graduate with honors, associate 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 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 presents a student’s entire academic history. All grades and credits earned will be included in determining eligibility to graduate with honors (Ds, Fs, repeated courses, courses lost in academic bankruptcy, etc.). In addition, a student transferring coursework and grades must have a minimum of 70 percent of their credits submitted with letter grades to be eligible to graduate with honors.

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

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

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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. Students who apply for spring graduation will only be eligible to wear honor cords and be recognized in the commencement program as receiving Latin honors if their overall GPA at the end of fall semester is 3.50 or above. Students who earn honors after spring grades will have honors displayed on their diploma and transcript and may request honor cords with their diploma.

Official Communication by UAA E-mail
All communication related to registration and enrollment activities will occur either through the preferred email that students submit via UAOnline or through the official UAA-assigned email. Students should be careful to keep this account clear and review the correspondence received there regularly.

Facsimile (Fax) or Electronic Transmission
Documents received electronically or 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. Electronic submissions and 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 is careful to guard private information and 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 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 or Email
Currently enrolled students may update their address or email through UAOnline or by completing a Change Form.

Social Security Number
The University of Alaska has established student identification numbers and does not use Social Security numbers for student identification. The university is still required to collect a valid Social Security number from each student for IRS, employment and federal financial aid purposes. The last four digits of the Social Security number are included on official transcripts for identification matching purposes.
Educational Delivery Methods & Nontraditional Credit

Faculty Technology Center
Distance Education Services

Military Programs
Nontraditional Credit

National Credit by Examination
Faculty Technology Center (FTC)
Consortium Library (LIB), Suite 215
(907) 786-4496
Fax: (907) 786-1008
www.uaa.alaska.edu/facultytechnologycenter

UAA has a particular interest in expanding the use of technology to provide courses to better meet the needs of students today and into the future. The Faculty Technology Center supports technology-enhanced instruction for the UAA campus community, in both classroom and e-learning environments. FTC’s mission is to stimulate learning and facilitate the use of appropriate technologies to support teaching and learning at UAA.

FTC employs skilled staff and an instructional laboratory to provide training and instruction in the uses of technology to all UAA faculty. It also works with the Center for Advancing Faculty Excellence (CFAE) to understand and test the best uses of technology in course development, teaching, and redesign.

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

Distance Education Services offers courses that are convenient for college students with busy schedules. E-learning 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 e-learning courses.

E-learning 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 e-learning and on-campus courses. Most e-learning courses are delivered along the same semester timeline as on-campus courses.

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

Many different technologies are used to deliver e-learning courses. Most courses use a combination of the following:

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

Proctoring Services
(907) 786-4500

Most e-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 e-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 $35 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.

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 Reserve personnel; their spouses and dependents; and Department of Defense civilian personnel.

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

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

Courses at Elmendorf are offered at:
Elmendorf Air Force Base
3 FSS/DPE 4109 Bullard Ave., Suite 107
JBER-E, Alaska 99506
(907) 753-0204

Courses at Fort Richardson are offered at:
Fort Richardson
Building 7 Chilkoot Ave.
JBER-R, Alaska 99505
(907) 428-1228

Nontraditional Credit
Academic credit may be awarded to students who demonstrate mastery of knowledge or skills that were acquired outside of an accredited college or university. Nontraditional credit evaluations are available for accepted, degree-seeking UAA students. Credit is granted for coursework for which students show documented achievement of equivalent outcomes. UAA faculty have evaluated specific training programs, exams and certifications in a number of disciplines and have determined that those listed below may result in the award of academic credit. The discipline and number of credits are established by the faculty and reviewed on a regular basis. Use of nontraditional credit to complete certificate or degree requirements may be limited; students should see their academic advisor for more information.

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 higher is eligible to receive credit for the two immediately preceding courses, if any, up to a total of 8 credits not to exceed the level of A202. Language Credit 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 Examination Program, nor to special topics (-93), independent study (-97), the course A302, or Department of Languages literature or culture courses. In order to receive credit the student must complete the appropriate form in the Office of the Registrar and pay an administrative fee.
Certified Experience Credit
UAA may award elective or specific course credit for learning that is documented with a professional certification or completion of exams that lead to certification. These certificates indicate that individuals have met certain standards and demonstrated specific competencies. Credit arrangements are currently in effect for the following:

- Certified Dental Assistant (CDA) by Dental Assisting National Board Examination (DANB) (contact the College of Health, School of Allied Health)
- Certified Professional Secretary (CPS) Examination (contact the Community & Technical College, Computer and Electronics Technologies Department)
- Child Development Certificate from the Council on Professional Recognition (contact the College of Education)
- Department of Defense Fire & Emergency Services — multiple (contact the College of Health, School of Allied Health)
- Federal Aviation Administration Certificates or Knowledge Tests — multiple (contact the Community & Technical College, Aviation Technology Division)
- Federal Wildland Fire Management Training Program — multiple (contact the College of Health, School of Allied Health)
- International Fire Service Accreditation Congress (IFSAC) — multiple (contact the College of Health, School of Allied Health)
- National Council Licensure Examination (NCLEX) (contact the College of Health, School of Nursing)
- National Fire Protection Association (NFPA) — multiple (contact the College of Health, School of Allied Health)
- National Wildlife Coordinating Group (NWFG) — multiple (contact the College of Health, School of Allied Health)
- Southcentral Foundation Dental Assisting Training Program (contact the College of Health, School of Allied Health)
- State of Alaska EMT/Paramedic — multiple (contact the College of Health, School of Allied Health)
- State of Alaska Fire Certifications — multiple (contact the College of Health, School of Allied Health)
- U.S. Department of Homeland Security FEMA Emergency Management Institute — multiple (contact the College of Health, School of Allied Health)
- U.S. Department of Labor Certificate of Completion of Apprenticeship (contact the Community & Technical College, Career and Technical Education Department)

Business or industry credit: Recommendations for business or industry credit equivalents are found in the American Council on Education’s National Guide. They cover courses or formal instruction offered by businesses, government agencies, labor unions and professional or voluntary associations. At this time UAA does not accept recommendations related to massive open online courses (MOOCs).

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, DSST, ACT-PEP, or other national examinations may be administered instead of a local examination.

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

Military Credit
Eelective credits may be awarded to students who have completed active-duty military service, in accordance with ACE Guide credit use. Additionally, credits may be granted for formal service schools and the primary MOS/Rating as recommended in the Guide to the Evaluation of Education Experiences in the Armed Services prepared by the American Council on Education. Students who wish to use military credit to meet degree requirements should work with an academic advisor to submit a Request for Evaluation of Military Training.

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

To graduate from these programs, the residency requirement is 3 semester credits and an overall GPA of 2.00.

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 UAA Office of the Registrar. Credit may be received for more than one national examination.

A list of all current national examinations, including current equivalencies to UAA courses, number of credits awarded and minimum required scores, may be found at www.uaa.alaska.edu/records/ace/nationalexam.cfm.

Advanced Placement (AP) Program
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.

College-Level Examination Program (CLEP)
Credit awarded for CLEP examinations is often elective credit. A student may work with an individual department to determine if more specific course credit may be awarded for a specific examination. Examinations may not be repeated for a minimum of six months.

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

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

**International Baccalaureate**

UAA awards credit for satisfactory performance (a score of 5 or higher) on the International Baccalaureate Higher Level Examinations.
Academic Preparation, Professional Development & Training
Academic Preparation

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

The mission of the College Preparatory and Developmental Studies Department is to help underprepared, linguistically diverse and nontraditional students develop the academic and language skills necessary to successfully pursue 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.

Professional Development and Continuing Education

**College of Education**

Professional and Continuing Education (PACE)
(907) 786-1933
www.uaa.alaska.edu/coe
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

Continuing Education (CE)
(907) 786-6790
www.uaa.alaska.edu/continuinged

Continuing Education includes several areas of professional development and continuing education: workforce development, community education, noncredit instruction and personal enrichment. CE matches business and individual needs with appropriate CTC and UAA resources to deliver high quality, short-term education and training for professionals in career and technical fields. Programs are often custom-developed for requesting organizations and businesses, and may include credit, noncredit, and continuing education unit (CEU) courses. CE also supports the UAA community outreach goal through centralized community education and personal enrichment programming for the entire Anchorage service area.

**Centers and Institutes Offerings**

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 are arranged through the respective center or institute and course offerings depend on the demand and availability of qualified faculty. For more information, see Chapter 2.

**Tech Prep Program**

(907) 786-6464
www.uaa.alaska.edu/techprep

The objective of the Tech Prep Program is to prepare students for college and Career and Technical Education (CTE) fields by offering them contextualized and engaged learning experiences. Tech Prep is a partnership between UAA and other educational institutions that offers students the option of earning college credit concurrent with their secondary or technical training programs. These credits subsequently apply to a UAA certificate, credential, associate degree or baccalaureate degree, and allow students to seamlessly transition into the next phase of their education without duplication of coursework.

Students receiving Tech Prep credit must be concurrently registered in a course at the partnering institution and at 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). Tech Prep credit is transferable and results in a permanent transcript notation, which can have implications for financial aid, transfer or scholarship eligibility. Students who participate in the Tech Prep Program are encouraged to develop a personal learning and career plan and to review course selections with academic advisors or guidance counselors to ensure their applicability.

Students who participate in the Tech Prep program at partnering institutions adhere to the UAA Student Code of Conduct guidelines for academic integrity. Students under the age of 18 may be eligible for some Tech Prep courses and may participate with permission from a parent or guardian.

**Credits**

Most students receiving Tech Prep credit are concurrently registered in a course at the partnership institution and at 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 requirements for specific programs. In some cases, courses may be articulated to UAA lower division elective credit.

**Nontraditional Transfer Credits (Nonconcurrent)**

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.
Undergraduate Programs

Academic Programs
General University Requirements for Occupational Endorsements, Undergraduate Certificates & Associate Degrees
Associate of Applied Science Degree Requirements
Multiple Associate Degrees or Concurrent Majors

Double Majors for AAS Programs
Baccalaureate Degrees Requirements
General University Requirements for Baccalaureate Degrees
General Education Requirements for Baccalaureate Degrees

Concurrent Baccalaureate Programs
Second Baccalaureate Degrees
Interdisciplinary Baccalaureate Degree
Undergraduate Program Descriptions
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 for further information). The requirements for each degree include completion of a minimum number of courses, resident credits, fulfillment of the General University Requirements and the General Education Requirements (GERs), and completion of program requirements.

**Academic Programs**

**Occupational Endorsements and Undergraduate Certificates**

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

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

- **Undergraduate certificates of 30 credits or more** offer focused instruction in a concentrated area. They include an equivalent of at least 6 credits of related instruction at the collegiate level in communications, computation and human relations. These certificates provide knowledge and skill development in broad enough areas to prepare students for entry into a variety of career fields. They are particularly appropriate in scientific or technical areas such as health care, computer systems, transportation or industrial technology.

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

**Associate Degrees**

UAA offers two types of associate degrees, both of which require the completion of 60 credits or more:

- **The Associate of Arts (AA) degree** combines broad studies in written communication, oral communication, humanities, mathematics, natural sciences and social sciences, with elective coursework selected by the student. The degree provides broad exposure to systems of thought and inquiry, allows exploration of a variety of disciplines and learning experiences, and provides a solid foundation for further study at the baccalaureate level. The AA degree is administered by the College of Arts and Sciences (CAS). The complete program description is found under the CAS section 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 programs are designed to provide a foundation for a specific related baccalaureate degree. Students in AAS programs build knowledge and skills needed to carry out specific tasks while they develop abilities in the essential elements of communications, computation and human relations.

**Baccalaureate Degrees**

Baccalaureate — or bachelor’s — degrees, 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 grade point average (GPA) of at least 2.00 (C) in the minor. Students must follow minor requirements from the same catalog used for the baccalaureate program. Refer to each discipline for specific requirements. Students must declare minors no later than the deadline to submit an Application for Graduation.

**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 certificates and graduate certificates and degrees are described in chapters 11 and 12.

**General University Requirements for Occupational Endorsements, Undergraduate Certificates and Associate Degrees**

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

**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 graduate 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 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 graduate 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 the Associate of Arts**

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

**General University Requirements 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.
4. Students must complete at least 15 credits in residence. Additional residency credit requirements, to meet program accreditation standards, may be established.
5. Students must earn a cumulative GPA of at least 2.00 (C) at UAA. They must also earn a cumulative GPA of at least 2.00 (C) in all courses required for each major. Some associate degree programs may require higher GPAs.
6. 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.
7. 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.
8. All courses for an AAS degree must be at the 100 level or above.

**Associate of Applied Science Degree Requirements**

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

1. General University Requirements for Associate of Applied Science Degrees, and
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>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM A111</td>
<td>Fundamentals of Oral Communication</td>
</tr>
<tr>
<td>COMM A235</td>
<td>Small Group Communication</td>
</tr>
<tr>
<td>COMM A237</td>
<td>Interpersonal Communication</td>
</tr>
<tr>
<td>COMM A241</td>
<td>Public Speaking</td>
</tr>
</tbody>
</table>

B. Written Communication Skills

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL A111</td>
<td>Introduction to Composition</td>
</tr>
<tr>
<td></td>
<td>and one of the following:</td>
</tr>
<tr>
<td>CIOS A260A</td>
<td>Business Communications</td>
</tr>
<tr>
<td>ENGL A211</td>
<td>Academic Writing About Literature</td>
</tr>
<tr>
<td>ENGL A212</td>
<td>Technical Writing</td>
</tr>
<tr>
<td>ENGL A213</td>
<td>Writing in the Social and Natural Sciences</td>
</tr>
<tr>
<td>ENGL A214</td>
<td>Persuasive Writing</td>
</tr>
</tbody>
</table>

3. General Course Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>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.</td>
</tr>
</tbody>
</table>

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

4. Degree-Specific Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(See degree programs under each college in this chapter.)</td>
</tr>
</tbody>
</table>

5. Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Varies</td>
</tr>
</tbody>
</table>

Total Minimum Credits

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
</tr>
</tbody>
</table>

All courses must be at the 100 level or above.
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, mathematics, natural science or social science).

The design of AAS degrees, like that of undergraduate certificates, ensures further that students gain some proficiency in essential skills of communication, computation and human relations. In the absence of specific required courses in these areas, the degrees address these topics in the major requirements and measure student performance in those classes.

**Humanities**
- Alaska Native Studies
- American Sign Language
- Art
- Chinese
- Communication
- Creative Writing and Literary Arts
- Dance
- English*
- French
- German
- History
- Humanities
- Italian
- Japanese
- Korean
- Languages
- Latin
- Liberal Studies Integrated Core
- Linguistics
- Music
- Philosophy
- Political Science (PS A331, PS A332 and PS 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 A211 only)
- Geography (ENVI 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 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)
- Legal Studies (LEGL A101 only)
- Liberal Studies Social Sciences
- Political Science
- Psychology
- Social Work (SWK A106 and SWK A243)
- Sociology
- Women's Studies

**Multiple Associate Degrees or Concurrent Majors**
The Associate of Arts is intended to provide a broad education. Therefore, it includes no major specialty, and students may earn only one AA degree.

Associate degree-seeking students may graduate (during the same semester) with two degrees, provided they have applied to and been accepted in both degree programs. (An Associate of Applied Science and Associate of Arts is an example.)

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).

Students seeking a second associate degree must be admitted to the program and must complete the General University Requirements for that degree, the degree requirements for both programs, and at least 12 resident credits earned after the posting of the primary degree. Students seeking both an associate degree and a baccalaureate degree must be admitted to both programs (or have completed one program) and must complete the General University Requirements and degree-specific requirements for both degrees.

Students 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**
Associate of Applied Science degrees are intended to provide specialized education. Therefore, they do include a major specialty and students may earn more than one AAS.

Associate of Applied Science degree-seeking students may apply to graduate (during the same semester) with two majors. For example, a student may select two areas from the approved majors within the AAS degree program (such as Welding and Automotive Technology).

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/records/registrarforms.cfm. Students must satisfy the General University Requirements, the General Course Requirements and both sets of major requirements.

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).

Students seeking a second associate degree must be admitted to the program and must complete the General University Requirements for that degree, the degree requirements for both programs, and at least 12 resident credits earned after the posting of the primary degree. Students seeking both an associate degree and a baccalaureate degree must be admitted to both programs (or have completed one program) and must complete the General University Requirements and degree-specific requirements for both degrees.

Students 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.

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 degree from UAA must:

1. Meet program admission requirements,
2. Complete the General University Requirements but not the General Education Requirements or General Course Requirements, and
3. Complete the major program requirements.
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 (GERs) 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-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 formal acceptance.

- 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.

General Education Requirements (GERs) for Baccalaureate Degrees

General Education Requirements (GERs) provide students with a common educational experience in order to provide a foundation for further study and broaden the educational experience of every degree-seeking student. They are designed to promote an elevation of the student’s level in basic college-level skills (Tier 1), a breadth of exposure to traditional academic disciplines (Tier 2), and 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 GERs begin 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, communications 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.

Integrative capstone (Tier 3) courses may be taken only after the student has completed all basic college-level skills (Tier 1) 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 GER classifications has a list of approved courses (see the General Education Requirements 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 GER category.
• Courses ending with numbers _93 or _94 cannot satisfy a GER, and UAA courses not on the approved GER classification list cannot be petitioned to meet a GER.

**General Education Requirement Student Learning 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 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 Requirements 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 GER list cannot be petitioned to meet a GER. For more information, see the Academic Petition section in Chapter 7.

**General Education Requirement Classification List**

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

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. 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 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. 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. 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. 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. 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.

Students who wish to use a UAF or UAS course to meet a UAA GER should refer to the table of substitutions in this section.

**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>
</tbody>
</table>

Oral communication skills courses increase the abilities of students to interact appropriately and effectively in a variety of contexts, including interpersonal, small group and public speaking settings. In these courses, students develop both their message creation and message interpretation skills in order to be more successful communicators. In doing so, students develop an awareness of the role of communication in a variety of human relationships. Students develop and implement effective and appropriate communication skills, including the ability to develop, organize, present and critically evaluate messages; analyze audiences; and adapt to a variety of in-person communication settings.

Courses completed at UAA must be selected from the following:

**Oral Communication courses:**

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

**Classification**

<table>
<thead>
<tr>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>3</td>
</tr>
</tbody>
</table>

**Tier 2: Disciplinary Areas**

<table>
<thead>
<tr>
<th>Classification</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fine Arts*</td>
<td>3</td>
</tr>
</tbody>
</table>

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</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AKNS A101A</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.*

**Classification Credits**

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 skills-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</th>
<th>Description</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>
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<tr>
<td>AKNS A101E</td>
<td>Elementary Alutiq 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>
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<td>AKNS A102E</td>
<td>Elementary Alutiq Language II</td>
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<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>
</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>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>
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<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>
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<tr>
<td>ENGL A383</td>
<td>Film Interpretation</td>
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<td>ENGL A445</td>
<td>Alaska Native Literatures</td>
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<tr>
<td>FREN A102</td>
<td>Elementary French I</td>
</tr>
<tr>
<td>FREN A201</td>
<td>Intermediate French I</td>
</tr>
<tr>
<td>FREN A202</td>
<td>Intermediate French II</td>
</tr>
<tr>
<td>FREN A301</td>
<td>Advanced French I</td>
</tr>
<tr>
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<tr>
<td>GER A101</td>
<td>Elementary German I</td>
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<tr>
<td>GER A102</td>
<td>Elementary German II</td>
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<tr>
<td>GER A201</td>
<td>Intermediate German I</td>
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<tr>
<td>GER A202</td>
<td>Intermediate German II</td>
</tr>
<tr>
<td>GER A301</td>
<td>Advanced German I</td>
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<tr>
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<td>Advanced German II</td>
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<td>HIST A101</td>
<td>Western Civilization I</td>
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<td>HIST A102</td>
<td>Western Civilization II</td>
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<tr>
<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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<tr>
<td>HIST A131</td>
<td>History of United States I</td>
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<td>HIST A132</td>
<td>History of United States II</td>
</tr>
<tr>
<td>HIST A341</td>
<td>History of Alaska</td>
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<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>JPN A101</td>
<td>First Year Japanese I</td>
</tr>
<tr>
<td>JPN A102</td>
<td>First Year Japanese II</td>
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</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>
</tr>
<tr>
<td>PHIL A201</td>
<td>Introduction to Philosophy</td>
</tr>
<tr>
<td>PHIL A211</td>
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<td>Ethics</td>
</tr>
<tr>
<td>PHIL A305</td>
<td>Professional 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: Classical</td>
</tr>
<tr>
<td>PS A333</td>
<td>History of Political Philosophy: Modern</td>
</tr>
<tr>
<td>RUSS A101</td>
<td>Elementary Russian I</td>
</tr>
<tr>
<td>RUSS A102</td>
<td>Elementary Russian II</td>
</tr>
<tr>
<td>RUSS A201</td>
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<td>Advanced Spanish I</td>
</tr>
<tr>
<td>SPAN A302</td>
<td>Advanced Spanish II</td>
</tr>
</tbody>
</table>

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Undergraduate Programs

6. Natural Sciences 7

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 challenge scientific theories, providing an appreciation for the process and problems involved in the advancement of scientific knowledge.

Students completing their natural sciences requirement will be able to apply the scientific method by formulating questions or problems, proposing hypothetical answers or solutions, testing those hypotheses, and reaching supportable conclusions. They will also demonstrate an understanding of the fundamentals of one or more scientific disciplines, a knowledge of the discoveries and advances made within that discipline, and the impact of scientific information in sculpting thought and in providing the foundations for the technology in use at various times in history. Students completing the laboratory class will demonstrate the ability to work with the tools and in the settings encountered by professionals in the discipline, will critically observe materials, events or processes, and will accurately record and analyze their observations.

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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR A103/L</td>
<td>Solar System Astronomy</td>
</tr>
<tr>
<td>ASTR A104/L</td>
<td>Stars, Galaxies and Cosmology</td>
</tr>
<tr>
<td>BIOL A102</td>
<td>Introductory Biology</td>
</tr>
<tr>
<td>BIOL A103</td>
<td>Introductory Biology Laboratory</td>
</tr>
<tr>
<td>BIOL A111</td>
<td>Human Anatomy and Physiology I</td>
</tr>
<tr>
<td>BIOL A112</td>
<td>Human Anatomy and Physiology II</td>
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<tr>
<td>BIOL A115</td>
<td>Fundamentals of Biology I</td>
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<td>BIOL A116</td>
<td>Fundamentals of Biology II</td>
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<tr>
<td>GEOL A178</td>
<td>Fundamentals of Oceanography</td>
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<tr>
<td>GEOL A179</td>
<td>Fundamentals of Oceanography Laboratory</td>
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<tr>
<td>CHEM A103/L</td>
<td>Survey of Chemistry</td>
</tr>
<tr>
<td>CHEM A104/L</td>
<td>Introduction to Organic Chemistry and Biochemistry</td>
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<tr>
<td>CHEM A105/L</td>
<td>General Chemistry I</td>
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<tr>
<td>CHEM A106/L</td>
<td>General Chemistry II</td>
</tr>
<tr>
<td>ENVI A211/L</td>
<td>Environmental Science: Systems and Processes (equivalent to GEOG A211 and ENVI A202)*</td>
</tr>
<tr>
<td>GEOG A111</td>
<td>Earth Systems: Elements of Physical Geography (equivalent to GEOG A205)*</td>
</tr>
<tr>
<td>GEOG A111</td>
<td>Physical Geology</td>
</tr>
<tr>
<td>GEOL A115/L</td>
<td>Environmental Geology</td>
</tr>
<tr>
<td>GEOL A221</td>
<td>Historical Geology</td>
</tr>
<tr>
<td>LSIS A101</td>
<td>Discoveries in Science</td>
</tr>
<tr>
<td>LSIS A102</td>
<td>Origins: Earth-Solar System-Life</td>
</tr>
<tr>
<td>LSIS A201</td>
<td>Life on Earth</td>
</tr>
<tr>
<td>LSIS A202</td>
<td>Concepts and Processes: Natural Sciences</td>
</tr>
<tr>
<td>PHYS A101</td>
<td>Physics for Poets</td>
</tr>
<tr>
<td>PHYS A123/L</td>
<td>Basic Physics I</td>
</tr>
<tr>
<td>PHYS A124/L</td>
<td>Basic Physics II</td>
</tr>
<tr>
<td>PHYS A211/L</td>
<td>General Physics I</td>
</tr>
<tr>
<td>PHYS A212/L</td>
<td>General Physics II</td>
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</tbody>
</table>

* Equivalent courses are treated as repeats. Only the credits and chronologically last grade earned are applied toward graduation requirements, prerequisite fulfillment and cumulative UAA GPA calculation. Only the most recent course taken is used to fulfill university requirements, including the General Education Requirement.

7. Social Sciences 6

(outside the major and from two different disciplines)

The social sciences constitute the various fields of study concerned with society, social interaction and human behavior. Each of the specific disciplines in the social sciences is a historically recognized area of inquiry with a scientifically grounded methodology, yet they all share the goal of understanding society, its institutions, and its people and their behavior.

Therefore, each of the social science courses under the rubric of General Education Requirements (GERs), share common learning outcomes. Upon successful completion of a social science GER course, the student will be able to:

- Describe the discipline she or he has studied and discuss the key principles or themes that unify it.
- Describe and contrast key scientific theories and theoretical approaches in a discipline and the ways in which these theories structure social scientists’ thinking and research
- Demonstrate the ability to think critically about how society works and how our social realities are created by diverse social processes and cultural practices.
- Describe the wide range of social science data and the importance of using empiricism, both qualitative and quantitative, in making claims about the social world and in setting evidence-based social policy.
- Explain and use basic social science methods and summarize the assumptions behind and the limitations of inductive or deductive approaches that might include the formulation of research questions and hypotheses; data collection and analysis; and testing, verifying and rejecting hypotheses.

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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH A101</td>
<td>Introduction to Anthropology</td>
</tr>
<tr>
<td>ANTH A200</td>
<td>Natives of Alaska</td>
</tr>
<tr>
<td>ANTH A202</td>
<td>Cultural Anthropology</td>
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<tr>
<td>ANTH A250</td>
<td>The Rise of Civilization</td>
</tr>
<tr>
<td>BA A151</td>
<td>Introduction to Business</td>
</tr>
<tr>
<td>CEL A292</td>
<td>Introduction to Civic Engagement</td>
</tr>
<tr>
<td>ECON A123</td>
<td>Introduction to Behavioral Economics</td>
</tr>
<tr>
<td>ECON A201</td>
<td>Principles of Macroeconomics</td>
</tr>
<tr>
<td>ECON A202</td>
<td>Principles of Microeconomics</td>
</tr>
<tr>
<td>ECON A210</td>
<td>Environmental Economics and Policy</td>
</tr>
<tr>
<td>EDEC A105</td>
<td>Introduction to the Field of Early Childhood</td>
</tr>
<tr>
<td>ENVI A212</td>
<td>Living on Earth: People and the Environment</td>
</tr>
<tr>
<td>INTL A101</td>
<td>Local Places/Global Regions: An Introduction to Geography</td>
</tr>
<tr>
<td>HS A220</td>
<td>Core Concepts in the Health Sciences</td>
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<tr>
<td>HUMS/</td>
<td></td>
</tr>
<tr>
<td>SWK A106</td>
<td>Introduction to Social Welfare</td>
</tr>
<tr>
<td>JPC A101</td>
<td>Media and Society</td>
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<tr>
<td>JUST A110</td>
<td>Introduction to Justice</td>
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<tr>
<td>SOC A251</td>
<td>Crime and Delinquency</td>
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<tr>
<td>JUST A330</td>
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<td>JUST A375</td>
<td>Juvenile Justice and Delinquency</td>
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<tr>
<td>LEGL A101</td>
<td>Introduction to Law</td>
</tr>
<tr>
<td>LSSS A111</td>
<td>Cultural Foundations of Human Behavior</td>
</tr>
<tr>
<td>PS A101</td>
<td>Introduction to American Government</td>
</tr>
<tr>
<td>PS A102</td>
<td>Introduction to Political Science</td>
</tr>
<tr>
<td>PS A311</td>
<td>Comparative Politics</td>
</tr>
<tr>
<td>PS/SOC A351</td>
<td>Political Sociology</td>
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<tr>
<td>PSY A111</td>
<td>General Psychology</td>
</tr>
<tr>
<td>PSY A150</td>
<td>Lifespan Development</td>
</tr>
<tr>
<td>SOC A101</td>
<td>Introduction to Sociology</td>
</tr>
</tbody>
</table>
Undergraduate Programs

8. Integrative Capstone*

The GER experience culminates with the integrative capstone, which includes courses from across the university that require students to synthesize across GER domains. Integrative capstone courses include knowledge integration of GER basic college-level skills (Tier 1) and/or disciplinary areas (Tier 2) as part of their course design. Integrative capstone courses should focus on practice, study and critical evaluation, and include in their student outcomes an emphasis on the evolving realities of the 21st century.

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 A373 Conservation Biology
- 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
- CSCE A470 Computer Science and Engineering Capstone 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
- EDEN A300 Philosophical and Social Context of American Education
- EDEN A304 Comparative Education
- EE A438 Design of Electrical Engineering Systems
- ENGL A434 History of Rhetoric
- ENGL A476 History of English Language
- ENGL A478 Public Science Writing
- ENV1 A470 Environmental Planning and Problem Solving
- GEO A460 Geomatics Design Project
- GEOG A390A Topics in Global Geography
- GEOG A390B Topics in Regional Geography
- GEOL A456 Geochronology
- HIST/INTL/
- PS A325 Northeast Asia in 21st Century
- HIST A390A Themes in World History
- HIST A492 Senior Seminar
- HS A491 Health Issues in Alaska
- HS A492 Senior Seminar: Contemporary Health Policy
- HUMS A495B Human Services Practicum IV
- INTL A315 Canada: Nation and Identity
- JPC A403 Communications and Media Research
- JUST A460 Justice in Crisis
- JUST A463 Biobehavioral Criminology
- LSIC A488A Capstone Project I: Design and Research
- LSSS A312 Individuals, Groups, and Institutions
- MATH A420 History of Mathematics
- ME A438 Design of Mechanical Engineering Systems
- MEDT A302 Clinical Laboratory Education and Management
- MUS A331 Form and Analysis
- NS A411 Health II: Nursing Therapeutics
- PEP A384 Cultural and Psychological Aspects of Health and Physical Activity
- PHIL A400 Ethics, Community, and Society
- PS A492 Senior Seminar in Politics
- PSY A370 Behavioral Neuroscience
- SOC A488 Capstone Seminar
- STAT A308 Intermediate Statistics for the Sciences
- SWK A431 Social Work Practice IV: Integrative Capstone
- TECH A453 Capstone Project
- THR A492 Senior Seminar

* 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.)

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/records/registrarforms.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/admission-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.).
### UAA Table of GER Substitutions

This table is intended to assist UAA students who wish to use a UAF/UAS course to meet a UAA General Education Requirement per Board of Regents Policy P10.04.062.

<table>
<thead>
<tr>
<th>UAA Courses</th>
<th>UAF Courses</th>
<th>UAS Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tier 1: Basic College-Level Skills</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Oral Communications Skills — 3 Credits</strong></td>
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</tr>
<tr>
<td><strong>Quantitative Skills — 3 Credits</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Written Communication Skills — 6 Credits</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL A111, A211, A212, A213, A214, A311, A312, A414</td>
<td>ENGL F111X, F211X, F213X</td>
<td>ENGL S111, S211, S212</td>
</tr>
</tbody>
</table>

| **Tier 2: Disciplinary Areas** | | |
| **Fine Arts — 3 Credits** | | |
| AKNS A215 • ART A160, A261, A262, A360A, A360B • DNCE A170 • MUS, A121, A124, A215, A221, A222 • THR A111, A311, A312, A411, A412 | ANS F202X • ART F200X • HUM F201X • MUS F200X • THR F200X | ART S160, S261, S262 • MUS S123 • THR S111, S211, S212 |

| **Humansities — 6 Credits Outside the Major** | | |

| **Natural Sciences — 7 Credits Including One Laboratory Course** | Laboratory Courses | |

| **Non-Laboratory Courses** | | |
| ASTR A103, A104 • BIOL A102, A178, A200 • CHEM A103, A104, A105, A106 • CPLX A200 • ENVI A211 • GEOG A111 • GEOG A115, A178 • LSIS A101 • PHYS A101, A123, A124, A211, A212 | ANTH S205 • ASTR S225 • CHEM S100 • GEOG S205 • GEOG S105 • OCN S101 • PHIIL S206 |

| **Social Sciences — 6 Credits Outside the Major and From Two Different Disciplines** | | |
| ANTH A101, A200, A202, A250 • BA A151 • CEL A292 • ECON A123, A201, A202, A210 • EDEC A105 • ENVI A212 • GEOG A101 • HNRS A292 • HS A220 • HUMS A106 • INTL A101 • JPC A101 • JUST A110, A251, A330, A375 • LEGL A101 • LSSS A111 • PS A101, A102, A311, A351 • PSY A111, A150 • SOC A101, A110, A201, A202, A251, A342, A351 • SWK A106, A243 • WS A200 | ANTH F100X • ECON F100X • PS F100X, F300X • SOC F100X | ANTH S101, S202, S211 • ECON S100, S201, S202 • GEOG S101 • GOVT S101, S102, S230, S251 • PSY S101, S250 • SOC S101, S201 |
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 Bachelor of Arts (BA) or Bachelor of Science (BS) program. The proposed program must differ significantly from established degree programs and must not be a substitute for a regular degree program. Interdisciplinary degree programs are not transferable to other University of Alaska campuses.

To receive a baccalaureate degree in interdisciplinary studies from UAA, the student must meet General University Requirements, 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 baccalaurate 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 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

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<tr>
<th>Level</th>
<th>Description</th>
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<tbody>
<tr>
<td>BA candidates:</td>
<td>Three years with emphasis on algebra I and II, trigonometry, geometry, analysis.</td>
</tr>
<tr>
<td>BS candidates:</td>
<td>Four years with emphasis on algebra I and II, trigonometry, geometry, analysis.</td>
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Science

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<tr>
<th>Level</th>
<th>Description</th>
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<tbody>
<tr>
<td>BA candidates:</td>
<td>Two to three years with emphasis in biology, chemistry, physics, geology and/or earth science.</td>
</tr>
<tr>
<td>BS candidates:</td>
<td>Three to four years with emphasis in biology, chemistry, physics, geology and/or earth science.</td>
</tr>
</tbody>
</table>

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, ENGL A301, ENGL A302, ENGL A305, ENGL A306, ENGL 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-AKNS A102 (with same letter suffix), ART A261-ART A262, ENGL A201-ENGL A202, MUS A221-MUS A229, PHIL A211-PHIL A212, PHIL A313-PHIL A314, PS A332-PS A333, THR A311-THR A312, THR A411-THR A412]

C. Ways of Knowing
3. (ENGL A120, PHIL A101, PHIL A201, PHIL A301, PHIL A421)

D. Social Behavior
3. Choose one of the following not in the major:
   (ANTH A101, COMM A101, ECON A201, JPC A101, PS A102, PSY A111, SOC A101, HUMS/SWK A106)

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) 3-4
(STAT A253 or STAT A307) 4

B. Computer Programming
(CS A109, CS A110, CS A111, CSCE A201, CSCE A202) 3-4

C. Language/Humanities
Any two-semester sequence in French, German, Japanese, Russian or Spanish, or one of the following humanities sequences:
   (ART A261-ART A262, ENGL A201-ENGL A202, MUS A221-MUS A229, PHIL A211-PHIL A212, PHIL A313-PHIL A314, PS A332-PS A333, THR A311-THR A312, THR A411-THR A412)

D. Natural Sciences
To be selected from the following list:
(AMST A103, ASTR A104, BIOL A102, BIOL A103, BIOL A111, BIOL A112, BIOL A113, BIOL A114, BIOL A115, BIOL A116, CHEM A103/L, CHEM A104/L, CHEM A105/L, CHEM A106/L, GEOL A111, GEOL A221 PHYS A123/L, PHYS A124/L, PHYS A211/L, PHYS A212/L)

*The total natural science requirement of each student includes 16 credits (7 credits from the natural science GER 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
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 Student Learning 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.

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)

2. Written Communication Skills
   - ENGL A111 Introduction to Composition (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)

3. Humanities and Fine Arts
   - Three courses from the GER Classification List. At least one course each from the Humanities and Fine Arts areas.

4. Mathematical and Natural Sciences
   - MATH A105 Intermediate Algebra (3) or one course from the Quantitative Skills area of GER Classification List (3)
   - Two Natural Science courses from the Natural Science area of the GER Classification List (3+3) (6)

5. Social Sciences
   - Two Social Sciences courses (from two different disciplines) from the Social Science area of GER Classification List

Degree Completion Requirements
6. Electives
   - Total minimum credits: 60

* 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 (3)

2. Written Communication Skills
   - ENGL A111 Introduction to Composition (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)

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)

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)

5. Social Sciences
   - Two social science courses (from two different disciplines) from the Social Science area of GER Classification List

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 Cultural Knowledge of Native Elders (3)

University of Alaska Anchorage 2013-2014 Catalog www.uaa.alaska.edu
To be eligible for departmental honors, a student must satisfy the achievement by undergraduate majors in the study of anthropology. The award of honors in Anthropology recognizes outstanding specialization should be deferred until graduate work.

For limited specialization in either archaeology or sociocultural theories and methodologies. Although there is some opportunity understanding of different cultures and peoples as well as different with a solid general foundation in the discipline by emphasizing anthropology, biological anthropology, archaeology and anthropological goals. Anthropology is comprised of four sub-fields: sociocultural basis, aimed at achieving both scientific and humanistic education Anthropology is the study of human diversity on a cross-cultural

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<th>FACULTY</th>
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<tbody>
<tr>
<td>Nancy Furlow, Interim Director, <a href="mailto:AFNJF1@uaa.alaska.edu">AFNJF1@uaa.alaska.edu</a></td>
</tr>
<tr>
<td>Edgar Blatchford, Associate Professor, <a href="mailto:Edblatch@lpc.alaska.edu">Edblatch@lpc.alaska.edu</a></td>
</tr>
<tr>
<td>Marie Meade, Master Teacher, <a href="mailto:AFMM1@uaa.alaska.edu">AFMM1@uaa.alaska.edu</a></td>
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**ANTHROPOLOGY**

Beatrice McDonald Hall (BMH), Room 214, (907) 786-6840

www.uaa.alaska.edu/anthropology

Anthropology is the study of human diversity on a cross-cultural basis, aimed at achieving both scientific and humanistic education goals. Anthropology is comprised of four sub-fields: sociocultural anthropology, biological anthropology, archaeology and anthropological linguistics. The BA/BS degrees are designed to provide the student with a solid general foundation in the discipline by emphasizing understanding of different cultures and peoples as well as different theories and methodologies. Although there is some opportunity for limited specialization in either archaeology or sociocultural anthropology and 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. Complete one of the following focus areas:

   **A. Policy Focus**
   - AKNS A290 Topics in Alaska Native Studies (1-3) and/or
   - AKNS A490 Advanced Topics in Alaska Native Studies (1-3)
   - AKNS/PS A346 Alaska Native Politics (3)
   - AKNS/PS A411 Tribes, Nations and Peoples (3)

   **B. Language Focus**
   - AKNS A101 Alaska Native Languages I (4)
   - AKNS A102 Alaska Native Languages II (4)

   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/
   - DNCE A146 Introduction to Alaska Native Dance (1-2)
   - AKNS/
   - MUS A215 Music of Alaskan Natives and Indigenous Peoples of Northern Regions (3)
   - AKNS A290 Topics in Alaska Native Studies (1-3)
   - AKNS/PS A346 Alaska Native Politics (3)
   - AKNS/PS A411 Tribes, Nations and Peoples (3)
   - AKNS A490 Advanced Topics in Alaska Native Studies (1-3)
   - AKNS A495 Alaska Native Studies Internship (1-3)
   - ANTH A200 Natives of Alaska (3)
   - ANTH A427 Ethnohistory of Alaska Natives (3)
   - ANTH A435 Northwest Coast Cultures (3)
   - ANTH A436 Aleut Adaptations (3)
   - ART A365 Native Art of Alaska (3)
   - ENGL A445 Alaska Native Literatures (3)
   - HIST A341 History of Alaska (3)
   - JUST A355 Rural Justice (3)

4. A minimum of 19 credits is required for the minor, of which 6 credits must be upper division.

**Bachelor of Arts, Anthropology**

**Bachelor of Science, Anthropology**

**Program Student Learning Outcomes**

Students graduating with a Bachelor of Arts in Anthropology or a Bachelor of Science in Anthropology will be able to:

- Explain current understandings about human beings and behavior including the evolution of humans, the nature of culture and cultural processes, the features of language and characteristics of linguistic use, the forms of biological diversity and the significant trajectories of change which have led to the current status of humanity.
- Demonstrate an understanding of different scientific and theoretical approaches in anthropology, their epistemological and conceptual foundations, their strengths and limitations, and the types of topics, issues and problems they are designed to address.
- Apply liberal educational skills, such as independent knowledge acquisition, problem identification, critical thinking, formation and evaluation of hypotheses, and organized and effective presentation of information, to anthropological materials demonstrated through various types of presentation including scientific and technical writing, effective public speaking and electronic media presentation.
- Demonstrate ability to apply anthropological concepts and perspectives to understanding local social and cultural practices occurring outside the classroom in the community.

**Admission Requirements**

Complete the Admission to Baccalaureate Programs Requirements in Chapter 7.

**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 Linguistic Anthropology (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 from the following:
   ANTH A200 Natives of Alaska (3)
   ANTH A325 Cook Inlet Anthropology (3)
   ANTH A335 Native North Americans (3)
   ANTH A336 Peoples and Cultures of South America (3)
   ANTH A338 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
   ANTH A439 Athabaskan 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)

5. Complete two courses (6 credits) from the following topical/theoretical courses:
   ANTH A270 Women in Cross-cultural Perspective (3)
   ANTH A324 Psychological Anthropology (3)
   ANTH A354 Culture and Ecology (3)
   ANTH A360 Anthropology of Art (3)
   ANTH A361 Language and Culture (3)
   ANTH A365 Modern Human Biological 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 A432 Hunting and Gathering Societies (3)
   ANTH A445 Evolution of Humans and Disease (3)
   ANTH A455 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 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 courses (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 and Statistics (4)

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 Linguistic Anthropology (3)
   ANTH A211 Fundamentals of Archaeology (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 A335 Native North Americans (3)
   ANTH A336 Peoples and Cultures of South America (3)
   ANTH A338 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
   ANTH A439 Athabaskan 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)

5. Complete two courses from the following topical/theoretical courses:
   ANTH A270 Women in Cross-cultural Perspective (3)
   ANTH A324 Psychological Anthropology (3)
   ANTH A354 Culture and Ecology (3)
   ANTH A360 Anthropology of Art (3)
   ANTH A365 Modern Human Biological 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)
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   ANTH A486 Applied Human Osteology (3)

   Note: The upper division special topics course (ANTH A490) or independent study courses (ANTH A397, ANTH A497) may be petitioned to satisfy ethnographic area or topical/theoretical course requirements, depending on course content.

6. Anthropology Electives:
   Any six courses in Anthropology

7. Complete one statistics course from the following:
   STAT A253 Applied Statistics for the Sciences (4)
8. A minimum of 120 credits is required for the degree, of which 42 credits must be upper division to satisfy General Education Requirements.

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 Linguistic Anthropology (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.

FACULTY

Alan Boraas, Professor (KPC campus), IFASB@uaa.alaska.edu
Phyllis Fast, Assistant Professor, AFPAF@uaa.alaska.edu
Kerry Feldman, Professor Emeritus, AFKDF@uaa.alaska.edu
Christine Hanson, Professor, AFCHI@uaa.alaska.edu
Diane Hanson, Associate Professor, AFDHJ@uaa.alaska.edu
Steve Langdon, Professor/Chair, AFJSI@uaa.alaska.edu
Paul White, Assistant Professor, AFPRW@uaa.alaska.edu
William Workman, Professor Emeritus, AFWBW@uaa.alaska.edu
David Yesner, Professor, AFDRY@uaa.alaska.edu

ART

Fine Arts Building (ARTS), Room 302A, (907) 786-1783
www.uaa.alaska.edu/art

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 Student Learning 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:

- Bachelor of Arts, Art
- Bachelor of Fine Arts, Art
- Minor in Art
- Minor in Art Education
- Continuing Education

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

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 A212 Beginning Watercolor (3)
   - ART A213 Beginning Painting (3)
   - ART A215 Beginning Printmaking (3)
   - ART A224 Beginning Photography (3)
   - ART A252 Beginning Graphic Design and Illustration (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 A270 Beginning Alaska Native Art (3)
   - ART A272 Beginning Fiber Structures (3)

Upper Division Studio Art (15 credits)

3. Complete a total of 15 credits from the studio areas listed below, with a minimum of 9 credits from any one area:
   - Ceramics  Drawing
   - Digital Art and Graphic Design  Fibers
Jewelry/Metalsmithing  Painting  Sculpture
Photography  Printmaking  Alaska Native Art

Upper Division Art History (6 credits)

4. Select 6 credits from the following:  
   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)

Additional Requirements (21 credits)

5. Complete the following:
   ART A203 Introduction to Art Education 3  
   ART A491 Senior Seminar (Capstone) (fall semester only) 3  
   PHIL A401 Aesthetics 3  
   Upper division general electives 12 credits 12  
   At least 6 of the 12 elective credits must have a prefix other than ART.

6. A total of 120 credits is required for the degree, of which 42 credits must be upper division. A total of 60 credits in ART may be applied to the degree.

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, withdrawal 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 (upper or lower division courses) in residence at UAA after acceptance into the BFA program.

Transfer Students need a minimum of 12 resident Art credits that 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 as a declared pre-major in the BFA program.
2. Applicants must have completed all lower division Art major courses in the Foundation Core and the Beginning Studio categories required for the BFA degree.
3. Applicants must have been enrolled at UAA for at least one semester prior to application to the full major status in the BFA program.
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 “Projected Plan of Study” signed by the College of Arts and Sciences Academic Advisor for the Fine Arts area.
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 digital formats (preferred) or slides. Applications will be reviewed only in the fall semester. Admission decisions are determined by a consensus of BFA Committee members in October.

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 in the major.
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 A499 Thesis. 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.

The BFA Committee’s evaluation of the student’s thesis project will be based on content, presentation and the degree of success in visual realization of the written proposal. At least 10 slides or digital images of the student’s thesis will be furnished to the Department of Art. These images must be acceptable to the BFA Committee and will become the property of the Department of Art. The slides or digital images must be received by the department before a grade for ART A499 Thesis is awarded.

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 cumulative GPA of 3.00 in the major and a minimum cumulative GPA of 2.50 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
   - 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:**
     - ART A212 Beginning Watercolor (3)
     - ART A213 Beginning Painting (3)
     - ART A215 Beginning Printmaking (3)
     - ART A224 Beginning Photography (3)
     - ART A252 Beginning Graphic Design and Illustration (3)
     - ART A257 Digital Art and Design I (3)
     - ART A271 Beginning Surface Design (3)
     - ART A273 Beginning Woven Forms (3)
   - **Three-Dimensional Area:**
     - 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
- Digital Art and Graphic Design
- Jewelry/Metalsmithing
- Photography
- Sculpture
- Drawing
- Fibers
- Painting
- Printmaking

4. Select a primary studio concentration from the list above and complete the following studio courses in the same concentration:
   - 200 level Beginning studio course 3

   **Note:** Students must choose a beginning course in their emphasis.

   **Exception:** students with a drawing concentration may choose from any 200 level two-dimensional class listed under **Beginning Studio Electives**.

   - 300 level Intermediate studio course 6
   - 400 level Advanced studio course 6

5. Select a support course from following (3 credits):
   - 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 concentration:
   - 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):
   - 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 (fall semesters only) 3
   - ART A499 Thesis (spring semesters only) 3

Additional Requirements (12 credits)

9. ART A203 Introduction to Art Education 3
10. PHIL A401 Aesthetics 3
11. Art electives (6 credits) 6

   Complete 6 credits of electives selected from art history, art education or art studio courses.

12. 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 A105 Beginning Drawing (3)
- ART A205 Intermediate Drawing (3)
- ART A305 Advanced Drawing (3)
- ART A307 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 credits)

Minor, Art Education

Students majoring in Art or in another subject must complete the following sequence of six courses for a minor in Art Education. A total of 18 credits is required for the minor of which 6 credits must be upper division.

- ART A203 Introduction to Art Education 3
### DIGITAL ART

**Kenai Peninsula College**  
156 College Road, Soldotna, AK 99669, (907) 262-0300, (877) 262-0330  
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 UA 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

Satisfy the Admission to Certificate and Associate Degree Program Requirements in Chapter 7.

### 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):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART A105</td>
<td>Beginning Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART A111</td>
<td>Two-Dimensional Design</td>
<td>3</td>
</tr>
<tr>
<td>ART A112</td>
<td>Color Design</td>
<td>3</td>
</tr>
</tbody>
</table>
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
   - Digital Photography Concentration Electives (9 Credits Minimum; suggested electives: 9)
     - 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)
     - JPC A201 Reporting and Writing News (3)
     - JPC A211 Visual Literacy (3)

2. Darkroom/Digital Concentration (27 Credits Total):
   - ART A220 Digital Imaging for Photography 3
   - ART A224 Beginning Photography 3
   - ART A228 Art as a Profession 3
   - ART A323 Color Photography 3
   - ART A324 Intermediate Photography 3
   - ART A325 Digital Media for Photography 3
   - Darkroom/Digital Photography Concentration Electives (9 credits minimum): 9
     - ART A113 Three-Dimensional Design (3)
     - ART A205 Intermediate Drawing (3)
     - ART A213 Beginning Painting (3)
     - ART A215 Beginning Printmaking (3)
     - ART A225 Beginning Photography - Digital (3) (recommended)
     - ART A295V Internship/Visual Art (1-3)
     - ART A367 History of Photography (3)
     - BA A166 Small Business Management (3)
     - BA A260 Marketing Practices (3)
     - BA A264 Personal Selling (3)
     - JPC A101 Media and Society (3)
     - JPC A201 Reporting and Writing News (3)
     - JPC A211 Visual Literacy (3)

Total Minimum Credits 60

Special Note: Program may take longer than two years depending upon scheduling and availability of classes.

FACULTY

Celia Anderson, Associate Professor, IFCA@uaa.alaska.edu
Jayne Jones, Assistant Professor, IFM@uaa.alaska.edu

BIOLOGICAL SCIENCES

ConocoPhillips Integrated Sciences Building (CPSB), Room 101P,
(907) 786-4770
www.uaa.alaska.edu/biology

Biology is the science concerned with the study of living organisms. It encompasses a vast range of biological disciplines, from the study of micro-organisms and molecular biology to the study of plants, animals and the environment. The undergraduate program in the Biological Sciences includes courses that provide students with a broad understanding of both traditional and modern biological sciences. These courses are suitable as preparation for professional degrees, teaching, or careers in government or industry. Both the Bachelor of Arts and the Bachelor of Science degrees are available for undergraduates. A Master of Science degree program in Biological Sciences as well as a joint UAA-UAF Doctor of Science degree program is available for students already holding a baccalaureate degree.

A program of study in the biological sciences requires completion of a basic science core curriculum in the chemical, physical and mathematical sciences as well as required and elective courses in the biological sciences. Two general divisions are recognized in the biology program: the cell-molecular and the organismal-ecology-evolution areas. The cell-molecular area focuses on pre-professional sciences for students wishing to pursue careers in medicine, dentistry, and veterinary medicine, or who wish to attend graduate school. The organismal-ecology-evolution area is a more diversified curriculum emphasizing environmental, organismal, evolutionary, and general biological sciences preparatory for graduate school or for employment in the private or public sector. Students are strongly encouraged to consult with their academic advisors within the Department of Biological Sciences to determine which electives best suit their programmatic needs and career requirements.

The Bachelor of Arts and the Bachelor of Science 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 Student Learning Outcomes

It is expected that graduates of the Biological Sciences program will have the ability to:

1. Accept challenges and think through problems until solutions are derived and effectively communicate the solutions to supervisors.
2. Design and conduct projects that include fieldwork, laboratory analyses, and interpretation in the discipline.

Community Service Courses

The department offers a wide range of community service courses as a service to the people in the Anchorage area and extended campuses who wish to become more knowledgeable about the science of biology and how it relates to them. Unless noted otherwise in the course description, community service courses do not satisfy either core requirements or elective credit toward any degree programs in the biological sciences. All are offered as demand warrants.

- BIOL A074 Field Natural History
- BIOL A075 Local Flora
- BIOL A100 Human Biology
- BIOL A124 Biota of Alaska: Selected Topics
- BIOL A126 Birds in Field and Laboratory

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.
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 Progress
To graduate with a BA in Biological Sciences, the student must complete all courses covered under Major Requirements for a BA in Biological Sciences with a grade of C or better. All prerequisites for Biology courses must be completed with a grade of C or better. Students who audit, or are unable to earn a grade of C or better in, a lower-division (100 or 200 level) course in the Department of Biological Sciences (BIOL) may repeat the course two additional times on a space available basis. Students who audit, or are unable to earn a grade of C or better in, an upper-division (300 or 400 level) course in the Department of Biological Sciences may repeat the course one additional time on a space available basis. Students repeating a course in the Department of Biological Sciences are required to complete all components of that course during the semester in which the course is retaken. When repeating a course with a lecture and laboratory component, both components must be repeated. Students enrolled in a laboratory in the Department of Biological Sciences must attend lab the first week of class or they may be administratively dropped.

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 (35-36 credits):
   - 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
   - BIOL A271 Principles of Ecology  3
   - BIOL A308 Principles of Evolution  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
   - STAT A252 Elementary Statistics (3) 3-4
   - or
   - STAT A253 Applied Statistics for the Sciences (4)
   - or
   - STAT A307 Probability and Statistics 4
   - Complete 15-17 credits of upper division program electives from the following four areas. At least one course must come from each area.*
   - Cellular-Molecular
     - BIOL A340 General Microbiology (5)
     - BIOL A403 Microtechnique (4)
     - BIOL A451 Applied Microbiology (3)
     - BIOL A452 Human Genome (3)
     - BIOL A461 Molecular Biology (3)
     - BIOL A461L Molecular Biology Laboratory (3)
     - BIOL/ CHEM A471 Immunochemistry (4)

   - BIOL A488 Developmental Biology (4)
   - 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)
   - Organismal
     - BIOL A331 Systematic Botany (4)
     - BIOL A333 Biology of Non-Vascular Plants (4)
     - BIOL A334 Biology of Vascular Plants (4)
     - BIOL A340 General Microbiology (5)
     - BIOL A423 Ichthyology (4)
     - BIOL A425 Mammalogy (3)
     - BIOL A426 Ornithology (4)
     - BIOL A427 Invertebrate Zoology (4)
     - BIOL A430 Marine Mammal Biology (4)
   - Physiology
     - BIOL A310 Principles of Physiology (4)
     - BIOL A316 Introduction to Plant Physiology (3)
     - BIOL A415 Comparative Animal Physiology (3)
     - BIOL A479 Physiological Plant Ecology (3)
     - BIOL A487 Comparative Anatomy of Vertebrates (4)

*Several courses are listed under more than one area. Each course can only count toward the credit requirement in one area.

3. The following may be taken for upper division elective credit in addition to the 15-17 credits required as stated in 2 above.
   - ASTR/ BIOL A365 Astrobiology (3)
   - BIOL/CHEM/ PHYS 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 A495 Instructional Practicum: Laboratory (1)
   - BIOL A497 Independent Study in Biology (1-12)
   - BIOL A498 Individual Research (1-6)
   - BIOL A499 Senior Thesis (3)

4. It is recommended that students complete 8 credits from the following:

   - GEOL A111 Physical Geology (4)
   - GEOL A221 Historical Geology (4)
   - or
   - PHYS A123 Basic Physics I (3)
   - and
   - PHYS A123L Basic Physics I Laboratory (1)
   - PHYS A124 Basic Physics II (3)
   - and
   - PHYS A124L Basic Physics II Laboratory (1)
   - and
   - PHYS A211 General Physics I (3)
   - and
   - PHYS A211L General Physics I Laboratory (1)
   - PHYS A212 General Physics II (3)
   - and
   - PHYS A212L General Physics II Laboratory (1)

5. A total of 124 credits is required for the degree, 42 credits of which 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 area prepares students for careers in environmental, organismal, and evolutionary biology. A wide selection of electives is available to all students, including courses offered under BIOL A490, which is a selected topics course. It is imperative that students consult their academic advisors within the Department of Biological Sciences to determine which electives are most appropriate to their career interests. Some of these elective courses are offered periodically, depending on demand. Refer to course descriptions to identify these courses.

Admission Requirements
Complete the Admission to Baccalaureate Programs Requirements in Chapter 7.

Academic Progress
To graduate with a BS in Biological Sciences, the student must complete all courses covered under Major Requirements for a BS in Biological Sciences with a grade of C or better. All prerequisites for Biology courses must be completed with a grade of C or better. Students who audit, or are unable to earn a grade of C or better in, a lower-division (100 or 200 level) course in the Department of Biological Sciences (BIOL) may repeat the course two additional times on a space available basis. Students who audit, or are unable to earn a grade of C or better in, an upper-division (300 or 400 level) course in the Department of Biological Sciences may repeat the course one additional time on a space available basis. Students repeating a course in the Department of Biological Sciences are required to complete all components of that course during the semester in which the course is retaken. When repeating a course with a lecture and laboratory component, both components must be repeated. Students enrolled in a laboratory in the Department of Biological Sciences must attend lab the first week of class or they may be administratively dropped.

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 B5 requirements.
2. Complete these required support courses (39 credits):
   - 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) 8
   - PHYS A123L Basic Physics I Laboratory (1)

   and
   - 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)
   - STAT A253 Applied Statistics for the Sciences (4)
   - STAT A307 Probability and Statistics (4)
   - STAT A308 Intermediate Statistics for the Sciences* 3

   or
   - 3 upper division biological sciences credits

   *It is recommended that STAT A308 be taken. Students may substitute STAT A308 with 3 upper division Biological Sciences credits.

3. Complete Biological Sciences core courses (32-33 credits):
   - BIOL A115 Fundamentals of Biology I with 4
   - BIOL A116 Fundamentals of Biology II 4
   - BIOL A242 Fundamentals of Cell Biology 4
   - BIOL A252 Principles of Genetics 4
   - BIOL A271 Principles of Ecology 4
   - BIOL A308 Principles of Evolution 3
   - BIOL A310 Principles of Physiology (4) 3-4
   - BIOL A316 Introduction to Plant Physiology (3)
   - BIOL A340 General Microbiology 5
   - BIOL A492 Undergraduate Seminar 1

4. Complete 11-12 credits of upper division program electives from the following list: 11-12
   a. Recommended electives in cellular and molecular biology: Cellular-Molecular
      - BIOL A451 Applied Microbiology (3)
      - BIOL A452 Human Genome (3)
      - BIOL A461 Molecular Biology (3)
      - BIOL A461L Molecular Biology Laboratory (3)
      - BIOL A462 Virology (3)
      - BIOL A471 Immunochemistry (4)
      - BIOL A488 Developmental Biology (4)
   b. Recommended elective courses in organismal, ecology and evolutionary biology: Techniques
      - BIOL A415 Comparative Animal Physiology (3)
      - BIOL A487 Comparative Anatomy of Vertebrates (4)
   c. Recommended elective courses in organismal, ecology and evolutionary biology: Botany
      - BIOL A316 Introduction to Plant Physiology (3)
      - BIOL A331 Systematic Botany (4)
      - BIOL A333 Biology of Non-Vascular Plants (4)
      - BIOL A334 Biology of Vascular Plants (4)
      - BIOL A479 Physiological Plant Ecology (3)
   d. Recommended elective courses in organismal, ecology and evolutionary biology: Zoology
      - BIOL A415 Comparative Animal Physiology (3)
      - BIOL A423 Ichthyology (4)
      - BIOL A425 Mammalogy (5)
      - BIOL A426 Ornithology (4)
      - BIOL A427 Invertebrate Zoology (4)
      - BIOL A428 Comparative Anatomy of Vertebrates (4)
   e. Recommended elective courses in organismal, ecology and evolutionary biology: Ecology-Systems

For a complete program description see the Natural Sciences section of the University of Alaska Anchorage 2013-2014 Catalog, www.uaa.alaska.edu.

**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. A program of study in the Natural Sciences requires that students select an option within the degree, and complete all courses required within the option, as well as sufficient science elective courses to meet minimum unit requirements for graduation. Students accepted into this flexible degree program select one of three options: the General Sciences Option is designed for students who are interested in understanding the interrelationships among various scientific fields, or in teaching science at the secondary level. The Pre-Health Professions Option is designed to meet the admission requirements of specific professional schools in medicine, dentistry, and veterinary medicine. The Environmental Sciences Option is designed to prepare students for graduate school or for employment in the private or public sector.

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.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL A115</td>
<td>Fundamentals of Biology I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL A116</td>
<td>Fundamentals of Biology II</td>
<td>4</td>
</tr>
<tr>
<td>BIOL A242</td>
<td>Fundamentals of Cell Biology</td>
<td>4</td>
</tr>
</tbody>
</table>

**Biology**

- 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)

**Chemistry**

Chemistry is the science concerned with substances and their properties, composition, and reactions. Recent advances in chemistry have exerted a profound influence on the progress of medicine, agriculture, industry, and commerce.

The undergraduate courses in Chemistry offered at UAA are designed primarily to provide a broad knowledge of the field as a part of the program of liberal education offered by the College of Arts and Sciences. They are also designed to provide a substantial foundation in chemistry for students interested in post-graduate studies in chemistry or the other sciences, preparation for professional degrees, teaching, or a career in government or industry. Students majoring in Chemistry will meet basic course requirements in inorganic, analytical, organic, physical chemistry and biochemistry.

The biochemistry option is designed for students who prefer a more biologically oriented approach to chemistry. During the past 25 years, biochemistry has become a central scientific discipline linking the chemical, physical, and biological sciences. By applying the concepts and methods of chemistry to the problems of biology, biochemists have made great progress in explaining life in chemical terms.

**High School Preparation**

The Bachelor of Science in Chemistry with options in Chemistry or Biochemistry is a four-year baccalaureate program which assumes a proper high school preparation. Consult the College of Arts and Sciences list of recommended preparatory courses in all disciplines. The specific coursework which a freshman student must have mastered for admission to the Chemistry program without a deficiency includes:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>4</td>
</tr>
<tr>
<td>Mathematics</td>
<td>2</td>
</tr>
</tbody>
</table>

English:

- (This must have included at least complex numbers, logarithms, quadratic functions, inequalities and absolute values, plus conic sections).
It is strongly recommended that students graduating from high school without the preparation indicated above enroll in available non-science courses during the summer session to make up deficiencies so that they can begin the fall semester with the correct sequence of the freshman Chemistry curriculum. If this is not done, it will be necessary to carry heavier course loads or take more than eight semesters to complete the degree. Students are reminded that it is imperative for them to regularly consult a departmental advisor to evaluate their progress through the program of study.

**Honors in Chemistry**
The Department of Chemistry awards departmental honors in Chemistry to undergraduate students who show exceptional performance in all their coursework. To graduate with honors students must:

1. Satisfy all requirements for a Bachelor of Science degree in Chemistry.
2. Meet the requirements for Graduation with Honors as listed in Chapter 7.
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 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.

**Chemistry Option (82-83 credits)**
Complete the following required courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL A115</td>
<td>Fundamentals of Biology I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM A105</td>
<td>General Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM A105L</td>
<td>General Chemistry I Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CHEM A106</td>
<td>General Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM A106L</td>
<td>General Chemistry II Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CHEM A253</td>
<td>Principles of Inorganic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM A312</td>
<td>Quantitative Analysis</td>
<td>5</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>
</tr>
<tr>
<td>CHEM A323</td>
<td>Physical Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM A332</td>
<td>Physical Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM A333L</td>
<td>Physical Chemistry Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>CHEM A434</td>
<td>Instrumental Methods</td>
<td>5</td>
</tr>
<tr>
<td>CHEM A441</td>
<td>Principles of Biochemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM A453</td>
<td>Advanced Inorganic Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM A492</td>
<td>Undergraduate Seminar (1)</td>
<td>2</td>
</tr>
<tr>
<td>CHEM A498</td>
<td>Individual Research (3)</td>
<td>6</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 A314</td>
<td>Linear Algebra</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 I 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>
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</table>

**Upper Division Elective (choose one of the following)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL A310</td>
<td>Principles of Physiology (3)</td>
<td>3-4</td>
</tr>
<tr>
<td>BIOL A415</td>
<td>Comparative Animal Physiology (4)</td>
<td>3-4</td>
</tr>
<tr>
<td>BIOL A461</td>
<td>Molecular Biology (3)</td>
<td>3</td>
</tr>
<tr>
<td>CHEM A442</td>
<td>Principles of Biochemistry II (3)</td>
<td>3</td>
</tr>
<tr>
<td>CHEM A450</td>
<td>Environmental Chemistry (3)</td>
<td>3</td>
</tr>
<tr>
<td>CHEM A454</td>
<td>Mathematical Techniques (3)</td>
<td>3</td>
</tr>
<tr>
<td>CHEM A456</td>
<td>Non-linear Dynamics and Chaos (3)</td>
<td>3</td>
</tr>
<tr>
<td>CHEM A460</td>
<td>Chemical Ecotoxicology (3)</td>
<td>3</td>
</tr>
<tr>
<td>CHEM A471</td>
<td>Immunology (4)</td>
<td>3</td>
</tr>
<tr>
<td>GEOL A321</td>
<td>Mineralogy (4)</td>
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</tr>
<tr>
<td>GEOL A360</td>
<td>Geochemistry (3)</td>
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<td>GEOL A460</td>
<td>Environmental Geochemistry (3)</td>
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<tr>
<td>MATH A302</td>
<td>Ordinary Differential Equations (3)</td>
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<tr>
<td>MATH A422</td>
<td>Partial Differential Equations (3)</td>
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<tr>
<td>PHYS A303</td>
<td>Modern Physics (3)</td>
<td>3</td>
</tr>
<tr>
<td>PHYS A320</td>
<td>Simulation of Physical Systems (3)</td>
<td>3</td>
</tr>
<tr>
<td>PHYS A403</td>
<td>Quantum Mechanics (3)</td>
<td>3</td>
</tr>
<tr>
<td>PHYS A413</td>
<td>Statistical Methods (3)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Biochemistry Option (86-87 credits)**
Complete the following required courses:

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>BIOL A115</td>
<td>Fundamentals of Biology I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL A116</td>
<td>Fundamentals of Biology II</td>
<td>4</td>
</tr>
<tr>
<td>BIOL A242</td>
<td>Fundamentals of Cell Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL A252</td>
<td>Principles of Genetics</td>
<td>4</td>
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</table>

**Upper Division Biology (choose one of the following)**

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL A310</td>
<td>Principles of Physiology (3)</td>
<td>3-4</td>
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<td>Comparative Animal Physiology (4)</td>
<td>3-4</td>
</tr>
<tr>
<td>BIOL A461</td>
<td>Molecular Biology (3)</td>
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<td>CHEM A105L</td>
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<td>CHEM A106</td>
<td>General Chemistry II</td>
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<tr>
<td>CHEM A106L</td>
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<tr>
<td>CHEM A253</td>
<td>Principles of Inorganic Chemistry</td>
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<td>CHEM A371</td>
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<td>CHEM A375</td>
<td>Biochemistry III</td>
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<td>CHEM A396</td>
<td>Biochemistry IV</td>
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<td>PHYS A211</td>
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<td>PHYS A303</td>
<td>Modern Physics (3)</td>
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<td>PHYS A320</td>
<td>Simulation of Physical Systems (3)</td>
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</tr>
<tr>
<td>PHYS A403</td>
<td>Quantum Mechanics (3)</td>
<td>3</td>
</tr>
<tr>
<td>PHYS A413</td>
<td>Statistical Methods (3)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Geometry**
1 year

**Trigonometry**
1/2 year

**Physics**
1 year

(This must cover mechanics, thermodynamics, electricity and magnetism, and optics).

**Chemistry**
1 year

(This must cover elementary laboratory procedures, introduction to atoms and molecules, chemical reactions, equilibrium, and an introduction to chemical calculations).

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www.uaa.alaska.edu
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.

1. Select 9 credits from the following: 9
   - COMM A101 Introduction to Human Communication (3)
   - COMM A111 Fundamentals of Oral Communication (3)
   - COMM A235 Small Group Communication (3)
   - COMM A257 Interpersonal Communication (3)
   - COMM A241 Public Speaking (3)

2. Select 9 credits from the following: 9
   - 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)
   - COMM A360 Competitive Debating (3)
   - COMM A380 Theories of Human Communication (3)
   - COMM A390 Selected Topics in Communication (6)
   - COMM A412 Persuasion (3)

FACULTY

Communication and Discourse Studies:
- Lauren Bruce, Associate Professor (Retired), AFLKB@uaa.alaska.edu
- Steve Johnson, Associate Professor, AFSL@uaa.alaska.edu
- Doug Parry, Professor, AFD@uaa.alaska.edu
- Shauwnalee Whitney, Associate Professor, AFSAW@uaa.alaska.edu

Communication and Human Behavior:
- Barbara Harville, Associate Professor, AFBAH@uaa.alaska.edu
- Marcia Stratton, Associate Professor, AFMRS@uaa.alaska.edu

ENGLISH

Administration/Administration, Humanities Building (ADM), Room 101, (907) 786-4355
www.uaa.alaska.edu/english

The programs offered by the Department of English provide an opportunity for a truly liberal education, one that encourages both self-discovery and an exploration of enduring ideas. The curriculum includes courses in composition, rhetoric, literature, linguistics, and critical-thinking strategies. The department also supervises the First-Year Composition Program, which fulfills the university’s General Education Requirement in written communication.

The English Department’s mission is to prepare students to succeed in an increasingly diverse world. The department is devoted to an innovative curriculum that encourages lifelong learning, critical thinking, and effective writing. We teach students to see textual work as an engagement with history, convention, culture, and place so that they can participate responsibly in changing regional and challenging global environments. In particular, the department is concerned with Alaskan cultures, the North Pacific Rim environment, and the intersection of networked technologies and forms of textuality. The English Department also strives to familiarize students with a full range of literacies – written, digital, and visual – so that they may become active and well-equipped citizens.

To address this mission, the Department offers three emphases in the undergraduate major: Literature, Rhetoric and Language, and Secondary Education.

- The Literature option focuses on significant examples of literature from different places, periods, and genres as well as the social and geocultural forces that shape them.
- The Rhetoric and Language option focuses on rhetorical strategies and techniques of composition, emphasizing historical, theoretical, and linguistic perspectives.
The Secondary Education option prepares students for teaching literature and writing at the middle and high school levels as well as for admission to UAA’s Master of Arts in Teaching program. The Department also provides a variety of minors (Literature, Linguistics, Professional Writing, and Creative Writing and Literary Arts). 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. 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 Creative Writing and Literary Arts minor allows students to explore the crafts of fiction, literary nonfiction, poetry and dramatic writing in an intensive series of workshops taught by active writers in the genres.

For information on English placement tests, transfer credits, petition procedures, or special registration, contact the English Department.

**Bachelor of Arts, English**

**Program Student Learning Outcomes**

All options prepare majors to conduct research in the discipline and to write for a variety of purposes and audiences. In addition, each option offers the opportunity to earn honors in English. The specific student learning outcomes that support the undergraduate program objectives are to produce graduates who are able to:  
- Read closely,  
- Interpret texts analytically,  
- Conduct research effectively,  
- Weigh evidence critically, and  
- Write coherently

**Admission Requirements**

Complete the Baccalaureate Degree Programs Admission Requirements at the beginning of Chapter 7.

**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 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.

**D. Major Requirements**

Students working toward a degree in English may choose from three options: Literature, Rhetoric and Language, or Secondary Education.

1. Complete the following core courses (18 credits):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL A201</td>
<td>Masterpieces of World Literature I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A202</td>
<td>Masterpieces of World Literature II</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A351</td>
<td>Poetry</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A433</td>
<td>Literacy, Rhetoric, and Social Practice</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A435</td>
<td>History of Criticism</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A476</td>
<td>History of English Language</td>
<td>3</td>
</tr>
</tbody>
</table>

2. Complete one of the following options:

**Literature Option (24 credits)**

Complete 3 credits from the following list:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL A301</td>
<td>Literature of Britain I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A302</td>
<td>Literature of Britain II</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A305</td>
<td>National Literatures in English</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A306</td>
<td>Literature of the United States I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A307</td>
<td>Literature of the United States II</td>
<td>3</td>
</tr>
</tbody>
</table>

Complete 3 credits from one period and 6 from the other period:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL A310</td>
<td>Ancient Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A315</td>
<td>Survey of Medieval Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A320</td>
<td>Renaissance Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A325</td>
<td>Neoclassical Literature</td>
<td>3</td>
</tr>
</tbody>
</table>

**Earlier**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL A330</td>
<td>Literature of Romanticism</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A340</td>
<td>The Victorian Period</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A343</td>
<td>Modern and Contemporary Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A440</td>
<td>Topics in Comparative Literature</td>
<td>3</td>
</tr>
</tbody>
</table>

Complete 3 credits from specialized studies:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL A424</td>
<td>Shakespeare</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A429</td>
<td>Major Authors</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A444</td>
<td>Topics in Native Literatures</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A445</td>
<td>Alaska Native Literatures</td>
<td>3</td>
</tr>
</tbody>
</table>

Complete 3 credits upper-division English or Creative Writing and Literary Arts elective:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL A450</td>
<td>Linguistics and English Language Teaching</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A487</td>
<td>Standard Written English</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A495</td>
<td>Internship in Professional Writing</td>
<td>1-6</td>
</tr>
</tbody>
</table>

Complete 3 credits from rhetoric and language theory:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL A475</td>
<td>Modern Grammar</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A478</td>
<td>Public Science Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A491</td>
<td>Topics in Composition and Rhetoric</td>
<td>3</td>
</tr>
</tbody>
</table>

Complete 6 credits upper-division electives:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL A242</td>
<td>Shakespeare</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A361</td>
<td>The Novel</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A363</td>
<td>Short Story</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A371</td>
<td>Narrative Nonfiction</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A381</td>
<td>Drama</td>
<td>3</td>
</tr>
</tbody>
</table>

**Rhetoric and Language Option (24 credits)**

Complete 6 credits from the following list:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LING A101</td>
<td>The Nature of Language</td>
<td>3</td>
</tr>
<tr>
<td>LING A201</td>
<td>Intermediate Grammar</td>
<td>3</td>
</tr>
</tbody>
</table>

Complete 6 credits from advanced composition:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL A311</td>
<td>Advanced Composition</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A312</td>
<td>Advanced Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A313</td>
<td>Professional Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A414</td>
<td>Research Writing</td>
<td>3</td>
</tr>
</tbody>
</table>

Complete 3 credits from applied linguistics:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL A450</td>
<td>Linguistics and English Language Teaching</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A487</td>
<td>Standard Written English</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A495</td>
<td>Internship in Professional Writing</td>
<td>1-6</td>
</tr>
</tbody>
</table>

Complete 3 credits from rhetoric and language theory:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL A475</td>
<td>Modern Grammar</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A478</td>
<td>Public Science Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A491</td>
<td>Topics in Composition and Rhetoric</td>
<td>3</td>
</tr>
</tbody>
</table>

Complete 6 credits upper-division electives:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL A311</td>
<td>Literature of British I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A312</td>
<td>Renaissance Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A313</td>
<td>Professional Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A314</td>
<td>Research Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A315</td>
<td>Survey of Medieval Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A320</td>
<td>Renaissance Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A325</td>
<td>Neoclassical Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A330</td>
<td>Literature of Romanticism</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A340</td>
<td>The Victorian Period</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A343</td>
<td>Modern and Contemporary Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A440</td>
<td>Topics in Comparative Literature</td>
<td>3</td>
</tr>
</tbody>
</table>

**Secondary Education Option (24 credits)**

Complete 12 credits from the following list:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL A424</td>
<td>Shakespeare</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A361</td>
<td>The Novel</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A363</td>
<td>Short Story</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A371</td>
<td>Narrative Nonfiction</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A381</td>
<td>Drama</td>
<td>3</td>
</tr>
</tbody>
</table>
ENGL A383 Film Interpretation (3)
ENGL A391 Genres of Subject and Theme (3)
and one of the following:
ENGL A306 Literature of the United States I (3)
ENGL A307 Literature of the United States II (3)
and one of the following:
ENGL A305 National Literatures in English (3)
ENGL A343 Modern and Contemporary Literature (3)
ENGL A440 Topics in Comparative Literature (3)
ENGL A444 Topics in Native Literatures (3)
ENGL A445 Alaska Native Literatures (3)
Complete 3 credits from language and composition:
ENGL A311 Advanced Composition (3)
ENGL A312 Advanced Technical Writing (3)
ENGL A313 Professional Writing (3)
ENGL A414 Research Writing (3)
ENGL A491 Topics in Composition and Rhetoric (3)
Complete 9 credits from language development and analysis:
LING A101 The Nature of Language 3
LING A201 Intermediate Grammar 3
ENGL A450 Linguistics and English Language Teaching 3

3. A total of 120 credits is required for the degree, of which 42 credits must be upper division.

Honors in English
The Department of English recognizes exceptional undergraduate students by awarding them departmental honors in English. To graduate with departmental honors, the student must be a declared English major, satisfy all requirements for a BA degree in English (Literature, Rhetoric, or Secondary Education option), and, in addition, fulfill the following:

1. Meet the requirements for Graduation with Honors as listed in Chapter 7.
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 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. Successfully complete ENGL A499 (with success defined as an A for the honors thesis).

The honors thesis itself is shaped by these guidelines:
1. A student wishing to undertake an English Honors Thesis should coordinate the process from the beginning with two faculty members (one considered primary, one secondary), one of whom must be a full-time tenure-track member of the English department.
2. The secondary faculty member may be from another department with the approval of the primary faculty member. Both faculty members should be involved in the project from early in the process.
3. The student is responsible for locating the two faculty members and securing their agreement to become involved in the project.
4. The student should meet regularly (about once every couple of weeks) with the primary faculty member guiding the thesis to ensure that the project remains on track.
5. The student may well benefit from concurrent enrollment in ENGL A414: Research Writing.
6. The process should begin with a proposal of no more than 1000 words (statement of purpose, preliminary controlling generalization, and outline) along with an annotated bibliography of about ten items. This proposal needs to be approved by both faculty members before the student may proceed to write the honors thesis itself.
7. The anticipated length of the project is 7,500-10,000 words (exclusive of reference page[s]).
8. The final paper needs to be submitted to the two faculty members by the end of the last week of instruction of the semester during which the student is enrolled in ENGL A499.
9. The project should be undertaken in a student’s senior year.
10. Successful completion of ENGL A499 (with success defined as an A for the honors thesis) may be used to count for three (3) credits toward the seven (7) credit requirement of the University Honors Project.

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):
   - ENGL A490 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)*
   *Counts for Linguistics Minor only when focus is on language.

Literature Emphasis
ENGL A201 Masterpieces of World Literature I 3
ENGL A202 Masterpieces of World Literature II 3
ENGL A351 Poetry 3
ENGL A424 Shakespeare 3
ENGL A435 History of Criticism 3
Upper division English elective 3

Professional Writing Emphasis
One of the following:
- ENGL A212 Technical Writing (3)
- ENGL A213 Writing in the Social and Natural Sciences (3)
- ENGL A214 Persuasive Writing (3)
Two of the following:
- ENGL A311 Advanced Composition (3)
- ENGL A312 Advanced Technical Writing (3)
- ENGL A313 Professional Writing (3)
One of the following:
- ENGL A414 Research Writing (3)
- ENGL A495 Internship in Professional Writing (1-6)
And both of the following:
- ENGL A434 History of Rhetoric 3
- Upper division elective approved by the English Department 3

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 of the following:
   - CWLA A352 Writers’ Workshop: Poetry (3)
Chapter 10 Page 108

ENVIRONMENT AND SOCIETY

Professional Studies Building (PSB), (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 and 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 and 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 and 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 and Society, minors in Environmental Studies and in Geography are also offered.

Bachelor of Arts, Environment and Society

Bachelor of Science, Environment and Society

Program Student Learning Outcomes

The specific educational outcomes that support the program objectives in the BA and BS in Environment and Society are to produce graduates who are able to:

• Explain the fundamental role of natural/living systems in supporting life and social well-being, the relationships between people and the natural world, and the key human threats to the environment. (Environmental Knowledge)

• Demonstrate the ability to employ the following liberal education skills in a disciplinary and professional setting: critical thinking, problem solving, and decision making; ethics and civic engagement; science and technical writing skills. (Liberal Knowledge)

• Apply the following skill sets to address environmental problems and develop solutions in professional, academic, and civic settings: civic engagement, teamwork, habitat assessment, survey design, wetlands delineation, mapping skills (Geographic Information Systems and GPS), knowledge of the National Environmental Policy Act. (Technical Knowledge)

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 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 the following departmental core courses (19 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVI A211</td>
<td>Environmental Science: Systems and Processes</td>
</tr>
<tr>
<td>ENVI A211L</td>
<td>Environmental Science: Systems and Processes Laboratory</td>
</tr>
<tr>
<td>ENVI A212</td>
<td>Living on Earth: People and the Environment</td>
</tr>
</tbody>
</table>
ENVI A280  Professional Development in Environmental Fields I  1
ENVI A395  Environmental Studies Internship  3
ENVI A470  Environmental Planning and Problem Solving  4
ENVI A480  Professional Development in Environmental Fields II  1
ENVI A490  Topics in Environment and Society  3

2. Complete the following interdisciplinary core courses (19 credits)
   - BIOL A373  Conservation Biology  3
   - CEL A292  Introduction to Civic Engagement  3
   - ECON A210  Environmental Economics and Policy  3
   - ENGL A478  Public Science Writing  3
   - ENVI/PHIL A303  Environmental Ethics  3
   - GIS A268  Elements of Geographic Information Systems (GIS)  4

3. Complete 9-11 credits from one of the following emphases:  9-11
   **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 A477  Tundra and Taiga Ecosystems (3)
   - BIOL A490*  Selected Lecture Topics in Biology (3)

   **Natural Science and Environment Emphasis:**
   - BIOL A490*  Selected Lecture 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 A460  Environmental Geochemistry (3)

   **Society and Environment Emphasis:**
   - ANTH A354  Culture and Ecology (3)
   - ECON A435  Natural Resource Economics (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)”.

4. 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.

**Program Student Learning Outcomes**

The specific educational outcomes that support the program objectives are to produce graduates who are able to:

- Explain the fundamental role of natural/living systems in supporting life and social well-being, the relationships between people and the natural world, and the key human threats to the environment.
- Apply skill sets such as Geographic Information Systems, knowledge of the National Environmental Policy Act and survey design to address environmental problems and develop solutions in professional, academic, and civic settings.

1. Complete the following required core courses (11 credits):

   - BIOL A271  Principles of Ecology (4)
   - BIOL A309  Biogeography (3)
   - BIOL A490*  Selected Lecture Topics in Biology (3)
   - CHEM A450  Environmental Chemistry (3)
   - GEOL A115  Environmental Geology (3)
   - GIS A268  Elements of Geographic Information Systems (GIS)  4

   *To be taken under the topic title “Environmental and Ecological Applications of Geographic Information Systems (GIS)”.

   **Not available to Environment and Society majors.

**Minor, Geography**

Students majoring in another subject who wish to minor in Geography must complete the following requirements. At least 19 credits are required for the minor.

**Program Student Learning Outcomes**

The specific educational outcomes that support the program objectives are to produce graduates who are able to:

- Describe the discipline of geography and use geographic data and tools to explore the workings of society and the diversity of human societies and problems.
- Identify and describe the important physical processes that shape the surface of the earth and produce global patterns.

1. Complete the following required core courses: (10 credits)
   - GEOG/INTL A101  Local Places/Global Regions: An Introduction to Geography  3
   - GEOG A111  Earth Systems: Elements of Physical Geography  3
   - 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

**GEOGRAPHY AND ENVIRONMENTAL STUDIES FACULTY**

Shannon Donovan, Assistant Professor, sdonovan@uaa.alaska.edu

Dorn Van Dommelen, Professor, dvandommelen@uaa.alaska.edu

**AFFILIATED FACULTY**

Raymond Anthony, Associate Professor, Philosophy,
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 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 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 grade of 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 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 (24 credits):
   - CHEM A105/L General Chemistry I 4
   - CHEM A106/L General Chemistry II 4
   - PHYS A123/L Basic Physics I 4
   - PHYS A124/L Basic Physics II 4
   - MATH A200 Calculus I 4
   - STAT A253 Applied Statistics for the Sciences (4) 4
   - STAT A307 Probability and Statistics (4) 4
   
   Note: Math A201 Calculus II is highly recommended for students majoring in Geological Sciences.

3. Complete Geological Sciences core curriculum courses (40 credits):
   a. Complete the following required courses  34
      - GEOL A111 Physical Geology 4
      - GEOL A221 Historical Geology 4
      - GEOL A321 Mineralogy 4
      - GEOL A322 Igneous and Metamorphic Petrology 4
      - GEOL A335 Structural Geology 4
      - GEOL A350 Geomorphology 4
      - GEOL A360 Geochemistry 3
      - GEOL A310 Professional Practices in Geology 3
      - GEOL A452 Sedimentology and Stratigraphy 4
      
      *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.

   b. Complete a minimum of 6 credits of the following required field courses  6
      - GEOL A480* Geologic Field Methods (3)
      - GEOL A481* Alaskan Field Investigations (3)
      - GEOL A490 Geology Field Camp (3-6)

   **GEOL A480 and GEOL A481 may be applied toward recommended electives if they are not being applied to satisfy the core curriculum credits.

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)
      Complete 13-14 credits of the following:  13-14
      - GEOL A320 Volcanology (3)
      - GEOL A325 Geology of Ore Deposits (3)
      - GEOL A340 Hydrogeology (3)
      - GEOL A380 Anchorage Field Studies (3)
      - GEOL A381 Kenai Peninsula Field Studies (3)
      - GEOL A382 Geologic Field Studies (3)
      - GEOL A454 Glacial and Quaternary Geology (3)
      - GEOL A455 Permafrost (3)
      - GEOL A456 Geoarcheology (3)
      - GEOL A460 Environmental Geochmistry (3)
      - GEOL A475 Environmental Geophysics (3)
      - GEOL A495 Geology Internship (1-3)

   b. Environmental Geological Sciences Track (13-14 credits)
      1.a Complete the following 3 required credits:  3
         - GEOL A340 Hydrogeology
         - GEOL A454 Glacial and Quaternary Geology (3)
         - GEOL A455 Permafrost (3)

      1.b Complete at least 6 additional credits from the following:  6
         - 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 A454 Glacial and Quaternary Geology (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 A454 Glacial and Quaternary Geology (3)

   2.b Complete a minimum of 6 credits of the following 6
      - GEOL A480* Geologic Field Methods (3)
      - GEOL A481* Alaskan Field Investigations (3)
      - GEOL A490 Geology Field Camp (3-6)

   **GEOL A480 and GEOL A481 may be applied toward recommended electives if they are not being applied to satisfy the core curriculum credits.

   ^ GEOL A480 and GEOL A481 may be applied toward recommended electives if they are not being applied to satisfy the core curriculum credits.

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
- Other Geological Sciences electives 2 or more

FACULTY

LeeAnn Munk, Professor/Chair, lmunk@uaa.alaska.edu
Kristine J. Crossen, Professor, kjcrossen@uaa.alaska.edu
Terry R. Naumann, Associate Professor, tnaumann@uaa.alaska.edu
Peter Oswald, Term Instructor, pjoswald@uaa.alaska.edu
Anne Pasch, Emeritus Professor, AHAP@uaa.alaska.edu
Mark Rivera, Term Instructor, marivera@uaa.alaska.edu
**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.

**Program Student Learning Outcomes**
The desired student learning outcomes for the Department of History are:

1. Demonstrate the ability to write clear and precise English
2. Demonstrate advanced level historical research skills (proper use of historical citation style, critical use of primary and secondary sources, adequate research base, ability to frame a good historical question)
3. Demonstrate advanced historical skills (recognition of significance, cause and effect, continuity v. discontinuity, historiographical conversancy and perspective, critical and integrative thinking)

**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.
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 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.

**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 the following survey courses:
   - HIST A101 Western Civilization I 3
   - HIST A102 Western Civilization II 3
   - HIST A131 History of United States I 3
   - HIST A132 History of United States II 3

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

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
   - or
   - HIST A102 Western Civilization II (3)
   - 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

**FACULTY**

Caedmon Liburd, Associate Professor (retired), AFCAL@uaa.alaska.edu
Ronald Crawford, Professor Emeritus, AFRMC@uaa.alaska.edu
Elizabeth Dennison, Professor/Chair, AFEJD@uaa.alaska.edu
Paul Duncomb, Professor, AFPED@uaa.alaska.edu
Scott Gavorsky, Term Instructor, AFSG2@uaa.alaska.edu
Songho Ha, Associate Professor, AFSH2@uaa.alaska.edu
Steve Haycox, Professor Emeritus, AFWSH1@uaa.alaska.edu
W.A. Jacobs, Professor Emeritus, AFWA@uaa.alaska.edu
Elizabeth James, Assistant Professor, AFEJ@uaa.alaska.edu
Don Mohr, Professor Emeritus, AFDEM@uaa.alaska.edu
Bill Myers, Associate Professor, AFWLM@uaa.alaska.edu
Kelly Shannon, Assistant Professor
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.

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.

Bachelor of Arts, International Studies

Program Student Learning Outcomes

Students graduating with a Bachelor of Arts in International Studies will be able to:

- Demonstrate cross-cultural understanding through language study.
- Demonstrate critical thinking about values, attitudes, and practices in an international context.
- Demonstrate a multi-perspective understanding of a specific area (Canada, Europe, Russia, Northeast Asia).
- Demonstrate effective written communication.

Honors in International Studies

Students majoring in International Studies are eligible to graduate with honors if they satisfy the following requirements:

1. Meet the requirements for Graduation with Honors as listed in Chapter 7.
2. Meet the requirements for a Bachelor of Arts in International Studies.
3. Maintain a grade point average of 3.80 or above in courses applicable to the degree requirements.
4. Complete the program capstone course (GEOG A390A, HIST A390A, or PHIL A400) with an honor grade (A).

Admission Requirements

Complete the Admission to Baccalaureate Programs Requirements in Chapter 7.

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 Bachelor of Arts Requirements listed at the beginning of the CAS section.

D. Major Requirements

Note 1: 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.

Note 2: Topics, selected topics, studies in, and senior seminar courses, i.e., courses with changing topics and content and approved for a particular semester are posted on the International Studies Website under ‘Courses and Registration.’

1. Complete 18 credits of required core courses
   
   Introductory Survey 3
   (May be used to fulfill both an International Studies degree requirement and the Tier 2 GER social sciences requirement.)
   GEOG/INTL A101* Local Places/Global Regions: An Introduction to Geography (3)
   Social Sciences Selection 6
   (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 6
   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 3
   GEOG A390A* Topics in Global Geography (3)
   HIST A390A* Themes in World History (3)
   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 9
ANTH A434 Peoples and Cultures of Northeast Asia (3)
ART A492 Art History Seminar (with approved topic) (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)
Undergraduate Programs, College of Arts & Sciences

*PHIL A314* Western Religions (3)
*PS A311* Comparative Politics (3)
*PS A333* History of Political Philosophy II: Modern (3)
*SPAN A432* Selected Topics: Studies in Hispanic Literature and Culture *(with approved topic)* (3)
*SPAN A490* Selected Topics: Hispanic Culture and Civilization *(with approved topic)* (3)

**Canadian Track (Language: French)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTL A315*</td>
<td>Canada: Nation and Identity</td>
<td>3</td>
</tr>
<tr>
<td>ANTH A416</td>
<td>Arctic Archeology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH A435</td>
<td>Northwest Coast Cultures</td>
<td>3</td>
</tr>
<tr>
<td>ANTH A437</td>
<td>Eskimo Adaptations</td>
<td>3</td>
</tr>
<tr>
<td>ANTH A439</td>
<td>Athabaskan Adaptations</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A305*</td>
<td>National Literatures in English <em>(with approved topic)</em></td>
<td>3</td>
</tr>
<tr>
<td>ENGL A371</td>
<td>Narrative Nonfiction <em>(with approved topic)</em></td>
<td>3</td>
</tr>
<tr>
<td>FREN A432</td>
<td>Selected Topics: Studies in French/ Francophone Literature and Culture <em>(with approved topic)</em></td>
<td>3</td>
</tr>
<tr>
<td>THR A492*</td>
<td>Senior Seminar <em>(with approved topic)</em></td>
<td>3</td>
</tr>
</tbody>
</table>

Any course with the appropriate focus and approved by academic petition for the category. For example, a topics course that focuses on Canada. (3)

4. A total of 120 credits is required for the degree, of which 42 credits must be upper division, and 46 credits must be earned to meet the requirements of the major as specified above.

**Minor, International North Pacific Studies**

Students majoring in another subject and wishing to minor in International North Pacific Studies must:

1. Complete the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTL A315*</td>
<td>Canada: Nation and Identity</td>
<td>3</td>
</tr>
<tr>
<td>INTL/HIST/</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PS A325*</td>
<td>Northeast Asia in 21st Century</td>
<td>3</td>
</tr>
<tr>
<td>HIST A315*</td>
<td>Russia in East Asia</td>
<td>3</td>
</tr>
<tr>
<td>JPN A310</td>
<td>Selected Topics Advanced Japanese <em>(with approved topic)</em></td>
<td>3</td>
</tr>
</tbody>
</table>

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)

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.

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:

1. Complete the following course:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTL A315*</td>
<td>Canada: Nation and Identity</td>
<td>3</td>
</tr>
</tbody>
</table>

2. Complete 8 credits of a language appropriate to the Canada track of the Bachelor of Arts in International Studies.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTL A315*</td>
<td>Canada: Nation and Identity</td>
<td>3</td>
</tr>
</tbody>
</table>
The department also strives to meet Alaska’s communication needs. Through its research, creative activities, and community engagement, and appreciation of the vital role that free expression and mass communications is to prepare students for professional careers and teach students theory, skills, and ethical principles of journalism and professional communications that will endure as fundamentals in a world where the methods of conveying information are undergoing significant change.

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.
- Abilities to articulate ideas in relationship to orally based critical discourse in the classroom.

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:

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:

C. Complete JPC A492, JPC Senior Seminar with grade of 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.

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 the 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 these 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

JOURNALISM AND PUBLIC COMMUNICATIONS

Professional Studies Building (PSB), Room 203, (907) 786-4180

www.uaa.alaska.edu/journalismandpubliccommunications

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, 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.

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.

Mission

The mission of the Department of Journalism and Public Communications is to prepare students for professional careers and graduate study and to give them a thorough understanding and appreciation of the vital role that free expression and mass communication play in a global society.

Through its research, creative activities, and community engagement, the department also strives to meet Alaska’s communication needs. Our goal is to contribute to the development of the economic and social environment of the state, with an emphasis on the Southcentral region served by the University of Alaska Anchorage.
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 and JPC A204 should be taken in the same semester, followed by JPC A202 and JPC A203 the next semester. JPC A204 is the prerequisite for most 300- and 400-level courses.

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 the following JPC 400-level elective courses: 3
   JPC A404 Global Media and Communications Systems (3)
   JPC A413 Communications Law (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 Photjournalism (3)
   JPC A343 Radio News Reporting (3)
   JPC A344 Television News Reporting (3)
   JPC A345 Web Design (3)
   JPC A346 Magazine Content Creation (3)
   JPC A442 Multimedia Journalism (3)
   JPC A443 Enterprise Reporting (3)
   JPC A444 Specialty Reporting (3)
   JPC A445 Magazine Editing and Production I (3)
   JPC A492 JPC Senior Seminar (3)
   JPC A495 JPC Practica and Internships (1-6)
   JPC A497 Independent Study (1-6)

   **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 Internships (1-6)
   JPC A497 Independent Study (1-6)

   **Telecommunications and 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 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 Internships (1-6)
   JPC A497 Independent Study (1-6)

**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 Multimedia 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 or UAA-based workplace supervisor. 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 A203 are required. The remaining 12 credits may be taken from any JPC courses. Eighteen credits are required for the minor.

**FACULTY**
Elizabeth Arnold, Assistant Professor, earnold@uaa.alaska.edu
Paola Banchero, Associate Professor/Chair, pbanchero@uaa.alaska.edu
Edgar Blatchford, Associate Professor, ebblatchford@uaa.alaska.edu
Red Bradley, Term Assistant Professor, rbradley@uaa.alaska.edu
Joy Chavez Mapaye, Assistant Professor, jmapaye@uaa.alaska.edu
Ron McGee, Assistant Professor, rmcgee@uaa.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 student’s selection of courses from outside the department to fulfill major requirements, reflect the diverse context in which students live and work, and recognize the inherent multidisciplinary nature of language study. This flexibility also allows students to select a program most suited to their educational and career goals.

The Department of Languages offers French, German, Japanese, Russian, and Spanish as emphasis languages, with additional lower division courses in American Sign Language (ASL), Chinese, Korean, and Latin.
Students must complete the following graduation requirements:

- Graduation Requirements toward the major or minor.
- No course in which a grade below C has been received will count.

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.

**Bachelor of Arts, Languages**

**Program Student Learning Outcomes**

Students graduating with a Bachelor of Arts in Languages will be able to:

- Communicate effectively in both spoken and written forms, as per the American Council on the Teaching of Foreign Languages Guidelines, in the emphasis language,
- Demonstrate close reading and critical analysis of authentic texts in the emphasis languages, and
- Articulate knowledge of cross-cultural similarities and differences, appropriately communicating this knowledge within a given context in the emphasis language.

**Admission Requirements**

Complete the Admission to Baccalaureate Programs Requirements in Chapter 7.

**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: 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.

2. 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).

3. 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).

**Option II: Dual Languages**

a. Choose an emphasis language from French, German, Japanese, Russian, or Spanish; and a second language from among those, ASL, or Chinese.

b. Complete one of the following four courses: 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

   *Chinese and Japanese courses have the same course number but different titles, respectively: CHIN A201 Second Year Chinese I and CHIN A202 Second Year Chinese II; JPN A201 Second Year Japanese I and JPN A202 Second Year Japanese II.

   d. Complete 9 credits of approved upper division electives in or related to the emphasis language or culture, at least 6 of which must be taught in the emphasis language (contact Language Program Coordinator or see department for list of approved courses taught in English).

   e. Complete 8 credits beyond A102 in the second language.

2. Students must petition to substitute study abroad language courses for certain major requirements.

3. Students may not earn a major and a minor in the same language.

4. Students must take at least 6 upper division credits, in the respective emphasis language, in courses numbered higher than A302 physically in residence at UAA.

5. 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 Examination Program, nor to special topics (-93), independent study (-97), or other elected 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).
the course A302, or Department of Languages literature or culture courses. In order to receive credit the student must complete the appropriate form in the Office of the Registrar and pay an administrative fee.

**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 Arna, Assistant Professor, Japanese, mama@uaa.alaska.edu
Margriff Engel, Professor Emerita, German, afgan@uaa.alaska.edu
Patricia Fagan, Associate Professor, Spanish, pcfagan@uaa.alaska.edu
Hiroko Harada, Professor, Japanese, hharada@uaa.alaska.edu
Susan Kaulina, Professor, Russian, smkalin@uaa.alaska.edu
Theodore Kassier, Professor, Spanish, tkassier@uaa.alaska.edu
Natasha Masanovic, Associate Professor, German, nmasanovic@uaa.alaska.edu
Rebeca Maseda Garcia, Assistant Professor, Spanish, rmasedaga@uaa.alaska.edu
Francisco Miranda, Associate Professor, Spanish, fmiranda2@uaa.alaska.edu
Sudarsan Rangagarajan, Associate Professor, French, srangarajan@uaa.alaska.edu
Dave Robertson, Coordinator, American Sign Language, derobertson@uaa.alaska.edu
Annie Zeng, Assistant Professor, Chinese, apzeng@uaa.alaska.edu

**LIBERAL STUDIES**

Professional Studies Building (PSB), Room 104A, (907) 786-6049
www.uaa.alaska.edu/liberalstudies

**Bachelor of Liberal Studies**

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.

**Program Student Learning Outcomes**

Students graduating with a Bachelor of Liberal Studies will be able to:

- Demonstrate sound understanding of content and methodology within different fields in the natural sciences, social sciences, humanities and arts.
- Think critically, cross disciplinary boundaries, and work effectively (both independently and in teams) to solve problems and produce original work.
- Communicate effectively in both written and oral formats.

**Admission Requirements**

Complete the Admission to Baccalaureate Programs Requirements in Chapter 7.

**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 www.uaa.alaska.edu/liberalstudies, or by contacting the department at (907) 786-1707.

1. **Communications and Writing Skills**

   - COMM A111* Fundamentals of Oral Communication 3
   - ENGL A111* Introduction to Composition 3
   - ENGL A214* Persuasive Writing 3

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 A109 or MATH A109 or MATH A109 3
   - MATH A172 or MATH A200 or MATH A201 or MATH A272* 3
   - STAT A252 or STAT A252 Elementary Statistics (3) 3
   - or STAT A253* Applied Statistics for the Sciences (4)

4. **Liberal Studies Social Sciences (LSSS) Core**

   - AKNS/PS A411 Tribes, Nations and Peoples 3
   - LSIS A111 Cultural Foundations of Human Behavior 3
   - PSY Complete one course in psychology 3
   - (recommend PSY A111* General Psychology or PSY A150* Lifespan Development)
   - 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).
   - HIST A355 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

7.  Two Discipline Area Concentration  21
a.  Twelve credits in one discipline, of which 9 credits must be at the upper division level (see approved list of disciplines at www.uaa.alaska.edu/liberalstudies) 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 www.uaa.alaska.edu/liberalstudies). For example, 12 credits in Political Science and 9 credits in English.
8.  A minimum of 120 credits is required for the degree, of which 42 credits must be upper division.

FACULTY
Gabrielle Barnett, Assistant Professor, gbarnett@uaa.alaska.edu
Matthew Bowes, Instructor, mbowes@uaa.alaska.edu
Phyllis Fast, Professor, pfast@uaa.alaska.edu
Sarah Gerken, Associate Professor, sagerken@uaa.alaska.edu
Ann Jache, Assistant Professor, jache@uaa.alaska.edu
Marie Lowe, Assistant Professor, mlowe@uaa.alaska.edu
Kimberly Pace, Assistant Professor, kipace@uaa.alaska.edu
Travis Rector, Professor, tarector@uaa.alaska.edu

AFFILIATED FACULTY
Polly Bass, Assistant Professor, pbass2@matsu.alaska.edu
Karen Carpenter, Assistant Professor, kcarpenter@matsu.alaska.edu
Catherine Knott, Assistant Professor, jfc@kpc.alaska.edu
Cindy Trussell, Associate Professor, ctrussell@kokiak.alaska.edu

MATHEMATICS

Social Sciences Building (SSB), Room 154, (907) 786-1744/786-4824
www.uaa.alaska.edu/mathematicalsciences

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 satisfy NCATE standards, and prepare 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:

- Obtain an Associate of Applied Science degree
- Obtain an Associate of Arts degree
- Obtain a variety of certificates
- Study mathematics for use in another discipline
- Improve job-related mathematics skills
- Study mathematics for self-interest

Program Student Learning Outcomes
Students graduating with a Bachelor of Science in Mathematics or a Bachelor of Arts in Mathematics will be able to:

- Demonstrate knowledge of the techniques of modern mathematical subjects including calculus, linear algebra, modern algebra, and probability and statistics.
- Demonstrate an ability to construct proofs and solve problems using deductive logic, data analysis, computation, modeling, and connections.
- Demonstrate an ability to read, write, and speak mathematics.
- Be cognizant of their mathematical knowledge, of mathematics around them, and the need for life-long learning.

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.
2.  Meet the requirements for a BA/BS degree in Mathematics.
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.

Bachelor of Arts, Mathematics

Admission Requirements
Complete the Baccalaureate Degree Programs Admission Requirements listed in Chapter 7.

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 (28 Credits)
   - CS A109  Computer Programming (3)
   - CS A111  Visual Basic.Net Programming (3)
   - CSCE A201  Computer Programming I (4)
   - MATH A200  Calculus I  4

   or
   - CS A110  Java Programming (3)
   - MATH A201  Calculus I  4
MATH A201 Calculus II 4
MATH A202 Calculus III 4
MATH A215 Introduction to Mathematical Proofs 3
MATH A303 Introduction to Modern Algebra 3
MATH A314 Linear Algebra 3
STAT A307 Probability and Statistics 4

2. Complete one of the following options:

   **Traditional Option (21 Credits)**
   MATH A302 Ordinary Differential Equations 3
   MATH A321 Analysis of Several Variables 3
   MATH A324 Advanced Calculus 3
   MATH A410 Introduction to Complex Analysis (3) 3
   or
   MATH A422 Partial Differential Equations (3) 3
   a. Complete three additional courses from the following list (9 credits):
      MATH A305 Introduction to Geometries (3)
      MATH A306 Discrete Methods (3)
      MATH A371 Stochastic Processes (3)
      MATH A407 Mathematical Statistics I (3)
      MATH A408 Mathematical Statistics II (3)
      MATH A410 Introduction to Complex Analysis (3)
      MATH A420 History of Mathematics (3)
      MATH A422 Partial Differential Equations (3)
      MATH A426 Numerical Methods (3)
      MATH A430 Concepts of Topology (3)
      MATH A490A* Selected Topics in Pure Mathematics (3)
      MATH A490B* Selected Topics in Applied Mathematics (3)
      STAT A308 Intermediate Statistics for the Sciences (3)
   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.
   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 (6 credits):
      MATH A302 Ordinary Differential Equations (3)
      MATH A321 Analysis of Several Variables (3)
      MATH A324 Advanced Calculus (3)
      MATH A371 Stochastic Processes (3)
      MATH A407 Mathematical Statistics I (3)
      MATH A408 Mathematical Statistics II (3)

   3. Students pursuing a Bachelor of Science in Mathematics may choose from two options:
      1. Complete the following core courses (28 Credits)
         CS A109 Computer Programming (Languages Vary) (3) 3-4
         or
         CS A110 Java Programming (3)
         or
         CS A111 Visual Basic .Net Programming (3)
         or
         CSCE A201 Computer Programming I (4)
         MATH A200 Calculus I 4
         MATH A201 Calculus II 4
         MATH A202 Calculus III 4
         MATH A215 Introduction to Mathematical Proofs 3
         MATH A303 Introduction to Modern Algebra 3
         MATH A314 Linear Algebra 3
         STAT A307 Probability and Statistics 4
      2. Complete one of the following options:
MATH A305
Introduction to Geometries (3)
MATH A306
Discrete Methods (3)
MATH A371
Stochastic Processes (3)
MATH A407
Mathematical Statistics I (3)
MATH A408
Mathematical Statistics II (3)
MATH A410
Introduction to Complex Analysis (3)
MATH A420
History of Mathematics (3)
MATH A422
Partial Differential Equations (3)
MATH A426
Numerical Methods (3)
MATH A430
Concepts of Topology (3)
MATH A490A* Selected Topics in Pure Mathematics (3)
MATH A490B* Selected Topics in Applied Mathematics (3)
STAT A308
Intermediate Statistics for the Sciences (3)
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)
TH A490A and/or MATH A490B may be applied to the degree requirements.
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 (6 credits):
MATH A302
Ordinary Differential Equations (3)
MATH A321
Analysis of Several Variables (3)
MATH A324
Advanced Calculus (3)
MATH A371
Stochastic Processes (3)
MATH A407
Mathematical Statistics I (3)
MATH A408
Mathematical Statistics II (3)
MATH A410
Introduction to Complex Analysis (3)
MATH A422
Partial Differential Equations (3)
MATH A426
Numerical Methods (3)
MATH A430
Concepts of Topology (3)
MATH A490A* Selected Topics in Pure Mathematics (3)
MATH A490B* Selected Topics in Applied Mathematics (3)

STAT A308
Intermediate Statistics for the Sciences (3)
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)

*a maximum of 6 credits of MATH A490A and/or MATH A490B may be applied to the degree requirements.

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

Complete two additional courses from the following list (6 credits):
MATH A302
Ordinary Differential Equations (3)
MATH A321
Analysis of Several Variables (3)
MATH A324
Advanced Calculus (3)
MATH A371
Stochastic Processes (3)
MATH A407
Time Series Analysis (3)
MATH A408
Multivariate Statistics (3)

*a maximum of 6 credits of MATH A490A and/or MATH A490B may be applied to the degree requirements.

FACULTY
Arthur Bukowski, Professor Emeritus
Samuel Cook, Assistant Professor, sam.cook@uaa.alaska.edu
Hilary Davies, Professor, mdavies@uaa.alaska.edu
Mark Fitch, Associate Professor, mafitch@uaa.alaska.edu
Stefanos Folias, Assistant Professor, sfolis@uaa.alaska.edu
Larry Foster, Professor, lmfoster@uaa.alaska.edu
Joan Haig, Professor, jnhaig@uaa.alaska.edu
Alberta Harder, Assistant Professor, aharder@uaa.alaska.edu
Robert McCoy, Professor, romccoy@uaa.alaska.edu
Deborah Narang, Professor, dlnarang@uaa.alaska.edu
Kamal Narang, Professor, knarang@uaa.alaska.edu
Gail Opalinski, Term Assistant Professor, gopalinski@uaa.alaska.edu
Leonard Smiley, Professor, lmsmiley@uaa.alaska.edu
Brian Wick, Professor Emeritus
Yelena Yagodina, Term Assistant Professor, yagodina@uaa.alaska.edu

Undergraduate Programs, College of Arts & Sciences
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 excels intellectually, pedagogically, and creatively 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: www.uaa.alaska.edu/coe/degrees/master-degrees/master-of-arts-in-teaching.cfm.

Program Student Learning Outcomes
Students completing a degree in Music will be able to:

1. Demonstrate technical proficiency on a chosen instrument appropriate to the degree with an attendant functional proficiency on piano.
2. Demonstrate and analyze through musical literacy the basic technical principles used in the construction of music and its basic forms.
3. Communicate a knowledge of the various musical periods and representative forms from those periods in the social, artistic and political context of each.

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. 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.
5. Complete MUS A462, which includes a senior recital, with a grade of B or above.
6. Complete the Admission to Baccalaureate Programs Requirements in Chapter 7. 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 jured private lessons, ensembles, and academic music classes. Students judged not ready for jured private lessons will be required to complete non-juried private lessons to build performance skills. To develop prerequisite understanding of music theory, those students not ready for theory and aural skills courses will be required to complete MUS A111 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 jured private lessons (MUS A161), students file a Change of Major 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 music technical training workshop and must have demonstrated proficiency in all aspects of recital technical support.

Music majors may not enroll in certain upper division music courses until this jury examination is passed. See Music degree listings for specific requirements.

Graduation Requirements: 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 (32 credits):
   - MUS A131 Music Theory I  
   - MUS A132 Music Theory II  
   - MUS A133 Aural Skills I  
   - MUS A134 Aural Skills II  
   - MUS A154D Functional Piano IV  
   - MUS A222 History of Music I  
   - MUS A223 History of Music II  
   - MUS A231 Music Theory III  
   - MUS A232 Music Theory IV  
   - MUS A233 Aural Skills III  
   - MUS A234 Aural Skills IV  
   - MUS A280 Basic Conducting  
   - MUS A331 Form and Analysis  
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 A421, MUS A422, MUS A423, MUS A424, MUS A431 or MUS A432, for example) or in upper division private lessons (MUS A361) until they have passed the Piano Proficiency examination by jury.

E. Additional Major Requirements: Bachelor of Arts, Music
1. Private lessons on your major instrument:  
   - MUS A161, MUS A162; MUS A261, MUS A262  
2. Ensemble  
   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, String and Guitar Majors:
     - MUS A466 String and Wind Master Class (1) 
     - MUS A469 Guitar Master Class (1) 
   - Voice and Piano Majors:
     - MUS A467 Piano Master Class (2) 
     - MUS A468 Voice Master Class (2)
4. Sixty-seven credits must be completed outside of Music.
5. A total of 120 credits is required for the degree, of which 42 credits must be upper division.

F. Additional Major Requirements: Bachelor of Music, Performance
1. Private lessons on your major instrument:  
   - MUS A161 - MUS A162 
   - MUS A261 - MUS A262 
   - MUS A361 - MUS A362 
   - MUS A461 - MUS A462  
2. Ensemble  
   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 
     - MUS A301B University Singers (2) to total 4 
     - MUS A303B University Wind Ensemble (2) or 
     - MUS A307B University Sinfonia (2)
   - Guitar Majors:
     - MUS A409B University Guitar Ensemble (2) to total 12 
     - MUS A301B University Singers (2) to total 4 
     - MUS A303B University Wind Ensemble (2) or 
     - MUS A307B University Sinfonia (2)
3. Chamber Ensemble  
   Eight semesters of Master Class are required.
   Choose the class appropriate to your major instrument:
   - Wind, String and Guitar Majors:
     - MUS A466 String and Wind Master Class (1) 
     - MUS A469 Guitar Master Class (1)
   - Voice and Piano Majors:
     - MUS A467 Piano Master Class (2) 
     - MUS A468 Voice Master Class (2)
   - Percussion Majors:
     - MUS A408B University Percussion Ensemble (2)
5. Conducting: 2
   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 - MUS A162
   MUS A261 - MUS A262
   MUS A361 - MUS A362
   MUS A461 - MUS 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 A302B Chamber Music and Accompanying (2)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS A313</td>
<td>Opera Workshop (2)</td>
</tr>
<tr>
<td>MUS A365</td>
<td>Chamber Ensemble (1)</td>
</tr>
<tr>
<td>MUS A407</td>
<td>Jazz Combo (2)</td>
</tr>
<tr>
<td>MUS A408B</td>
<td>University Percussion Ensemble (2)</td>
</tr>
<tr>
<td>MUS A409B</td>
<td>University Guitar Ensemble (2)</td>
</tr>
</tbody>
</table>

**Note:** Credits completed will vary from 2 to 4, depending upon which courses are selected.

4. Master Class 8-16
   Four or eight semesters of Master Class are required.
   **Choose the class appropriate to your major instrument:**
   **Wind, String and Guitar Majors:**
   MUS A466 String and Wind Master Class (1)
   or
   MUS A469 Guitar Master Class (1)
   **Voice and Piano Majors:**
   MUS A467 Piano Master Class (2)
   or
   MUS A468 Voice Master Class (2)
   **Percussion Majors:**
   MUS A408B University Percussion Ensemble (2)

5. Conducting 2
   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. A total of 128-130 credits is required for the degree, of which 42 credits must be upper division.

11. 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.

12. 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.

13. Students seeking music certification must have completed all requirements for the Bachelor of Music, Music Education Emphasis degree with a 2.75 GPA or better for admission to the MAT program.

14. Students must take the PRAXIS I and the PRAXIS II in music for admission to the MAT program.

15. 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, Fundamentals of Music (3) or MUS A131, Music Theory I (3) or MUS A132, Music Theory II (3)
2. MUS A121, Music Appreciation (3) or MUS A221, History of Music I (3) or MUS A222, History of Music II (3)
3. Private Lessons, MUS A161-MUS 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
   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 (1)
5. Ensemble
   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
Christopher Sweeney, Associate Professor/Chair, csweeney@uaa.alaska.edu
George Belden, Associate Professor, gbelden@gci.net
Grant Cochran, Assistant Professor, grcochran@uaa.alaska.edu
Mari Hahn, Associate Professor, mihahn6@uaa.alaska.edu
Walter Olivares, Associate Professor, wgo@uaa.alaska.edu
Timothy Smith, Professor/Associate Dean for the Fine Arts, tcsmith@uaa.alaska.edu
Roland Stearns, Assistant Professor, rhostearns@uaa.alaska.edu
Karen Strid-Chadwick, Professor, kks@uaa.alaska.edu
Mark Wolbers, Professor, mewolbers@uaa.alaska.edu

NATURAL SCIENCES

ConocoPhillips Integrated Sciences Building (CPSB), Room 101P,
(907) 786-4770
www.uaa.alaska.edu/biology

The undergraduate program in Natural Sciences is founded on a curriculum that emphasizes the interrelationships among the sciences. A program of study in the Natural Sciences requires that students select an option within the degree and complete all courses required within the option, as well as sufficient science elective courses to meet minimum unit requirements for graduation.

Students accepted into this flexible degree program select one of three options: the General Sciences Option is designed for students who are interested in understanding the interrelationships among various scientific fields, or in teaching science at the secondary level. The Pre-Health Professions Option is designed to meet the admission requirements of specific professional schools in medicine, dentistry, and veterinary medicine. The Environmental Sciences Option is designed to prepare students for graduate school or for employment in the private or public sector.

The Natural Sciences program is administered by the Department of Biological Sciences. Upon acceptance to the major the student will be assigned an academic advisor from the Department of Biological Sciences in accordance with the student’s declared option, and students are strongly encouraged to consult with their academic advisors to determine which electives best suit their career requirements.

Bachelor of Science, Natural Sciences

Admission Requirements

Complete the Admission to Baccalaureate Programs Requirements in Chapter 7. Declare the major (see Major Requirements) and select one of three options: General Sciences, Pre-Health Professions or Environmental Sciences.

Program Student Learning Outcomes

It is expected that graduates of the Natural Sciences program will:

1. Demonstrate their knowledge of central conceptual models used in the major thematic areas of natural sciences.
2. Identify problems, devise solutions and communicate solutions effectively.

Academic Progress

To graduate with a BS in Natural Sciences, the student must complete all courses covered under Major Requirements for a BS in Natural Sciences with a grade of C or better. All prerequisites for courses used to meet the Natural Sciences degree requirements must be completed with a grade of C or better. Students who audit a course intended to meet the Natural Sciences degree requirements or who are unable to earn a grade of C or better in the course may repeat the course. Students who audit, or are unable to earn a grade of C or better in, an upper-division (100 or 200 level) course in the Department of Biological Sciences (BIOL) may repeat the course two additional times on a space available basis. Students who audit, or are unable to earn a grade of C or better in, a lower-division (100 or 200 level) course in the Department of Biological Sciences (BIOL) may repeat the course one additional time on a space available basis. Students repeating a course in the Department of Biological Sciences are required to complete all components of that course during the semester in which the course is retaken. When repeating a course with a lecture and laboratory component, both components must be repeated. Students enrolled in a laboratory in the Department of Biological Sciences must attend the first week of class or they may be administratively dropped.

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 (GERs) listed at the beginning of this chapter.

C. College of Arts and Sciences Requirements

Complete the College of Arts and Sciences (CAS) Requirements listed at the beginning of the CAS section. It is recommended that MATH A200 or MATH A272, STAT A253 or STAT A307, and the computer programming requirements be completed in the first two years of study.

D. Major Requirements

1. To declare the Bachelor of Science in Natural Sciences as their major, students must meet with an advisor and then apply to be accepted into the major. To schedule your advising session,
contact the Department of Biological Sciences. At the advising session students are required to:

a. choose one of the three options and
b. file a preliminary program of study with the Department of Biological Sciences.

2. It is strongly recommended that any changes to the preliminary program be reviewed by an advisor to ensure that the final program of study will meet all requirements for graduation.

3. Students must submit a final Program of Study-Natural Sciences Degree form signed by their advisor to both the Office of the Registrar and the Department of Biological Sciences during the semester prior to the semester in which they plan to graduate. All courses listed in the Program of Study-Natural Sciences Degree form must be approved by the formal advisor before submitting the form to the Office of the Registrar and the Department of Biological Sciences.

4. No more than 6 credits may come from courses designated as A495, A498 and A499 combined, with no more than 2 credits from A495.

5. No more than 4 credits may be A492, with no more than 2 from the same discipline.

6. Courses not listed as approved for the Natural Sciences degree may be considered by petition, which should be signed by an advisor.

7. A total of 120-124 credits is required for the degree, of which 42 credits must be upper division.

Note 1: It is suggested that the required science sequences for any option be completed in the first two years of study.

Note 2: Students are encouraged to pay careful attention to prerequisite requirements when designing their program of study.

Note 3: Some courses meet more than one of the requirements (GER, CAS, Major). Consult the beginning of this chapter for information about GERs and the beginning of the CAS section for information about CAS requirements.

Environmental Sciences Option (80 credits)

1. Complete the following required courses (30 credits):
   - BIOL A115 Fundamentals of Biology I 4
   - BIOL A116 Fundamentals of Biology II 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
   - ENVI A211 Environmental Science: Systems and Processes 3
   - ENVI A212 Living on Earth: People and the Environment 3

2. Complete an additional 50 credits of degree electives from the approved course lists for the Environmental Sciences Option.
   a. A minimum of 32 credits must be upper division.
   b. A minimum of 20 credits must come from the following Natural and Physical Sciences Course List for the Environmental Sciences Option: 20
      - ASTR/
      - BIOL A365 Astrobiology (3)
      - BIOL/
      - GEOL A178 Fundamentals of Oceanography (3)
      - BIOL/
      - GEOL A179 Fundamentals of Oceanography Laboratory (1)
      - BIOL/
      - CPLX A200 Introduction to Complexity (3)
      - BIOL A242 Fundamentals of Cell Biology (4)
      - BIOL A252 Principles of Genetics (4)
      - BIOL A271 Principles of Ecology (4)
      - BIOL A308 Principles of Evolution (3)
### Environmental Sciences Option: Math and Computational Skills Course List for the Environmental Sciences Option:

A minimum of 15 credits must come from the following Math and Computational Skills Course List for the Environmental Sciences Option:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL A454</td>
<td>Glacial and Quaternary Geology (3)</td>
</tr>
<tr>
<td>GEOL A455</td>
<td>Permafrost (3)</td>
</tr>
<tr>
<td>GEOL A456</td>
<td>Geoarchaeology (3)</td>
</tr>
<tr>
<td>GEOL A460</td>
<td>Environmental Geochemistry (3)</td>
</tr>
<tr>
<td>GEOL A475</td>
<td>Environmental Geophysics (3)</td>
</tr>
<tr>
<td>GEOL A480</td>
<td>Geological Field Methods (3)</td>
</tr>
<tr>
<td>GEOL A481</td>
<td>Alaskan Field Investigations (3)</td>
</tr>
<tr>
<td>GEOL A482</td>
<td>Geophysical Field Investigations (3)</td>
</tr>
<tr>
<td>GEOL A490</td>
<td>Advanced Topics in Geology (1-4)</td>
</tr>
<tr>
<td>GEOL A492</td>
<td>Geology Seminar (1)</td>
</tr>
<tr>
<td>GEOL A495</td>
<td>Geology Internship (1-3)</td>
</tr>
<tr>
<td>GEOL A498</td>
<td>Senior Research (1-3)</td>
</tr>
<tr>
<td>LSIS A201</td>
<td>Life on Earth (5)</td>
</tr>
<tr>
<td>LSIS A202</td>
<td>Concepts and Processes: Natural Sciences (5)</td>
</tr>
<tr>
<td>PHYS A123</td>
<td>Basic Physics I* (3)</td>
</tr>
<tr>
<td>PHYS A123L</td>
<td>Basic Physics I Laboratory* (1)</td>
</tr>
<tr>
<td>PHYS A124</td>
<td>Basic Physics II* (3)</td>
</tr>
<tr>
<td>PHYS A124L</td>
<td>Basic Physics II Laboratory* (1)</td>
</tr>
<tr>
<td>PHYS A211</td>
<td>General Physics I* (3)</td>
</tr>
<tr>
<td>PHYS A211L</td>
<td>General Physics I Laboratory* (1)</td>
</tr>
<tr>
<td>PHYS A212</td>
<td>General Physics II* (3)</td>
</tr>
<tr>
<td>PHYS A212L</td>
<td>General Physics II Laboratory* (1)</td>
</tr>
<tr>
<td>PHYS A303</td>
<td>Modern Physics (3)</td>
</tr>
</tbody>
</table>

*Students cannot get credit for both PHYS 123/L and PHYS 121/L or PHYS 124/L and PHYS 212/L.

### Social Sciences Course List for the Environmental Sciences Option:

A minimum of 9 credits must come from the following Social Sciences Course List for the Environmental Sciences Option:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH A101</td>
<td>Introduction to Anthropology (3)</td>
</tr>
<tr>
<td>ANTH A202</td>
<td>Cultural Anthropology (3)</td>
</tr>
<tr>
<td>ANTH A205</td>
<td>Biological Anthropology (3)</td>
</tr>
<tr>
<td>ANTH A335</td>
<td>Native North Americans (3)</td>
</tr>
<tr>
<td>ANTH A354</td>
<td>Culture and Ecology (3)</td>
</tr>
<tr>
<td>ANTH A415</td>
<td>Applied Anthropology (3)</td>
</tr>
<tr>
<td>ANTH A445</td>
<td>Evolution of Humans and Disease (3)</td>
</tr>
<tr>
<td>CEL A292</td>
<td>Introduction to Civic Engagement (3)</td>
</tr>
<tr>
<td>CEL A390</td>
<td>Selected Topics in Civic Engagement (1-3)</td>
</tr>
<tr>
<td>ECON A201</td>
<td>Principles of Macroeconomics (3)</td>
</tr>
<tr>
<td>ECON A202</td>
<td>Principles of Microeconomics (3)</td>
</tr>
<tr>
<td>ECON A210</td>
<td>Environmental Economics and Policy (3)</td>
</tr>
<tr>
<td>ECON A300</td>
<td>The Economy of Alaska (3)</td>
</tr>
<tr>
<td>ECON A321</td>
<td>Intermediate Microeconomics (3)</td>
</tr>
<tr>
<td>ECON A435</td>
<td>Natural Resource Economics (3)</td>
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<tr>
<td>ENVI A303</td>
<td>Environmental Ethics (3)</td>
</tr>
<tr>
<td>ENVI A470</td>
<td>Environmental Planning and Problem Solving (4)</td>
</tr>
<tr>
<td>GEOG A101</td>
<td>Local Places/Global Regions: An Introduction to Geography (3)</td>
</tr>
<tr>
<td>LSIS A311</td>
<td>People, Places and Ecosystems (3)</td>
</tr>
<tr>
<td>SOC A101</td>
<td>Introduction to Sociology (3)</td>
</tr>
<tr>
<td>SOC A404</td>
<td>Environmental Sociology (3)</td>
</tr>
</tbody>
</table>

### Pre-Health Professions Option (80 credits)

1. Complete the following required courses (24 credits):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL A115</td>
<td>Fundamentals of Biology I (4)</td>
</tr>
<tr>
<td>BIOL A116</td>
<td>Fundamentals of Biology II (4)</td>
</tr>
<tr>
<td>CHEM A105</td>
<td>General Chemistry I (3)</td>
</tr>
<tr>
<td>CHEM A105L</td>
<td>General Chemistry I Laboratory (1)</td>
</tr>
<tr>
<td>GIS A495</td>
<td>Internship in Geographic Information Systems II (3)</td>
</tr>
<tr>
<td>MATH A200</td>
<td>Calculus I (4)</td>
</tr>
<tr>
<td>MATH A272</td>
<td>Applied Calculus (3)</td>
</tr>
<tr>
<td>MATH A201</td>
<td>Calculus II (4)</td>
</tr>
<tr>
<td>MATH A202</td>
<td>Calculus III (4)</td>
</tr>
<tr>
<td>MATH A215</td>
<td>Introduction to Mathematical Proofs (3)</td>
</tr>
<tr>
<td>MATH A231</td>
<td>Introduction to Discrete Mathematics (3)</td>
</tr>
<tr>
<td>MATH A302</td>
<td>Ordinary Differential Equations (3)</td>
</tr>
<tr>
<td>MATH A303</td>
<td>Introduction to Modern Algebra (3)</td>
</tr>
<tr>
<td>MATH A305</td>
<td>Introduction to Geometries (3)</td>
</tr>
<tr>
<td>MATH A306</td>
<td>Discrete Methods (3)</td>
</tr>
<tr>
<td>MATH A314</td>
<td>Linear Algebra (3)</td>
</tr>
<tr>
<td>MATH A321</td>
<td>Analysis of Several Variables (3)</td>
</tr>
<tr>
<td>MATH A324</td>
<td>Advanced Calculus (3)</td>
</tr>
<tr>
<td>MATH A371</td>
<td>Stochastic Processes (3)</td>
</tr>
<tr>
<td>MATH A407</td>
<td>Mathematical Statistics I (3)</td>
</tr>
<tr>
<td>MATH A408</td>
<td>Mathematical Statistics II (3)</td>
</tr>
<tr>
<td>MATH A410</td>
<td>Introduction to Complex Analysis (3)</td>
</tr>
<tr>
<td>MATH A422</td>
<td>Partial Differential Equations (3)</td>
</tr>
<tr>
<td>STAT A253</td>
<td>Applied Statistics for the Sciences (4)</td>
</tr>
<tr>
<td>STAT A307</td>
<td>Probability and Statistics (4)</td>
</tr>
<tr>
<td>STAT A308</td>
<td>Intermediate Statistics for the Sciences (3)</td>
</tr>
<tr>
<td>STAT A402</td>
<td>Scientific Sampling (3)</td>
</tr>
<tr>
<td>STAT A403</td>
<td>Regression Analysis (3)</td>
</tr>
<tr>
<td>STAT A404</td>
<td>Analysis of Variance (3)</td>
</tr>
<tr>
<td>STAT A405</td>
<td>Nonparametric Statistics (3)</td>
</tr>
<tr>
<td>STAT A407</td>
<td>Time Series Analysis (3)</td>
</tr>
<tr>
<td>STAT A408</td>
<td>Multivariate Statistics (3)</td>
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<tr>
<td>STAT A490</td>
<td>Selected Topics in Statistics (1-3)</td>
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<td>Principles of Macroeconomics (3)</td>
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<td>ECON A210</td>
<td>Environmental Economics and Policy (3)</td>
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<tr>
<td>ECON A300</td>
<td>The Economy of Alaska (3)</td>
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<tr>
<td>ECON A321</td>
<td>Intermediate Microeconomics (3)</td>
</tr>
<tr>
<td>ECON A435</td>
<td>Natural Resource Economics (3)</td>
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<tr>
<td>ENVI A303</td>
<td>Environmental Ethics (3)</td>
</tr>
<tr>
<td>ENVI A470</td>
<td>Environmental Planning and Problem Solving (4)</td>
</tr>
<tr>
<td>GEOG A101</td>
<td>Local Places/Global Regions: An Introduction to Geography (3)</td>
</tr>
<tr>
<td>LSIS A311</td>
<td>People, Places and Ecosystems (3)</td>
</tr>
<tr>
<td>SOC A101</td>
<td>Introduction to Sociology (3)</td>
</tr>
<tr>
<td>SOC A404</td>
<td>Environmental Sociology (3)</td>
</tr>
</tbody>
</table>

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University of Alaska Anchorage 2013-2014 Catalog
www.uaa.alaska.edu
2. Complete an additional 56 credits of degree electives from the approved course lists for the Pre-Health Professions Option.
   a. A minimum of 32 credits must be upper division.
   b. A minimum of 24 credits must come from the following Natural Sciences Course List for the Pre-Health Professions Option: 24
      - B I O L  A 1 1 1  Human Anatomy and Physiology I (4)
      - B I O L  A 1 1 2  Human Anatomy and Physiology II (4)
      - B I O L  A 1 2 0  Introduction to Complexity (3)
      - B I O L  A 2 4 0  Introductory Microbiology for Health Sciences (4)
      - B I O L  A 3 4 0  General Microbiology (5)
      - B I O L  A 4 2 2  Principles of Genetics (4)
      - B I O L  A 3 1 0  Principles of Physiology (4)
      - B I O L  A 4 0 3  Microtechnique (4)
      - B I O L  A 4 1 5  Comparative Animal Physiology (3)
      - B I O L  A 4 2 5  Mammmalogy (3)
      - B I O L  A 4 5 1  Applied Microbiology (3)
      - B I O L  A 4 5 2  Human Genome (3)
      - B I O L / C H E M / P H Y S  A 4 5 6  Nonlinear Dynamics and Chaos (3)
      - B I O L  A 4 6 1  Molecular Biology (3)
      - B I O L  A 4 6 1 L  Molecular Biology Laboratory (3)
      - B I O L  A 4 6 2  Virology (3)
      - B I O L / C H E M / P H Y S  A 4 7 1  Immunochemistry (4)
      - B I O L  A 4 8 7  Comparative Anatomy of Vertebrates (4)
      - B I O L  A 4 8 8  Developmental Biology (4)
      - B I O L  A 4 8 9  Population Genetics and Evolutionary Processes (3)
      - B I O L  A 4 9 0  Selected Lecture Topics in Biology (1-3)
      - B I O L  A 4 9 0 L  Selected Laboratory Topics in Biology (1-3)
      - B I O L  A 4 9 2  Undergraduate Seminar (1)
      - B I O L  A 4 9 5 A  Internship in the Biological Sciences (3)
      - B I O L  A 4 9 8  Individual Research (1-6)
      - C H E M  A 3 1 1  Physical Chemistry: A Biological Orientation (3)
      - C H E M  A 3 1 2  Quantitative Analysis (5)
      - C H E M  A 3 2 1  Organic Chemistry I (3)
      - C H E M  A 3 2 2  Organic Chemistry II (3)
      - C H E M  A 3 2 3 L  Organic Chemistry Laboratory (2)
      - C H E M  A 4 3 4  Instrumental Methods (5)
      - C H E M  A 4 4 1  Principles of Biochemistry I (3)
      - C H E M  A 4 4 2  Principles of Biochemistry II (3)
      - C H E M  A 4 4 3  Biochemistry Laboratory (2)
      - C H E M  A 4 6 0  Chemical Ecotoxicology (5)
      - C H E M  A 4 9 2  Undergraduate Seminar (1)
      - C H E M  A 4 9 8  Individual Research (3)
   c. A minimum of (15) credits must come from the following Social Sciences Course List for the Pre-Health Professions Option: 15
      - A N T H  A 1 0 1  Introduction to Anthropology (3)
      - A N T H  A 2 0 5  Biological Anthropology (3)
      - A N T H  A 3 2 4  Psychological Anthropology (3)
      - A N T H  A 3 6 5  Modern Human Biological Diversity (3)
      - A N T H  A 4 4 5  Evolution of Humans and Disease (3)
      - A N T H  A 4 5 5  Medical Anthropology (3)
      - A N T H  A 4 5 7  Food and Nutrition: An Anthropological Perspective (3)
      - A N T H  A 4 8 5  Human Osteology (4)
      - A N T H  A 4 8 6  Applied Human Osteology (3)
      - A N T H  A 4 9 0  Selected Topics in Anthropology (1-3)
      - E C O N  A 2 0 1  Principles of Macroeconomics (3)
      - E C O N  A 2 0 2  Principles of Microeconomics (3)
      - H S  A 2 1 0  Introduction to Environmental Health (3)
      - H S  A 2 2 0  Core Concepts in the Health Sciences (3)
      - H S  A 2 3 0  Introduction to Global Health (3)
      - H S  A 3 2 6  Introduction to Epidemiology (3)
      - H S  A 4 9 2  Senior Seminar: Contemporary Health Policy (3)
      - P H L  A 3 0 2  Biomedical Ethics (3)
      - P S Y  A 1 1 1  General Psychology (3)
      - P S Y  A 1 4 3  Death and Dying (3)
      - P S Y  A 1 5 0  Lifespan Development (3)
      - P S Y  A 2 6 0  Statistics for Psychology (3)
      - P S Y  A 2 6 0 L  Statistics for Psychology Lab (1)
      - P S Y  A 2 6 1  Research Methods in Psychology (4)
      - P S Y  A 3 4 5  Abnormal Psychology (3)
      - P S Y  A 3 5 5  Learning and Cognition (4)
      - P S Y  A 3 6 6  Perception (3)
      - P S Y  A 3 6 8  Personality (3)
      - P S Y  A 3 7 0  Behavioral Neuroscience (3)
      - P S Y  A 4 1 2  Foundations of Modern Psychology (3)
      - P S Y  A 4 2 0  Conducting Research in Psychology (3)
      - P S Y  A 4 2 5  Clinical Psychology (3)
      - P S Y  A 4 2 8  Evolutionary Psychology (3)
      - P S Y  A 4 5 0  Adult Development and Aging (3)
      - P S Y  A 4 5 5  Mental Health Services in Alaska (3)
      - P S Y  A 4 8 5  Health Psychology (3)
      - P S Y  A 4 9 8  Individual Research (3)
   d. A minimum of 9 credits must come from the following Math and Computational Skills Course List for the Pre-Health Professions Option: 9
      - M A T H  A 2 0 0  Calculus I (4)
      - M A T H  A 2 0 1  Calculus II (4)
      - M A T H  A 2 0 2  Calculus III (4)
      - M A T H  A 2 1 5  Introduction to Mathematical Proofs (3)
      - M A T H  A 2 3 1  Introduction to Discrete Mathematics (3)
      - M A T H  A 3 0 2  Ordinary Differential Equations (3)
      - M A T H  A 3 0 3  Introduction to Modern Algebra (3)
      - M A T H  A 3 0 5  Introduction to Geometries (3)
      - M A T H  A 3 0 6  Discrete Methods (3)
      - M A T H  A 3 1 4  Linear Algebra (3)
      - M A T H  A 3 2 1  Analysis of Several Variables (3)
      - M A T H  A 3 2 4  Advanced Calculus (3)
      - M A T H  A 3 7 1  Stochastic Processes (3)
      - M A T H  A 4 0 7  Mathematical Statistics I (3)
      - M A T H  A 4 0 8  Mathematical Statistics II (3)
      - M A T H  A 4 1 0  Introduction to Complex Analysis (3)
      - M A T H  A 4 2 2  Partial Differential Equations (3)
      - M A T H  A 4 9 0 A  Selected Topics in Pure Mathematics (1-3)
      - M A T H  A 4 9 0 B  Selected Topics in Applied Mathematics (1-3)
      - M A T H  A 4 9 8  Individual Research (1-3)
      - S T A T  A 2 5 3  Applied Statistics for the Sciences (4)
      - S T A T  A 3 0 7  Probability and Statistics (4)
      - S T A T  A 3 0 8  Intermediate Statistics for the Sciences (3)
      - S T A T  A 4 0 2  Scientific Sampling (3)
      - S T A T  A 4 0 3  Regression Analysis (3)
      - S T A T  A 4 0 4  Analysis of Variance (3)
      - S T A T  A 4 0 5  Nonparametric Statistics (3)
PHILOSOPHY

Administration/Humanities Building (ADM), Room 254, (907) 786-4455
www.uaa.alaska.edu/philosophy

Philosophy is the creative and critical reflection on enduring questions concerning the nature of the world and our place in it. For example, philosophy asks metaphysical questions about what exists, epistemic questions about what we can claim to know, and ethical questions about the nature of the good life and right action. In addition, philosophy involves the study and practice of good reasoning and clear thinking, skills that are essential to any discipline or profession.

The Philosophy Department offers a variety of courses in the central areas of philosophy that acquaint students with the rich, living traditions of the world and explore historical and contemporary issues. Departmental faculty have a wide range of philosophical interests and expertise, with a particular strength in theoretical and applied ethics.

The 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 religious studies 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 religious studies Track is designed for students who want to learn about and reflect on religious traditions in a philosophical manner. Students completing this track will be prepared for graduate study in philosophy or religion.

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.

Program Student Learning Outcomes

Students completing a BA in Philosophy will be able to:

1. Identify, comprehend, analyze, and evaluate complex philosophical arguments in oral and written discourse.

2. Understand, analyze, interpret, and apply major works in the areas of the history of philosophy, ethics, and contemporary topics.
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, Political Science or the natural sciences.

**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.  
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.

**Undergraduate Certificate, Applied Ethics**

**Admission Requirements**  
A student must satisfy the Admission to Certificate Requirements in Chapter 7.

**Graduation Requirements**

1. Complete the following requirements:
   - **Written Communication Skills**  
     Complete two courses from the GER requirements for written communication skills.
   - **Oral Communication Skills**  
     Complete one course from the GER requirements for oral communication skills.
   - **Quantitative Skills**  
     Complete one course from the GER requirements for quantitative skills.
   - **Critical Reasoning Skills**  
     Complete the following course:
     PHIL A101 Introduction to Logic
   - **Ethical Theory**  
     Complete the following course:
     PHIL A301 Ethics
   - **Applied Ethics**  
     Complete two courses from the following:
     PHIL A302 Biomedical Ethics (3)  
     PHIL/ENVI A303 Environmental Ethics (3)  
     PHIL A304 Business Ethics (3)
   - **Professional Ethics**  
     Complete one course from the following:
     BA A488 Environment of Business (3)  
     HUMS A412 Ethical Issues in Human Services Practice (3)  
     PADM A618 Public Accountability and Ethics (3)  
     PHIL A305 Professional Ethics (3)  
     PSY A611 Ethics and Professional Practice (3)  
   
   *Note: Graduate courses taken to satisfy this requirement cannot also be counted toward 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.

**Bachelor of Arts, Philosophy**

**Admission Requirements**  
Complete the Admission to Baccalaureate Programs Requirements in Chapter 7.

**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 (15 credits):
   - **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:** Complete one course from the following:
     PHIL A302 Biomedical Ethics (3)  
     PHIL/ENVI A303 Environmental Ethics (3)  
     PHIL A304 Business Ethics (3)  
     PHIL A305 Professional Ethics (3)
   - **Philosophical Problems:** Complete one course from each of the following two groups:
     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:
     PHIL A495 Service Learning in Applied Ethics 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.

**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, 9 of which must be upper division.

1. Complete the following courses:

   - **Ways of Knowing (pick one):**
     - PHIL A101: Introduction to Logic (3)
     - PHIL A201: Introduction to Philosophy (3)
     - PHIL A301: Ethics (3)

   - **Foundations of Philosophy:**
     - PHIL A211: History of Philosophy I (3)
     - PHIL A212: History of Philosophy II (3)

2. Upper Division Electives (9 credits)

Choose any three upper division Philosophy courses. (9 credits)

**FACULTY**

Raymond Anthony, Associate Professor, rcanthony@uaa.alaska.edu
Stephanie Bauer, Assistant Professor, slbauer@uaa.alaska.edu
William Jamison, Term Instructor, wjamison@uaa.alaska.edu
Terry Kelly, Assistant Professor, tmkelly2@uaa.alaska.edu
James Liszka, Professor Emeritus
John Mouracade, Associate Professor/Chair, jnmouracade@uaa.alaska.edu
Doug Ryan, Term Assistant Professor, dryan1@uaa.alaska.edu

**PHYSICS**

**ConocoPhillips Integrated Sciences Building (CPSB), Room 101Q, (907) 786-1238**

**www.uaa.alaska.edu/physicsandastronomy**

Physics is the universal science. It is the rational development of experiments, observations, and theories to explain the fundamental structure of the universe. Physicists study everything from the smallest subatomic particle to the entire universe.

The laws that physicists have discovered form the basis for understanding the world and also for making the devices and machines that we see and use every day.

The 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.

1. Complete the following courses:

   - 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 credits)

**FACULTY**

James Pantaleone, Professor/Chair, jtpantaleone@uaa.alaska.edu
Katherine Radelin, Assistant Professor, kradelin@uaa.alaska.edu
Curtis Osterhoudt, Assistant Professor
Andrew Puckett, Planetarium Director, apuckett@uaa.alaska.edu
Travis Rector, Associate Professor, tarector@uaa.alaska.edu
POLITICAL SCIENCE

Social Sciences Building (SSB), Room 367, (907) 786-4897
www.uaa.alaska.edu/politicalscience

In its oldest definition, political science was called the master science. More modern definitions are less comprehensive, but of the social sciences, political science has perhaps the least definite boundaries and the widest concerns. Consequently, political science covers many different subjects, uses several diverse methods, and appeals to a variety of students.

Students come to political science because they are interested in politics: some of them with an eye to a political career, some with a scholarly intent, and many wishing to know more about this central, inescapable human concern. The Department of Political Science aims to make all students aware and critical of their first opinions (since human beings are at their most opinionated in politics), to open up the possibilities of politics, to reveal the permanent political problems, to impart an intellectual discipline, and to supply a guide for choice.

The Political Science program is divided into 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.

Program Student Learning Outcomes

Students graduating with a Bachelor of Arts in Political Science will be able to:

- Demonstrate the ability to write clear and precise English prose.
- Demonstrate the ability to understand basic principles of American government.
- Demonstrate the ability to understand relationship between the United States and the larger world.
- Demonstrate the ability to identify and criticize competing political science arguments.
- Demonstrate the ability to identify and interpret important political texts.
- Demonstrate the ability to write a satisfactory senior-level research paper.
- Demonstrate knowledge of each recognized field within political science.
- Indicate overall satisfaction with the education provided by the UAA Department of Political Science at graduation and five years after graduation.

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 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.

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 (%).

1. Complete the following core courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PS A101</td>
<td>Introduction to American Government § 3</td>
</tr>
<tr>
<td>PS A102</td>
<td>Introduction to Political Science § 3</td>
</tr>
<tr>
<td>PS A301</td>
<td>Comparative Political Economy § 3</td>
</tr>
<tr>
<td>PS A330</td>
<td>The American Political Tradition § 3</td>
</tr>
<tr>
<td>PS/AKNS A361</td>
<td>Social Science Research Methods § 3</td>
</tr>
<tr>
<td>PS A492</td>
<td>Senior Seminar in Politics § 3</td>
</tr>
</tbody>
</table>

2. Complete one starred (*) course from each of the five areas below:

<table>
<thead>
<tr>
<th>Area</th>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comparative Politics</td>
<td>PS A311</td>
<td>Comparative Politics § (3)</td>
</tr>
<tr>
<td></td>
<td>PS A312</td>
<td>Comparative Northern Politics § (3)</td>
</tr>
<tr>
<td></td>
<td>PS/AKNS A411</td>
<td>Tribes, Nations, and Peoples § (3)</td>
</tr>
<tr>
<td></td>
<td>PS A490</td>
<td>Studies in Politics (1-3)</td>
</tr>
<tr>
<td>International Relations</td>
<td>PS A321</td>
<td>International Relations § (3)</td>
</tr>
<tr>
<td></td>
<td>PS A322</td>
<td>United States Foreign Policy § (3)</td>
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<tr>
<td></td>
<td>PS A324</td>
<td>Model United Nations § (3)</td>
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<tr>
<td></td>
<td>PS A424</td>
<td>International Law § (3)</td>
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<tr>
<td></td>
<td>PS A490</td>
<td>Studies in Politics (1-3)</td>
</tr>
<tr>
<td>Political Philosophy</td>
<td>PS A331</td>
<td>Political Philosophy § (3)</td>
</tr>
<tr>
<td></td>
<td>PS A332</td>
<td>History of Political Philosophy I: Classical § (3)</td>
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<tr>
<td></td>
<td>PS A333</td>
<td>History of Political Philosophy II: Modern § (3)</td>
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<tr>
<td></td>
<td>PS A490</td>
<td>Studies in Politics (1-3)</td>
</tr>
<tr>
<td>American Politics</td>
<td>PS A341</td>
<td>The United States Congress § (3)</td>
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<td>PS A342</td>
<td>The American Presidency § (3)</td>
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<td>PS/JUST A343</td>
<td>Constitutional Law § (3)</td>
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<td>PS A344</td>
<td>State and Local Politics § (3)</td>
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<td>PS A345</td>
<td>Alaska Government and Politics § (3)</td>
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<td>PS/AKNS A346</td>
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<td>PS A347</td>
<td>Public Administration § (3)</td>
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<td>PS A348</td>
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<td>PS A490</td>
<td>Studies in Politics (1-3)</td>
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<tr>
<td>Political Behavior</td>
<td>PS/SOC A351</td>
<td>Political Sociology § (3)</td>
</tr>
</tbody>
</table>
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.

**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.

**Honors Student Learning Outcomes**
Students graduating with Departmental Honors in Psychology will possess:

1. An advanced understanding and application of descriptive and inferential statistics and use of statistical software in data analysis.
2. A broad knowledge of psychology’s historical foundation.
3. The ability to conduct a critical review and analysis of existing psychological literature.
4. The ability to design and execute empirical research that tests clearly stated hypotheses or addresses clearly articulated research questions.
5. A clear understanding of research ethics and the responsible conduct of research in the field of psychology.
6. The ability to communicate effectively in writing, in poster format, and in oral presentations, including mastery of APA style.
7. The ability to draw conclusions from research findings, including recognition of the limitations, applications, and implications of the data, and a discussion of alternative explanations of the results.

**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 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 courses (and their 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.

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**Political Science Minor**

Introductory courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>PS A101</td>
<td>Introduction to American Govt. §</td>
<td>3</td>
</tr>
<tr>
<td>PS A102</td>
<td>Introduction to Political Sc. §</td>
<td>3</td>
</tr>
</tbody>
</table>

Upper division Political Science courses 12

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**Public Administration Minor**

Introductory courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>PS A101</td>
<td>Introduction to American Govt. §</td>
<td>3</td>
</tr>
<tr>
<td>PS A102</td>
<td>Introduction to Political Sc. §</td>
<td>3</td>
</tr>
</tbody>
</table>

Additional courses, as follows:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</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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**FACULTY**

AKIHIRO AKI, Affiliate Instructor, akiakihiro@hotmail.com

guy f. burnett, term instructor, gburnett@uaa.alaska.edu

dalee sambo dorough, assistant professor, dsdorough@uaa.alaska.edu

Diddy R. M. Hitchens, Professor Emeritus, dhitchins@uaa.alaska.edu

William A. Jacobs, Professor Emeritus, afwj@uaa.alaska.edu

Mara E. Kimmel, Term Assistant Professor, mkkimmel2@uaa.alaska.edu

David C. Maas, Professor Emeritus, dmaas@uaa.alaska.edu

James W. Muller/Chair, Professor, jmuller@uaa.alaska.edu

Forrest A. Nabors, Assistant Professor, fnabors@uaa.alaska.edu

Kimberly J. Pace, Term Assistant Professor, kipace@uaa.alaska.edu

Carl E. Shepro, Professor Emeritus, ceshepro@uaa.alaska.edu

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**PSYCHOLOGY**

Social Sciences Building (SSB), Room 214, (907) 786-1711

www.uaa.alaska.edu/psych

The undergraduate Psychology program offers mentorship and high-quality training in the science of behavior and mental processes and, in so doing, enlivens 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.
Occupational Endorsement Certificate Requirements

Admission
Complete the admission requirements for Occupational Endorsement Certificates found in Chapter 7.

Graduation Requirements
1. Satisfy General University Requirements for Occupational Endorsement Certificates found in the beginning of this chapter.
2. Complete each of the following courses with a grade of C or higher (12 credits)
   - PSY A372 Community Psychology* 3
   - PSY A427 Field Experience in Psychology 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.

Bachelor of Arts, Psychology

Bachelor of Science, Psychology

Program Student Learning Outcomes
Students graduating with a Bachelor of Science in Psychology or a Bachelor of Arts in Psychology will:
- Possess a broad knowledge of contemporary psychology.
- Have experience conducting psychological research.
- Be able to demonstrate skills in research design and data analysis.
- Be prepared for advanced study in psychology and related disciplines.

Admission Requirements
Complete the admission to Baccalaureate Programs Requirements in Chapter 7. In addition, students wishing to declare Psychology as a major must have earned a minimum GPA of 2.5.

Academic Progress
All prerequisites for required Psychology courses must be completed with a grade of C or better. Students who audit, or are unable to earn a grade of C or better in, a lower-division (100 or 200 level) course in the Department of Psychology (PSY) may repeat the course two additional times on a space available basis. Students who audit, or wish to repeat an upper-division (300 or 400 level) course in the Psychology Department may repeat the course one additional time on a space available basis. Students repeating a course are required to complete all components of that course during the semester in which the course is retaken. When repeating a course with a lecture and laboratory component, both components must be repeated.

Graduation Requirements
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 (27 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 A345 Abnormal Psychology 3
   - PSY A355 Learning and Cognition 4
   - PSY A370 Behavioral Neuroscience 3
   - PSY A375 Social Psychology 3
2. Psychology Capstone Requirement (3 Credits)
   A capstone course is required of all Psychology majors (BA or BS). Each capstone option is designed to synthesize and apply material from the Psychology major. Choice of a capstone should be based, at least in part, on the student’s future career plans. Students planning to work in human service jobs following 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 (3) or
   - PSY A428 Evolutionary Psychology (3) or
   - PSY A499 Senior Thesis (3)

   Note: All of the above psychology capstone courses have rigorous prerequisites, including grades of C or higher in six credits of English composition, and grades of C or higher in PSY A111, PSY A150, PSY A260, PSY A260L, and PSY A261. Although Ds are passing grades for capstone prerequisites, Cs or higher in these prerequisites are required for admission into psychology’s capstone courses. Additional prerequisites may apply to each capstone course. See course descriptions of each capstone course for more details.
3. Psychology Electives (12 Credits)
   Take an additional 12 credits of Psychology, 9 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

FACULTY
Robert Boeckmann, Associate Professor, rjboeckmann@uaa.alaska.edu
Rebecca Bosek, Term Assistant Professor, rbosek@uaa.alaska.edu
Bachelor of Arts, Sociology

Bachelor of Science, Sociology

Admission Requirements

Complete the Admission to Baccalaureate Programs Requirements in Chapter 7.

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 they have academic difficulties that 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/PSY A362 Social Science Statistics    4
   - SOC A402 Social Theory                    3
   - 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

FACULTY

Nancy Andes, Professor Emerita, narandes@uaa.alaska.edu
Sharon Araji, Professor Emerita, asmarai@uaa.alaska.edu
Nelta Edwards, Associate Professor, nmwater@uaa.alaska.edu
Chad Farrell, Associate Professor, afcfar@uaa.alaska.edu
Ann Jache, Term Assistant Professor, ajache@uaa.alaska.edu
Zeynep Kiliç, Assistant Professor, zkili@uaa.alaska.edu
Michael Pajot, Professor Emeritus, afmep@uaa.alaska.edu
Karl Pfeiffer, Associate Professor, ktpfeiffer@uaa.alaska.edu
John Riley, Associate Professor/Chair, jpriley@uaa.alaska.edu
Gale Smoke, Adjunct, gismoke@alaska.net

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 approaches. Sociologists may 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.

Program Student Learning Outcomes

Students graduating with a Bachelor of Arts in Sociology or a Bachelor of Science in Sociology will be able to:

- Demonstrate decision-making skills appropriate to evidence-based identification, understanding, and amelioration of social problems.
- Demonstrate fundamental technical proficiency in social science research in preparation for graduate level training or direct employment in professional fields utilizing the methods and analytical skills of the social sciences.
- Demonstrate ability to work collaboratively in preparation for work in organizations characterized by complexity, rapid change, and high levels of cultural diversity.

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.
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. 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 and Statistics 4
   - STAT A308 Intermediate Statistics for the Sciences 3
   - MATH A200 Calculus I 4
   - MATH A201 Calculus II 4
2. Complete a minimum of 9 credits from the following: 9
   - 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)
3. A total of 24 credits is required in the minor.

Faculty

Jeff Bromaghin, Adjunct Instructor, jbromagh@uaa.alaska.edu
Constance Cutchins, Adjunct Instructor, cecutchins@uaa.alaska.edu
Larry Gordon, Adjunct Instructor, wgordon4@uaa.alaska.edu
Don Stevens, Affiliate Professor
Kanapathi Thiru, Professor/Chair, kthiru@uaa.alaska.edu
Rieken Venema, Associate Professor, rvenema@uaa.alaska.edu

Theatre and Dance

Fine Arts Building (ARTS), Room 302, (907) 786-1792
www.uaa.alaska.edu/theatreanddance

The Department of Theatre and Dance offers a well-rounded liberal arts approach in its curriculum. Theatre courses cover all the basic areas of theatrical endeavor, including acting, movement for the actor, directing, stagecraft, 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. Selected topics offered from time to time range from a diverse menu of performance and technical offerings such as: Alba Emoting Technique, Scene Painting, Practical Applications in Theatrical Control Systems, Sound Engineering, and Prop Design and Construction. Dance offers Hip Hop, Salsa Immersion, and Capoeira.

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. The thesis project must be approved in writing in advance by the department faculty and be completed in the senior year. The project must culminate in a public performance or presentation.
5. Students intending to graduate with departmental honors must notify the department in writing at least one year prior to filing their Application for Graduation with the Office of the Registrar.

Bachelor of Arts, Theatre

Program Student Learning Outcomes:

Students graduating with a Bachelor of Arts in Theatre with a Theatre or Dance option will be able to:

- Translate creative skills and techniques into performance and/or related technical production areas.
- Demonstrate integral collaborative communication skills fundamental to performance and/or related technical production areas.
- Demonstrate theories based on the historical and cultural foundations of theatre, dance and production.
- Analyze artistic works within an informed critical framework through a variety of contexts and formats such as artistic creation, performance, production and critical analysis.

Admission Requirements

Admission Requirements: All Majors

Complete the Admission to Baccalaureate Programs Requirements in Chapter 7.

Mandatory Practicum Requirement

All Theatre Majors (Theatre or Dance option) are required to take at least one credit of Technical Practicum per semester for the first three years. Students will meet with the Department Practicum coordinator to sign up for the semester practicum assignment. Practicum opportunities are available (but not limited to) in the areas of: scene shop assistant, costume shop assistant, prop artist or artisan, light shop assistant, master electrician, master carpenter, assistant technical director, cutter/draper, costume crafts, and student publicist assistant.
Admission Requirements to Upper Division Courses

1. Completion of any combination of at least 9 credits from the Tier 1 General Education Requirements with a cumulative GPA of 2.25 or higher.

2. Completion of each of the following courses with a grade of C or better.

   Theatre Option (21 credits):
   - THR A121 Introduction to Acting 3
   - THR A131 Theatrical Production Techniques 3
   - THR A141 Stagecraft I 3
   - THR A221 Movement for the Actor 3
   - THR A222 Voice for the Actor 3
   - THR A243 Scene Design 3
   - THR A257 Costume Design and Construction I 3

   Dance Option (21 credits):
   - 3 credits of any 100- or 200-level dance (DNCE) performance course 3
   - DNCE A170 Dance Appreciation 3
   - DNCE A262 Theory and Improvisation 3
   - 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

Students in the Theatre and Dance Program who do not meet the above standards may not take upper division courses.

Conditional Admission to Upper Division Courses
A student classified as being conditionally admitted to upper division status may take upper division THR and DNCE courses for one semester only while fulfilling division deficiencies with departmental approval.

Graduation Requirements
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 (33 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) 6
   - 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:
   - THR A347 Lighting Design (3)
   - THR A357 Costume Design and Construction II (3)

3. Students working toward a degree in Theatre may choose from the following two options:

   Theatre Option (21 credits):
   a. Complete the following required courses (12 credits):
      - THR A141 Stagecraft I 3
      - THR A222 Voice for the Actor 3

   Dance Option (21 credits):
   - Complete the following required courses (9 credits):
      - THR A243 Scene Design 3
      - THR A311 Representative Plays I (3) 3
      - THR A312 Representative Plays II (3) 3

   b. Complete three of the following performance or technical area courses:
      - 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 (3)
      - THR A376 CAD for the Arts (3)
      - THR A435 Directing II (3)
      - THR A490 Selected Topics in Performance (3)
      - THR A491 Selected Topics in Technical Theatre (3)
      - THR A495 Advanced Practicum: Technical (1-3)

   Dance Option (21 credits):
   a. Complete the following required courses (13 credits):
      - 2 credits of any 100- or 200-level dance (DNCE) performance course 2
      - DNCE A170 Dance Appreciation 3
      - DNCE A262 Theory and Improvisation 3
      - DNCE A361 Approaches to Dance Composition 3
      - DNCE A395 Advanced Practicum: Performance 2

   b. Complete 8 credits from the following performance area courses:
      - DNCE A101 Fundamentals of Ballet I (2)
      - DNCE A121 Fundamentals of Modern I (2)
      - DNCE/THR:
        - 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 A147 Popular American Social Dance (2)
        - DNCE A151 Fundamentals of Tap I (1)
        - DNCE A205 Fundamentals of Ballet II (2)
        - DNCE A223 Fundamentals of Modern II (2)
        - DNCE/THR:
          - 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 A365 Dance Repertory and Performance I (3)
          - DNCE A395 Advanced Practicum: Performance (1-3)
          - DNCE A465 Advanced Performance and Choreography Workshop (3)
          - DNCE A475 Dance Repertory and Performance II (3)
          - THR A222 Voice for the Actor (3)

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 in Theatre.

1. Complete the following required courses (9 credits):
   - THR A121 Introduction to Acting 3
   - THR A131 Theatrical Production Techniques 3
   - THR A411 History of the Theatre I (3) 3
Women’s Studies

The interdisciplinary Women’s Studies minor offers students the opportunity to select courses from a variety of academic disciplines. Women’s Studies courses are planned to foster open, vigorous inquiry about women, to challenge curricula in which women are absent or peripheral, to question cultural assumptions in light of new information, and to create a supportive environment for those interested in studying women.

Program Student Learning Outcomes
Students who complete this minor will be able to:
1. Demonstrate knowledge of the basic history of issues critical to the study of women’s issues both nationally and internationally.
2. Demonstrate effective communication skills in both written and oral formats.
3. Demonstrate critical thinking about the field of Women’s Studies, including cross disciplinary boundaries, solve problems and produce original work.
4. Demonstrate knowledge of the various theoretical frameworks within the field of Women’s Studies.

Minor, Dance
Students majoring in another subject who wish to minor in Dance must complete the following requirements. A total of 21 credits is required for the minor. Theatre majors with a dance emphasis are not eligible for a dance minor.

1. Complete the following required courses (17 credits):
   - DNCE A170 Dance Appreciation 3
   - DNCE A262 Theory and Improvisation 3
   - DNCE A361 Approaches to Dance Composition 3
   - DNCE A370 Interdisciplinary Dance Studies: Issues and Methods 3
   - DNCE A395 Advanced Practicum: Performance (1-3) 2
   - THR A131 Theatrical Production Techniques 3

2. And choose 4 more credits from the following courses:
   - DNCE A101 Fundamentals of Ballet I (2)
   - DNCE A121 Fundamentals of Modern I (2)
   - DNCE 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 A147 Popular American Social Dance (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 I (1)
   - DNCE A321 Intermediate Modern I (2)
   - DNCE A322 Intermediate Modern II (2)
   - DNCE A365 Dance Repertory and Performance I (3)
   - DNCE A465 Advanced Performance and Choreography Workshop (3)
   - DNCE A475 Dance Repertory and Performance II (3)

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 Women in Cross-cultural Perspective (3)
   - ENGL A404 Topics in Women’s Literature (3)
   - HIST A382 American Women’s History (3)
   - HUMS A350 Men and Masculinity (3)
   - PS/WS A355 Women in Politics (3)
   - PSY A313 Psychology of Women (3)
   - SOC A242 Introduction to Family, Marriage, and Intimate Relationships (3)
   - SOC/WS A252 Women and Social Action (3)
   - SOC A342 Sexual, Marital and Family Lifestyles (3)
   - SOC A377 Sociology of Gender (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.

Note: Other courses may apply to the minor with approval of Women’s Studies chair.

FACULTY
Tom Skore, Professor/Chair, tsckore@uaa.alaska.edu
Colleen Metger, Assistant Professor, cmetger@uaa.alaska.edu
Daniel Anteau, Associate Professor, danteau@uaa.alaska.edu
Jill Flanders Crosby, Professor, jflanderscrosby@uaa.alaska.edu
David Edgecombe, Professor, dedgecombe@uaa.alaska.edu
Brian Jeffery, Term Assistant Professor, bjeffery2@uaa.alaska.edu
Daniel G. Carlgren, Assistant Professor, dcarlgren@uaa.alaska.edu
Fran Lautenberger, Professor Emeritus
Katherine Kramer, Term Assistant Professor, kkramer1001@uaa.alaska.edu

WOMEN’S STUDIES
Social Sciences Building (SSB), Room 355 (907) 786-8387
www.uaa.alaska.edu/womensstudies

The interdisciplinary Women’s Studies minor offers students the opportunity to select courses from a variety of academic disciplines. Women’s Studies courses are planned to foster open, vigorous inquiry about women, to challenge curricula in which women are absent or peripheral, to question cultural assumptions in light of new information, and to create a supportive environment for those interested in studying women.
The College of Business and Public Policy (CBPP) serves Alaska and
global communities by training and educating the workforce and
promoting excellence in public, private and nonprofit management and
related business disciplines. CBPP faculty also conducts applied and
pedagogical research and provides professional assistance to public,
private and nonprofit organizations. CBPP offers a range of degree and
certificate programs including the Master of Business Administration
(MBA), Master of Public Administration (MPA), Master of Science in
Global Supply Chain Management, Bachelor of Business Administration
(BBA), Bachelor of Arts in Economics and Associate of Applied Science
(AAS) degrees.

The college has six departments — Accounting, Business
Administration, Computer Information Systems, Economics, Logistics
and Public Administration — and more than 40 full-time faculty
members with graduate degrees from some of higher education’s most
prestigious business programs. Many also have extensive professional
executive experience, which enhances the relevance and timeliness of
CBPP’s curricula. The college maintains a small-school atmosphere,
while featuring top-notch faculty, research and academic opportunities
for students.

The Association to Advance Collegiate Schools of Business (AACSB
International) accredits CBPP’s Bachelor of Business Administration
(which includes Accounting), Master of Business Administration, and
Master of Science in Global Supply Chain Management degrees. AACSB-
accredited schools are recognized as the top business schools in the world.
AACSB accreditation makes certain the UAA College of Business and
Public Policy provides a rigorous, credible and competitive education. It
also ensures employers that CBPP graduates are ready to perform on day
one. AACSB accreditation attracts higher quality faculty and students by
enhancing the reputation of the institution and its graduates.

CBPP also oversees the Small Business Development Center
(SBDC), Center for Economic Education (CEE), Center for Economic
Development (CED) and the Institute of Social and Economic Research
(ISER). The Dean’s Executive Advisory Council includes more than a
dozentop executives representing leading employers in Alaska and the
northwest United States. Many local firms offer scholarships, internships
and job opportunities for CBPP students.

CBPP embraces the university’s mission to serve Alaska and the global
community (with specific focus on the North Pacific Rim) and maintains
an environment that values, promotes, develops and fosters equal
treatment of cultural and ethnic groups. CBPP prepares students to
meet the ethical, environmental and moral challenges facing future
business leaders. Programs are designed to advance critical thinking
and behavioral and communication skills. The faculty is attentive to
advances in information technology for educating business students,
and is committed to maintaining state-of-the-art computer laboratory
facilities. CBPP serves a student body that is diverse in its social and
educational background, business and professional experience, learning
styles, and educational and career ambitions. Time after time CBPP
students finish at the top of business competition in which rivals include
Ivy League and other renowned educational institutions. The college’s
alumni consistently lead some of Alaska’s largest companies and are
noteworthy contributors to the economies of the state and region.

The Bachelor of Business Administration in Accounting (BBA) and
Associate of Applied Science in Accounting (AAS) prepare students for
careers in business, government or other types of organizations. BBA
graduates generally pursue professional accounting careers, while AAS
graduates are qualified for vocationally oriented accounting positions.
The Accounting Department is committed to enhancing lifelong learning
opportunities to encourage responsible citizenship and personal
satisfaction. UAA offers the AAS degree in accounting through UAA’s
Anchorage, Kenai Peninsula, Kodiak, and Matanuska Susitna campuses.

Associate of Applied Science, Accounting

Program Student Learning Outcomes

Students graduating with an Associate of Applied Science in Accounting
will be able to:

- Demonstrate the ability to provide written documentation
  summarizing accounting information in an organized manner.
- Demonstrate the ability to apply the fundamental accounting
  equation in the analysis and recording of business transactions
  and understand the concepts underlying the preparation of
  financial statements.
- Demonstrate the ability to use special journals and subsidiary
  ledgers in the analysis and recording of business transactions.
- Demonstrate an understanding of state and federal payroll tax laws
  and properly calculate, record, and report payroll transactions for
  an organization.
- Demonstrate an understanding of fundamental income tax laws
  and prepare an individual income tax return.
- Demonstrate competency using computer technology in the
  accounting processing cycle.

Admission Requirements

Satisfy the Admission to Certificate and Associate Degree Programs
Requirements in Chapter 7.

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

*Any higher-level MATH course with a minimum grade of C will
satisfy the MATH A105 requirement.

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**

**Program Student Learning Outcomes**

Students graduating with a Bachelor of Business Administration in Accounting will be able to demonstrate:

- A baccalaureate content knowledge of the Accounting discipline.
- The ability to communicate effectively.
- Knowledge of the external environment of business.
- The ability to identify, formulate, and solve business problems using appropriate methodologies and tools.
- An appreciation of professional and ethical responsibilities.
- The ability to function well in groups.
- Knowledge of the functional areas of organizations and how they relate to each other.

**Admission Requirements**

Complete the Admission to Baccalaureate Programs Requirements in Chapter 7.

**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
   - CIS A280 Managerial Communications 3
   - ECON A201 Principles of Macroeconomics 3
   - ECON A202 Principles of Microeconomics 3
   - ENGL A111 Introduction to Composition 3
   - ENGL A1W Written Communication GER
   - ENGL A212 Technical Writing 3
   - MATH A107 College Algebra (4) 3-4
   - MATH A172 Applied Finite Mathematics (3)
   - MATH A200 Calculus I (4) 3-4
   - MATH A272 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.

3. Completion of any combination of at least 9 credits in the following General Education disciplinary areas: 9
   - Fine Arts
   - Humanities

**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 Advising Center 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 A280 Managerial Communications – 3
     - ECON A201 Principles of Macroeconomics – 3
     - ECON A202 Principles of Microeconomics – 3
     - ENGL A112 Technical Writing – 3
     - MATH A107 College Algebra (4) – 3-4
     - MATH A172 Applied Finite Mathematics (3)
     - MATH A200 Calculus I (4) – 3-4
     - MATH A272 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 A200, MATH A201, and MATH A202 instead of MATH A172 and MATH A272.

2. Complete these upper division core courses with a grade of C or better:
   - ACCT A316 Accounting Information Systems II – 3
   - BA A300 Organizational Theory and Behavior – 3
   - BA A325 Corporate Finance – 3
   - BA A343 Principles of Marketing – 3
   - BA A377 Operations Management – 3
D. Major Requirements

1. Complete the following requirements with a grade of C or better:
   - ACCT A216  Accounting Information Systems I   3
   - ACCT A301  Intermediate Accounting I   3
   - ACCT A302  Intermediate Accounting II   3
   - ACCT A310  Individual Income Tax   3
   - ACCT A342  Managerial Cost Accounting   3
   - ACCT A452  Auditing (GER Integrative Capstone)   3
   - BA/JUST A241  Business Law I   3
   - Accounting electives   6

   Approved Accounting electives (6 credits) must be selected from the following courses and passed with a C or better:
   - ACCT A401  Advanced Accounting (3)
   - ACCT A410  Advanced Income Tax (3)
   - ACCT A420  Fraud Examination (3)
   - ACCT A430  Governmental and Not-for-Profit Accounting (3)
   - Upper division ECON elective (3) or
   - BA A375  Statistics for Business and Economics (3)

2. A minimum of ACCT A301 Intermediate Accounting I and ACCT A302 Intermediate Accounting II must be completed at the University of Alaska Anchorage, or another AACSB accredited institution.

3. A total of 120 credits is required for the degree, of which 42 credits must be upper division.

Minor, Accounting*

Students who wish to minor in Accounting must complete the following requirements with a grade of C or better. A total of 21 credits are required for the minor.

   - ACCT A201  Principles of Financial Accounting   3
   - ACCT A202  Principles of Managerial Accounting   3
   - ACCT A216  Accounting Information Systems I   3
   - ACCT A301  Intermediate Accounting I   3
   - ACCT A302  Intermediate Accounting II   3
   - Upper division Accounting electives   6

   ACCT A301 Intermediate Accounting I and ACCT A302 Intermediate Accounting II must be completed at the University of Alaska Anchorage or another AACSB accredited institution.

*Not available to BBA Accounting majors.

FACULTY

Han Donker, Professor
C. Patrick Fort, Professor, cpfort@uaa.alaska.edu
Gokhan Karahan, Assistant Professor, gokhan.karahan@kodiak.alaska.edu
Donna Kilpatrick, Professor, AFDJK@uaa.alaska.edu
Lynn Koshiyama, Professor, AFLK@ualaska.edu
J. David Mason, Associate Professor, AFJDM2@ualaska.edu
Soren Orley, Associate Professor, ANSEO@ualaska.edu
Stasia Straley, Associate Professor, AFSS5@ualaska.edu

Business Administration

The Department of Business Administration offers a Bachelor of Business Administration (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. Associate and certificate degree programs are offered through the Anchorage campus, as well as UAA’s Kenai, Kodiak, and Mat-Su campuses. Those offerings include, an associate of applied science (AAS) degree in small business administration at the Anchorage, Kenai, and Mat-Su campuses; an AAS degree in general business at the Kenai and Kodiak campuses; and a certificate in small business management at the Kenai campus. These professional programs prepare students to meet the challenges of a dynamic and changing business environment. Graduates find job opportunities in Alaska, throughout the United States, and in many foreign countries.

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 students for graduate studies in management.

Students gain knowledge in concepts of organizational theory, design and development in a global context; study of human behaviors and interactions within an organization; the management of human resources of an organization; negotiations, conflict resolutions and arbitrations; strategy formulation for managing the 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 gain knowledge in principles of marketing and its essential role in business and society. They learn the process of planning and concept execution; 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. Students learn marketing using focused studies in consumer behavior, international marketing, retail, promotion, and marketing management.

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 students for graduate studies in finance.

Students gain knowledge about concepts of financial planning, analysis and management in a global context; functions, structures, delivery systems, efficiency and performance of financial markets and institutions; concepts, techniques and strategies of investment in financial and real assets; creation of values for the stockbrokers, stakeholders and society; and the value of financial securities and the enterprise.

Undergraduate Certificate, Small Business Management

Kenai Peninsula College (KPC)
156 College Road, 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;
Undergraduate Programs, College of Business & Public Policy

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.

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 Introduction to Composition 3
   - Select 3 credits from the following:
     - 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
   - ACCT A120 Bookkeeping for Business I (Not offered at KPC) (3) or
   - ACCT A201 Principles of Financial Accounting (Not offered at KPC) (3) or
   - ACCT A102 Principles of Financial Accounting II (3) or
   - ACCT A202 Principles of Managerial Accounting (3) or
   - ACCT A222 Introduction to Computerized Accounting (3)
   **Students taking ACCT A101 and ACCT A102 cannot use ACCT A201 for credit toward certificate.

3. Complete 9 credits from the following departments:
   - 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.

5. A total of 30 credits is required for the certificate.

FACULTY
Holly Bell, Assistant Professor, hbell@matsu.alaska.edu
Thomas Datrymple, Assistant Professor, IFTAD@uaa.alaska.edu
Ray Zagorski, Associate Professor, IFRZ@uaa.alaska.edu

Associate of Applied Science, General Business
Kenai Peninsula College (KPC)
156 College Road, Soldotna, Alaska, 99669, (907) 262-0300
www.kpc.alaska.edu

Kodiak College (KOC)
117 Benny Benson Drive, Kodiak, Alaska 99615, (907) 486-1210
www.koc.alaska.edu

Matanuska-Susitna College (MSC)
8295 East College Drive (P.O. Box 2889)
Palmer, Alaska 99645, (907) 745-9774
http://matsu.alaska.edu

This two-year degree program provides a solid business foundation and preparation for career advancement. Graduates will be able to practice relevant business skills, meet the diverse needs of a business to achieve organizational goals, start and manage their own small business, communicate effectively, and/or manage their business affairs with professionalism, integrity, and a spirit of inquiry.

Program Student Learning Outcomes
Students graduating with an Associate of Applied Science in General Business will be able to:
- Use critical thinking skills to solve problems and make decisions based on accepted business principles.
- Understand the interrelationship of international and domestic business, societies, and governments.
- Execute the four functions of management: planning, organizing, leading, controlling.
- Apply effective communication skills in business settings.

Admission Requirements
Complete university admissions requirements for associate degrees found in Chapter 7.

General University Requirements
1. Complete the General University and the General Course Requirements (15 credits) 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:
- 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:
- ENGL A111 Introduction to Composition (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: 6
- MATH A105 Intermediate Algebra or higher level (required) (3)
and 3 more credits from an approved course
**Major Requirement Courses**

1. Complete the following required courses:

   - **ACCT A201** Principles of Financial Accounting 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
   - **CIS A110** Computer Concepts in Business 3
   - **ECON A201** Principles of Macroeconomics 3
   - **ECON A202** Principles of Microeconomics 3
   - **LGOP A110** Logistics, Information Systems and Customer Service 3

   *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.*

2. Major elective courses: 6 credits
   Advisor approved courses from the following programs:
   - **ACCT**, **BA**, **CIS**, **CS**, **ECON**

3. Electives: 9 credits

4. A total of 60 credits is required for the degree.

**FACULTY**

Holly Bell, Associate Professor, tdalrymplekpc.alaska.edu
Deirdre Berberich, Assistant Professor, dberberich@mtsu.alaska.edu
Thomas Dalrymple, Assistant Professor, iftad@uaa.alaska.edu
Kathryn Hollis-Buchanan, Assistant Professor, khollisbuchanan@kodiak.alaska.edu
Steve Horn, Assistant Professor, silhorn@kpc.alaska.edu

**Associate of Applied Science, Small Business Administration**

**Program Student Learning Outcomes**

Students graduating with an Associate of Applied Science in Small Business Administration will be able to:

- Demonstrate an understanding of for-profit and not for profit businesses, issues of social responsibility, business ethics, and forms of business ownership.
- Explain the importance of entrepreneurship to the wealth of an economy.
- Demonstrate knowledge of the importance of human resource management, the responsibilities of human resource managers, and the role of human resource planning in an organization’s competitive strategy.
- Demonstrate a fundamental knowledge of business law concepts.
- Demonstrate an understanding of financial statement analysis, cash flow analysis, capital assets utilization, budgeting, debt financing, and the preparation of financial statements.
- Demonstrate knowledge of marketing and how the marketing concept applies in both for-profit and nonprofit organizations.
- Demonstrate skills to sell themselves, products, services, and ideas.
- Demonstrate competency in utilizing computer technology.

**Admission Requirements**

Satisfy the Admission to Certificate and Associate Degree Programs Requirements in Chapter 7.

**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. To provide maximum transferability, 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.

**Major Requirements**

1. Complete the required support courses:
   - **ACCT A101** Principles of Financial Accounting I (3) 3-6
   - and
   - **ACCT A102** Principles of Financial Accounting II (3)
   - or
   - **ACCT A201** Principles of Financial Accounting I (3)
   - or
   - **ACCT A202** Principles of Managerial Accounting 3
   - **CIS A110** Computer Concepts in Business 3
   - **MATH A105** Intermediate Algebra (3) 3-4
   - or
   - **MATH A107** College Algebra (4)
   - or
   - **MATH A172** Applied Finite Mathematics (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.*

**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. The curriculum for the BBA degree is management-oriented, rather than
highly specialized. It emphasizes concepts relevant to small and large firms and both public and private sector organizations. The five majors — Economics, Finance, Global Logistics and Supply Chain Management, Management, and Marketing — prepare students to pursue meaningful and rewarding careers in management. Local, state, national, and international firms, as well as not-for-profit organizations, provide a ready market for graduates in each of the five major areas of concentration.

Program Student Learning Outcomes
Students graduating with a Bachelor of Business Administration will be able to demonstrate:

• A baccalaureate content knowledge of his/her major discipline.
• The ability to communicate effectively.
• Knowledge of the external environment of business.
• The ability to identify, formulate, and solve business problems using appropriate methodologies and tools.
• An appreciation of professional and ethical responsibilities.
• The ability to function well in groups.
• Knowledge of the functional areas of organizations and how they relate to each other.

Admission Requirements
Complete the Admission to Baccalaureate Programs Requirements in Chapter 7.

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
   - CIS A280 Managerial Communications 3
   - ECON A201 Principles of Macroeconomics 3
   - ECON A202 Principles of Microeconomics 3
   - ENGL A111 Introduction to Composition 3
   - ENGL A212 Technical Writing 3
   - MATH A107 College Algebra (4) 3-4
     or
   - MATH A172 Applied Finite Mathematics (3) 3
   - COMM A111 Fundamentals of Oral Communication (3) 3
     or
   - COMM A241 Public Speaking (3) 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 Advising Center 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 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) 3-4
     or
   - MATH A272 Applied Calculus (3) 3
   - ECON A201 Principles of Financial Accounting I and ACCT A202 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 (GER Integrative Capstone) 3

C. 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  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.

**Investment Concentration (30 credits)**

1. Complete the following:
   - BA/JUST A242  Business Law II  3  
   - BA A375  Statistics for Business and Economics  3  
   - ECON A312  Econometrics for Business and Economics  3  
   - ECON A429  Business Forecasting  3  
   - BA A380  Investment Management  3  
   - BA A385  Intermediate Financial Management  3  

2. Complete at least 12 credits from the following: 12  
   - 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  

3. Complete 6 credits of upper division business electives in ACCT, BA, CIS, ECON, or LOG.  6  

4. 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  
   - 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**

All courses must be completed with a C or better prior to graduating.

1. Management (27 credits)
   a. Complete the following requirements.
      - 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  
      - BA A489  Entrepreneurship and New Business Planning  3  
      - Upper division electives in ACCT, BA, CIS, ECON or LOG  12  

2. Management: Property Management and Real Estate Concentration (33 credits)
   a. Complete the following requirements.
      - BA A215  Introduction to Property Management  3  
      - BA A225  Leasing in Property Management  3  
      - BA A302  Maintenance in Property Management  3  
      - BA A303  Property Management Finance  3  
      - BA A361  Human Resource Management  3  
      - BA A461  Negotiation and Conflict Management  3  
      - BA A421  Property Management Capstone  3  
      - BA A432  Real Estate Law  3  
      - Complete 9 credits from the following: 9  
         - BA A306  Real Estate Principles  3  
         - BA A320  Real Estate Finance  3  
         - BA A395  Property Management Internship (3-6)  3  
         - BA A431  Real Estate Appraisal  3  
         - BA A489  Entrepreneurship and New Business Planning  3  

3. 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 A381  Consumer Behavior  3  
   - BA A420  Marketing Research  3  
   - BA A460  Marketing Management  3  
   - BA A480  Social Media Marketing  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 electives in ACCT, BA, CIS, ECON, or LOG with a grade of C or better prior to graduating: 6  

Upper division Business electives recommended:
school courses. are supported by seven computerized classrooms and
Courses involving computer instruction, as well as many other business
Edward & Cathryn Rasmuson Hall (RH), Room 203, (907) 786-4100
Gary Selk, Professor, AFGLS1@uaa.alaska.edu
Jeri Rubin, Professor, AFJGR@uaa.alaska.edu
Yonggang Lu, Assistant Professor, AFYL@uaa.alaska.edu
Sharon Lind, Term Assistant Professor, sglind@uaa.alaska.edu
Frank Jeffries, Professor, AFFLJ@uaa.alaska.edu
Al Hermann, Term Assistant Professor, afaph@uaa.alaska.edu
Edward J. Forrest, Professor, AFEJF1@uaa.alaska.edu
Ted Eschenbach, Professor Emeritus, AFTGE@uaa.alaska.edu
Kori Callison, Assistant Professor
Nalinaksha Bhattacharyya, Professor, AFNB@uaa.alaska.edu
Carlos J. Alsua, Associate Professor, AFCJA@uaa.alaska.edu

FACULTY
Carlos J. Alsua, Associate Professor, AFCJA@uaa.alaska.edu
Nalinaksha Bhattacharyya, Professor, AFNB@uaa.alaska.edu
Kori Callison, Assistant Professor
Yong Cao, Associate Professor, AFY@uaa.alaska.edu
Ted Eschenbach, Professor Emeritus, AFTGE@uaa.alaska.edu
Edward J. Forrest, Professor, AFEJF1@uaa.alaska.edu
George Geistauts, Professor, AFAG@uaa.alaska.edu
Al Hermann, Term Assistant Professor, afaph@uaa.alaska.edu
Frank Jeffries, Professor, AFFLJ@uaa.alaska.edu
Sharon Lind, Term Assistant Professor, sglin@uaa.alaska.edu
Yonggang Lu, Assistant Professor, AFYL@uaa.alaska.edu
Terry Nelson, Assistant Professor
Rashmi Prasad, Professor/Dean, AFRP2@uaa.alaska.edu
Jeri Rubin, Professor, AFJGR@uaa.alaska.edu
Gary Selk, Professor, AFGLS1@uaa.alaska.edu
Suresh Srinivastava, Professor, AFSC5@uaa.alaska.edu

COMPUTER INFORMATION SYSTEMS
Edward & Cathryn Rasmuson Hall (RH), Room 203, (907) 786-4100
www.uaa.alaska.edu/cbpp

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. The computer classrooms and
labs provide students with hands-on learning experiences using
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. Special laboratories
include multimedia presentation facilities, advanced networking and
information security facilities, and a decision-support room.

Computer courses are taught using structured, instructor-led and self-
guided tutorial approaches in classrooms, as well as online discussions.

Computer Information Systems Degree Programs
The College of Business and Public Policy prepares students for
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
The Bachelor of Business Administration in Management Information Systems
(MIS) prepares students for computer careers in systems
analysis and design, e-commerce, web design, end-user computing,
information systems management, databases and networks, and
associated occupations. The Associate of Applied Science in Business
Computer Information Systems (BCIS) prepares students for careers in
computer programming and systems design, network administration and
database administration. Both degrees are based on the Association
of Information Technology Professionals (AITP) model curriculum and
are linked so the diligent student can move from the two-year to four-
year degree without losing credits.

Faculty in computer information systems introduce relevant theories,
followed by hands-on experience with associated applications. Both
degrees emphasize using computers within business and public sector
settings through hands-on teaching methods and include techniques and
issues related to managing information resources, as well as technical
and security aspects of the computer environment.

Computer career education in the College of Business and Public
Policy is enhanced by work and internships opportunities within CBPP
laboratories and with business and government facilities.

Associate of Applied Science, Business Computer Information Systems

Program Student Learning Outcomes
Students graduating with an Associate of Applied Science in Business
Computer Information Systems will be able to:

• Design, code, test, compile, and debug programs for basic business
  functions utilizing a popular programming language.

• Perform a business analysis to identify business functional
  requirements as input for information technology application
  development.

• Demonstrate skills in analyzing, designing, building, and
  administering business-oriented databases.

• Explain the fundamentals of our rapidly changing environment of
  data communications over local area networks and over switched
  and private voice lines.

• Demonstrate skills in installing, configuring, and debugging a
  small local area network.

• Demonstrate competency in utilizing computer technology.

Admission Requirements
Satisfy the Admission to Certificate and Associate Degree Program
Requirements in Chapter 7. 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

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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 (21-22 credits):
   - 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 Microeconomics 3
   - MATH A107 College Algebra (4) or
     - MATH A172 Applied Finite Mathematics (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 (12 credits):
   - CIS A210 Contemporary Business Applications Development 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.
5. A minimum of 12 credits from Major Requirements, items 3 and 4 above, must be earned at the University of Alaska Anchorage.
6. A total of 60-61 credits is required for the degree.

**Bachelor of Business Administration, Management Information Systems**

**Program Student Learning Outcomes**
Students graduating with a Bachelor of Business Administration will be able to demonstrate:
- A baccalaureate content knowledge of his/her major discipline.
- The ability to communicate effectively.
- Knowledge of the external environment of business.
- The ability to identify, formulate, and solve business problems using appropriate methodologies and tools.
- An appreciation of professional and ethical responsibilities.
- The ability to function well in groups.
- Knowledge of the functional areas of organizations and how they relate to each other.

**Admission Requirements**
Complete the Admission to Baccalaureate Programs Requirements in Chapter 7.

**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
   - CIS A280 Managerial Communications 3
   - ECON A201 Principles of Macroeconomics 3
   - ECON A202 Principles of Microeconomics 3
   - ENGL A111 Introduction to Composition 3
   - ENGL A212 Technical Writing 3
   - MATH A107 College Algebra (4) or
     - MATH A172 Applied Finite Mathematics (3) Oral Communication Skills GER 3
     - COMM A111 Fundamentals of Oral Communication (3) or
     - COMM A241 Public Speaking (3) 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 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 Advising Center 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 (33-35 credits):
   - 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
   - MATH A172 Applied Finite Mathematics (3)
   - MATH A200 Calculus I (4) 3-4
   - MATH A272 Applied Calculus (3)
   *The ACCT A101 and ACCT A102 sequence may be used to satisfy the ACCT A201 requirement for this degree.

2. Complete the following requirements. The following courses must be completed with a grade of C or better prior to graduating (18 credits):
   - 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 (GER Integrative Capstone) 3

D. Major Requirements
1. Complete the following required courses with a grade of C or better (18 credits):
   - 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: 12
   - CIS A361 Advanced Contemporary Business Applications Development (3)
   - CIS A365 Object-Oriented Programming (3)
   - CIS A375 E-Training Design and End-User Support (3)
   - CIS A385 Multimedia Authoring (3)
   - CIS A390 Selected Topics in Management Information Systems (1-6)
   - CIS A395 Programmer/Analyst Internship (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)

   - 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.

   - 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, of which must be upper division.

- CIS A110 Computer Concepts in Business 3
- CIS A210 Contemporary Business Applications Development 3
- CIS A330 Database Management Systems 3
- CIS A376** Management Information Systems (GER Integrative Capstone) 3

Upper division CIS electives 6

**BBA Economics, Finance, Global Logistics, Management, and Marketing degree students must take CIS A310 Analysis of Business Systems, instead of CIS A376 for the minor and 6 credits of upper division IS electives from the following list:**

- CIS A361 Advanced Contemporary Business Applications Development (3)
- CIS A365 Object-Oriented Programming (3)
- CIS A375 E-Training Design and End-User Support (3)
- CIS A385 Multimedia Authoring (3)
- CIS A390 Selected Topics in Management Information Systems (1-6)
- CIS A395 Programmer/Analyst Internship (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)

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 Advising Center 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.

**FACULTY**
Alpana Desai, Associate Professor, AFAMD@uaa.alaska.edu
Dennis Drinka, Associate Professor, AFDE@uaa.alaska.edu
Sandra Ehrlich, Assistant Professor, sehrlch@uaa.alaska.edu
ECONOMICS
Edward & Cathy Rasmuson Hall (RH), Room 205, (907) 786-4100
www.uaa.alaska.edu/cbpp

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.

Program Student Learning Outcomes
Students graduating with a Bachelor of Arts in Economics will be able to:
• Understand the economic way of thinking and apply it to a wide variety of issues and problems.
• Understand economic concepts and analytical skills and apply them to economic problems.
• Demonstrate a basic descriptive knowledge of the U.S. and world economies.
• Understand the role of institutions, especially markets and government, in shaping economic outcomes.
• Obtain and analyze relevant economic data to test hypotheses against evidence.
• Write clearly about economic issues.
• Explain and defend ideas orally.

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.

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:
   - BA A273 Introduction to Statistics for Business and Economics 3
   - ECON A201 Principles of Macroeconomics 3
   - ECON A202 Principles of Microeconomics 3
   - ECON A312 Econometrics for Business and Economics 3
   - ECON A321 Intermediate Microeconomics 3
   - ECON A324 Intermediate Macroeconomics 3
   - ECON A492 Seminar in Economic Research 3
   - MATH A200 Calculus I (4) 3-4
   - or
   - MATH A272 Applied Calculus (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).

   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.

FACULTY
Jon Alley, Assistant Professor, AFJA@uaa.alaska.edu
Matthew Berman, Professor, auser@uaa.alaska.edu
Stephen Colt, Professor, AFSG@uaa.alaska.edu
Scott Goldsmith, Professor Emeritus, AFOSG2@uaa.alaska.edu
Mauchine Guettabi, Assistant Professor
Kyle Hampton, Assistant Professor/Director of Center for Economic Education, AFKH2@uaa.alaska.edu
E. Lance Howe, Associate Professor/Director of Experimental Economics Laboratory, elhowe@uaa.alaska.edu
Lee Huskey, Professor, AFLH@uaa.alaska.edu
Stephen Jackstadt, Professor Emeritus
Paul Johnson, Professor, AFPR@uaa.alaska.edu
Gunnar Knapp, Professor, murphy@uaa.alaska.edu
Matthew Reimer, Assistant Professor
Larry Ross, Professor, AFLR@uaa.alaska.edu
Qiujie Zheng, Term Assistant Professor
LOGISTICS
Edward & Cathryn Rasmuson Hall (RH) Room 203, (907) 786-4100
www.uaa.alaska.edu/cbpp

The Logistics Department offers four undergraduate programs: Bachelor of Business Administration in Global Logistics and Supply Chain Management, Associate of Applied Science in Logistics and Supply Chain Operations, Undergraduate Certificate in Logistics and Supply Chain Operations, and an Occupational Endorsement Certificate in Logistics and Supply Chain Operations. Logistics refers to the complex systems of the movement of material, component parts, and information within a business, and the distribution of final products to customers. Logistics and supply chain management are an essential function that adds value to a 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 gain 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.

Program Student Learning Outcomes

Students graduating with an Occupational Endorsement Certificate in Logistics and Supply Chain Operations will be able to:

- Demonstrate knowledge of logistics and supply chain operations in today’s business environment.
- Perform inventory control analyses used to improve supply chain efficiency.
- Demonstrate the impact of logistics and supply chain operations on an organization’s bottom line.
- Demonstrate skills in data mining in supply chain topics and sources.
- Explain the role of transportation in Alaska’s economy.
- Demonstrate the ability to communicate effectively.

Admission Requirements


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:

   - LGOP A110 Logistics, Information Systems and Customer Service 3
   - LGOP A120 Warehouse and Inventory Control Systems 3
   - LGOP A125 Transportation Services 3
   - LGOP A160 Purchasing and Supply Management 3
   - LGOP A235 Transport Operations Management 3

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.

Program Student Learning Outcomes

Students graduating with an Undergraduate Certificate in Logistics and Supply Chain Operations will be able to:

- Demonstrate knowledge of logistics and supply chain operations in today’s business environment.
- Perform inventory control analyses used to improve supply chain efficiency.
- Demonstrate the impact of logistics and supply chain operations on an organization’s bottom line.
- Demonstrate skills in data mining in supply chain topics and sources.
- Explain the role of transportation in Alaska’s economy.
- Demonstrate the ability to communicate effectively.

Admission Requirements

Satisfy the Admission to Certificate and Associates Degree Program Requirements in Chapter 7.

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:

   - BA A151 Introduction to Business 3
   - BA A231 Fundamentals of Supervision 3
   - CIS A110 Introduction to Personal Computers and Application Software (3) 3
   - or CIS A110 Computer Concepts in Business (3)
   - LGOP A110 Logistics, Information Systems and Customer Service 3
   - LGOP A120 Warehouse and Inventory Control Systems 3
   - LGOP A125 Transportation Services 3
   - LGOP A160 Purchasing and Supply Management 3
   - LGOP A235 Transport Operations Management 3

2. Two electives at the 100 level or higher.* 6

3. A total of 30 credits is required for this certificate.

* If students intend to pursue the AAS in Logistics and Supply Chain Operations, it is recommended that students use these elective credits to
prepare for the written communications and math courses required for the AAS LGOP degree.

**Associate of Applied Science, Logistics and Supply Chain Operations**

The Logistics and Supply Chain Operations associate's degree was developed with input from Alaskan business, industry, and military representatives to meet the needs in all aspects of the operational and technical career fields of logistics. Students will build a foundation of knowledge and skills for successful logistics and supply chain operations: information management and customer service, warehousing and inventory control, purchasing and supply chain operations, transportation services, transportation rates, tariffs, and carrier liability. The AAS degree is designed to prepare graduates for employment in all the operational and technical aspects of logistics and supply chain operations, careers, and fields. Students planning to go on to a four-year program in the College of Business and Public Policy should know that all ACCT, BA, CIS, ECON, LGOP, and LOG courses in those four-year programs must be completed with a grade of C or better.

**Program Student Learning Outcomes**

Students graduating with an Associate of Applied Science in Logistics and Supply Chain Operations will be able to:

- Demonstrate knowledge of logistics and supply chain operations in today's business environment.
- Perform inventory control analyses used to improve supply chain efficiency.
- Demonstrate the impact of logistics and supply chain operations on an organization's bottom line.
- Demonstrate skills in data mining in supply chain topics and sources.
- Explain the role of transportation in Alaska's economy.
- Demonstrate the ability to communicate effectively.

**Admission Requirements**

Satisfy the Admission to Certificate and Associate Degree Programs Requirements in Chapter 7.

**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. To provide maximum transferability, it is recommended that students consider the Bachelor of Business Administration General Education Requirements, and business core course requirements when selecting courses to fulfill the Associate of Applied Science General Course Requirements.

**Major Requirements**

1. Complete the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course 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>
<tr>
<td>BA/JUST A241</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>CIS A110</td>
<td>Computer Concepts in Business</td>
<td>3</td>
</tr>
<tr>
<td>ECON A201</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<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 Control Operations</td>
<td>3</td>
</tr>
<tr>
<td>LGOP A160</td>
<td>Purchasing and Supply Management</td>
<td>3</td>
</tr>
<tr>
<td>LGOP A125</td>
<td>Transportation Services</td>
<td>3</td>
</tr>
<tr>
<td>LGOP A235</td>
<td>Transport Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>MATH A107</td>
<td>College Algebra (4)</td>
<td>3-4</td>
</tr>
</tbody>
</table>

2. Complete four of the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA A273</td>
<td>Introduction to Statistics for Business and Economics</td>
<td>3</td>
</tr>
<tr>
<td>BA A295</td>
<td>Internship in Business Administration</td>
<td>3</td>
</tr>
<tr>
<td>BA A375</td>
<td>Statistics for Business and Economics</td>
<td>3</td>
</tr>
<tr>
<td>BA A377</td>
<td>Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>ECON A312</td>
<td>Econometrics for Business and Economics</td>
<td>3</td>
</tr>
<tr>
<td>ECON A429</td>
<td>Business Forecasting</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 A108</td>
<td>Injury Prevention and Risk Management</td>
<td>4</td>
</tr>
<tr>
<td>OSH A250</td>
<td>Hazardous Material Operations</td>
<td>3</td>
</tr>
<tr>
<td>TECH A295</td>
<td>Technical Internship (1-6)</td>
<td>3</td>
</tr>
<tr>
<td>TECH A302</td>
<td>Operational Safety</td>
<td>3</td>
</tr>
</tbody>
</table>

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**

Thomas Flanagan, Term Assistant Professor, aftjf@uaa.alaska.edu
Philip Price, Professor, philipp@uaa.alaska.edu
Darren Prokop, Professor/Chair, AFDJP1@uaa.alaska.edu
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 collegiate 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 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) 786-4412
2. The Department of Counseling and Special Education with programs in counselor education, special education, early childhood special education and opportunities in speech and language pathology. (907) 786-6317
3. The Department of Educational Leadership with programs in educational leadership (principal, superintendent, and teacher leadership preparation). (907) 786-4430

### 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 (admission suspended)
- **School Age Care Occupational Endorsement Certificate**: Administrator (admission suspended)
- **Early Childhood Development Undergraduate 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 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:

- English composition and writing
- Oral communication
- World languages
- Algebra
- Computer literacy
- Social sciences
- Natural sciences

### Field Placements

All College of Education undergraduate 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 and those enrolling in coursework offered at the Providence Early Learning Lab (PELL). In some cases, criminal history background clearance is required for admission to a department or program. In addition to self disclosure of criminal history to the College of Education and its partners, a check of the Alaska and National Sex Offender Registries, a fingerprint-based check by the Federal Bureau of Investigation, and a name-based check through the Alaska Public Safety Information Network may be required. Various agencies and centers may have additional requirements.

Failure to comply with the College of Education background check requirements will result in denial of access to field placement settings or PELL. Failure to pass the criminal history background check will result in removal from the program. More information is available at www.uaa.alaska.edu/coe/currentstudents/field-experiences/background-checks.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 225, (907) 786-4412
www.uaa.alaska.edu/coe

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
Admission to the Occupational Endorsement Certificate in School-Age Care: Practitioner and the Occupational Endorsement Certificate in School-Age Care: Administrator has been suspended. Please contact the department for information.

EARLY CHILDHOOD
Professional Studies Building (PSB), Room 225, (907) 786-4412
www.uaa.alaska.edu/coe/degrees

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 Student Learning 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 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.

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.
Undergraduate Certificate, Early Childhood Development

Admission Requirements
Applicants must satisfy the Admission to Certificate and Associate Degree Programs Requirements in Chapter 7. 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 Department of Teaching and Learning. To be admitted to the Early Childhood Development practicum course (EDEC A295), applicants must meet all requirements 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
   - EDEC A201 Early Childhood Practitioner Roles and Responsibilities 2
   - EDEC A206 Integrated Curriculum for Young Children 3
   - EDEC A210 Guiding Young Children 3
   - EDEC A241 Infant and Toddler Development 3
   - EDEC A242 Family and Community Partnerships 3
   - EDEC A292 Early Childhood Practicum Seminar 1
   - EDEC A295 Early Childhood Practicum 3
   - EDEC A303 Young Children in Inclusive Settings 3
   - EDSE A212 Human Development and Learning (3) 3
   - or
   - ENGL A365 Child and Adolescent Development (3) 3
   - ENGL A212L Human Development and Learning Lab (1) 1
   
2. A total of 34 credits is required for the certificate.

Associate of Applied Science, Early Childhood Development

Admission Requirements
Applicants must satisfy the Admission to Certificate and Associate Degree Programs Requirements in Chapter 7. In order to be admitted to the Early Childhood Development program, applicants must complete an application to the Associate of Applied Science Early Childhood Development program. Applications may be obtained from the Department of Teaching and Learning. To be admitted to the Early Childhood Development practicum course (EDEC A295), applicants must meet all requirements 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 Associate of Applied Science Early Childhood Development program must maintain a cumulative GPA of 2.00 or above in all EDEC courses.

General University Requirements
Complete the General University Requirements for Associate Degrees located at the beginning of this chapter.

Communication and General Requirements
1. Oral Communication Requirements: 3
   - COMM A111 Fundamentals of Oral Communication (3)
   or
   - COMM A235 Small Group Communication (3)
   or
   - COMM A237 Interpersonal Communication (3)
   or
   - COMM A241 Public Speaking (3)

2. Written Communication Requirements: 6
   - ENGL A111 Introduction to Composition (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. General Requirements: 6
   - MATH A105 Intermediate Algebra (or higher) (3)
   and
   - Choose 3 credits from humanities, natural sciences, or social sciences courses from the General Course Requirement Classification List located at the beginning of this chapter.

Background Check Requirements
See Field Placements located at the beginning of the College of Education section of this chapter.

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 A210 Guiding Young Children 3
   - EDEC A241 Infant and Toddler Development 3
   - EDEC A242 Family and Community Partnerships 3
   - EDEC A292 Early Childhood Practicum Seminar 1
   - EDEC A295 Early Childhood Practicum 3
   - EDEC A303 Young Children in Inclusive Settings 3
   - EDSE A212 Human Development and Learning (3) 3
   - or
   - ENGL A365 Child and Adolescent Development (3) 3
   - ENGL A212L Human Development and Learning Lab (1) 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 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. 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 I: 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.
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.

**Child Development (6 credits)**

- DN A145 Child Nutrition 3
- EDSE A212 Human Development and Learning (3) or
- PSY A365 Child and Adolescent Development (3)

**Social Relationships and Inclusive Environments (11–12 credits)**

- EDEC A242 Family and Community Partnerships 3
- EDEC A303 Young Children in Inclusive Settings 3

Select two courses from the following: 5–6

- CEL A292 Introduction to Civic Engagement (3)
- EDEL A327 Teaching Social Studies in Elementary Schools (2)
- EDSE A474 Special Children from Birth through Five (3)
- EDSE A482 Inclusive Classrooms for All Children (3)
- SWK A342 Human Behavior in the Social Environment (3)
- SWK A409 Introduction to Child Welfare (3)

**Liberal Studies Humanities and Social Sciences Core**

(18 credits)

*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).

Complete the following courses:

Select one course from GER fine arts list (3 credits) 3
- EDEC A105 Introduction to the Field of Early Childhood (SS GER) 3
- LSSS A111 Cultural Foundations of Human Behavior (SS GER) (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: 3
- ANTH A200 Natives of Alaska (SS GER) (3)
- EDFN A478 Issues in Alaska Native Education, K-12 (3)
- HIST A341 History of Alaska (HUM GER) (3)

Select one course from the following: 3
- ANTH A250 The Rise of Civilization (SS GER) (3)
- GEOG/INTL A101 Local Places/Global Regions: Introduction to Geography (SS GER) (3)
Undergraduate Programs, College of Education

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)

Liberal Studies Integrated Sciences Core (10 credits)
LSIS A102  Origins: Earth-Solar System-Life (NS GER) 5
LSIS A201  Life on Earth (NS GER) 5

Mathematical Skills (6-7 credits)
Select one course from GER quantitative skills list 3-4
MATH A205  Communicating Mathematical Ideas 3

Oral and Written Communication Skills (9 credits)
Select one course from GER oral communication list 3
Select two courses from GER written communication list 6

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 4
   EDEC A408  Children’s Literature: Early Childhood Years 3
   EDFN A300  Philosophical and Social Context of American Education (GER Capstone) (3) or
   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.

ELEMENTARY EDUCATION
Professional Studies Building (PSB), Room 224, (907) 786-4412
www.uaa.alaska.edu/coe/degrees

Bachelor of Arts, Elementary Education (with Teacher Certification)
Individuals interested in undergraduate elementary teacher preparation may obtain either a BA in Elementary Education or a Post-Baccalaureate Certificate in Elementary Education with elementary teacher certification. See Chapter 11 for more information.

The BA in Elementary Education is a professional degree nationally recognized by the Association of Childhood Education International (ACEI). Unique features of the program include an emphasis on culturally responsive teaching in Alaska’s context; a strong liberal studies focus; exposure to a range of teaching and curriculum design approaches, including integration of educational technology; and focused field experiences, developmentally sequenced and in a variety of school/classroom settings. Applicants are encouraged to take EDFN A101 Introduction to Education (3 credits) to learn more about the field of education. Elementary Education supports an Honors Track option. See an advisor for course guidance.

Program Student Learning Outcomes
Student learning 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. Within a culturally responsive framework, program graduates will:
1. Construct learning opportunities that support K-6 students’ development, acquisition of knowledge, and motivation.
2. Design and implement curriculum that supports K-6 students’ learning of language arts, science, mathematics, social studies, the arts, health, and physical education.
3. Plan and implement instruction based on knowledge of K-6 students, learning, theory, curriculum, and community.
4. Create appropriate instructional opportunities to address diversity.
5. Use teaching strategies that encourage development of critical thinking and problem solving.
6. Foster active engagement in learning and create supportive learning environments.
7. Use effective communication strategies to foster inquiry and support interaction among K-6 students.
8. Use formal and informal assessments to inform and improve instructional practice.
9. Reflect on practice and engage in professional growth activities.
10. Establish positive collaborative relationships with families, colleagues, and the community.

Admission Requirements
Admission to the University of Alaska Anchorage: Elementary Education Major
Applicants must complete the Admission to Baccalaureate Programs Requirements in Chapter 7. Application forms are available at: www.uaa.alaska.edu/admissions.
Admission to the Department of Teaching and Learning, College of Education: Elementary Education Major

In order to be admitted to the Department of Teaching and Learning, students must:

1. Submit an application to the Department of Teaching and Learning.
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 A365 Child and Adolescent 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 EDEL A495A, Elementary Education Practicum II, and Elementary Internship courses must be submitted by the semester before enrolling in EDEL A495A. Qualified applicants are accepted on a space-available basis. Admission to the Department of 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.

EDEL A495A, Elementary Practicum II and Internship Admission Criteria

EDEL A495A, Elementary Education Practicum II, increases the time in the classroom and the planning and teaching experiences, with focus on the classroom environment, math and science. The Elementary Internship includes a capstone seminar and extensive, supervised teaching experiences in an elementary classroom. Emphasis is placed on meeting the Alaska Beginning Teacher Standards. Criteria include the following:

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 admission to Internship, including a resume and letter of introduction, by the department’s published deadline.
3. Participate in a screening interview.
4. Complete all prerequisite courses.
5. Successfully complete the Praxis II: Elementary Content Knowledge (0014), Contact the Department of Teaching and Learning for current passing scores.
6. Have a cumulative GPA of 2.75.
7. Have a GPA of 3.00 in Major Requirements.
8. Apply for the Student Teaching Authorization Certificate. This application includes fingerprinting and a criminal background check. Fee required. Contact COE advisors for more information.

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, 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).

Sciences Core (15-24 credits)

LSIS A102 Origins: Earth-Solar System-Life (5) 5-8
GEOL A111 Physical Geology (4) and one of the following lecture/lab combinations:
ASTR A103 Solar System Astronomy (3) or
ASTR 103L Solar System Astronomy Laboratory (1) and
ASTR A104 Stars, Galaxies and Cosmology (3) or
ASTR A104L Stars, Galaxies and Cosmology Laboratory (1) and
LSIS A201 Life on Earth (5) 5-8 or
BIOL A102 Introductory Biology (3) and
BIOL A103 Introductory Biology Laboratory (1) and one of the following:
BIOL A115 Fundamentals of Biology I (4) or
BIOL A116 Fundamentals of Biology II (4) and
LSIS A202 Concepts and Processes: Natural Sciences (5) or
CHEM A103 Survey of Chemistry (3) and
CHEM A103L Survey of Chemistry Laboratory (1) and one of the following lecture/lab combinations:
PHYS A115 Physical Science (3) or
PHYS A115L Physical Science Laboratory (1) and
PHYS A123 Basic Physics I (3) and
PHYS A123L Basic Physics I Laboratory (1)

Undergraduate Programs, College of Education
Undergraduate Programs, College of Education

Social Sciences and Humanities Core (36-39 credits)
Students must fulfill GERs for baccalaureate degrees including 6 credits of social sciences from two different disciplines and 6 credits of humanities.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH A250</td>
<td>The Rise of Civilization (3)</td>
<td>3</td>
</tr>
<tr>
<td>HIST A390A</td>
<td>Themes in World History (3)</td>
<td>3</td>
</tr>
<tr>
<td>HIST A131</td>
<td>History of United States I (3)</td>
<td>3</td>
</tr>
<tr>
<td>HIST A132</td>
<td>History of United States II (3)</td>
<td>3</td>
</tr>
<tr>
<td>HIST A355</td>
<td>Major Themes in US History (3)</td>
<td>3</td>
</tr>
<tr>
<td>EDSE A212</td>
<td>Human Development and Learning</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A121</td>
<td>Introduction to Literature (3)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A201</td>
<td>Masterpieces of World Literature I (3)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A202</td>
<td>Masterpieces of World Literature II (3)</td>
<td>3</td>
</tr>
<tr>
<td>HUM A211</td>
<td>Introduction to Humanities I (3)</td>
<td>3</td>
</tr>
<tr>
<td>HUM A212</td>
<td>Introduction to Humanities II (3)</td>
<td>3</td>
</tr>
<tr>
<td>HNRS A192</td>
<td>Honors Seminar: Enduring Books (3)</td>
<td>3</td>
</tr>
<tr>
<td>LSSS A111</td>
<td>Cultural Foundations of Human Behavior (3)</td>
<td>3</td>
</tr>
<tr>
<td>HNRS A292</td>
<td>Honors Seminar in Social Science (3)</td>
<td>3</td>
</tr>
<tr>
<td>ANTH A202</td>
<td>Cultural Anthropology (3)</td>
<td>3</td>
</tr>
<tr>
<td>LSIC A231</td>
<td>Truth, Beauty, and Goodness (3)</td>
<td>3</td>
</tr>
<tr>
<td>PHIL A301</td>
<td>Ethics (3)</td>
<td>3</td>
</tr>
<tr>
<td>LSSS A311</td>
<td>People, Places, and Ecosystems (3)</td>
<td>3</td>
</tr>
<tr>
<td>ENVI A211</td>
<td>Environmental Science: Systems and Processes (3)</td>
<td>3</td>
</tr>
<tr>
<td>LSIC A331</td>
<td>Power, Authority, and Governance (3)</td>
<td>3</td>
</tr>
<tr>
<td>SOC/PS A351</td>
<td>Political Sociology (3)</td>
<td>3-6</td>
</tr>
<tr>
<td>LSSS A312</td>
<td>Individuals, Groups, and Institutions (3)</td>
<td>3-6</td>
</tr>
<tr>
<td>PSY A111</td>
<td>General Psychology (3)</td>
<td>3</td>
</tr>
<tr>
<td>SOC A101</td>
<td>Introduction to Sociology (3)</td>
<td>3</td>
</tr>
<tr>
<td>PSY A375</td>
<td>Social Psychology (3)</td>
<td>3</td>
</tr>
<tr>
<td>LSIC A332</td>
<td>Science, Technology and Culture (3)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Select one course from fine arts GERs</td>
<td>3</td>
</tr>
</tbody>
</table>

Mathematical Skills (9-13 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH A205</td>
<td>Communicating Mathematical Ideas and</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Elementary Statistics (3)</td>
<td>3-4</td>
</tr>
<tr>
<td>STAT A252</td>
<td>Applied Statistics for the Sciences (4)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Select one additional course from quantitative</td>
<td>3-6</td>
</tr>
<tr>
<td></td>
<td>skills GERs</td>
<td></td>
</tr>
</tbody>
</table>

Oral and Written Communication Skills (9 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Select one course from oral communication GERs</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Select two courses from written communication GERs</td>
<td>6</td>
</tr>
</tbody>
</table>

E. Major Requirements

It is recommended that students complete EDFN A101 Introduction to Education prior to enrolling in the following major courses. It is strongly recommended that you see an advisor to stay on track. Field experiences in public schools are required as part of most courses.

1. Complete the following core courses (22 credits):
   - EDEC A242 Family and Community Partnerships (3) 3
   - HRNS A310 Community Service: Theory and Practice (3)
   - EDEL A205 Becoming an Elementary Teacher 2
   - EDEL A392 Elementary Education Seminar I: Culturally Responsive Teaching 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
   - EDEL A478 Issues in Alaska Native Education, K-12 3
   - EDSE A482 Inclusive Classrooms for All Children 3

2. Complete the following methods 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 multiple courses is required. See an advisor for details.

3. Complete the following field experiences and internship (16-19 credits):
   - EDEL A395 Elementary Education Practicum I: Literacy and Social Studies 2
   - EDEL A492A Elementary Education Seminar II: Learning Environment 2
   - EDEL A492B Elementary Education Seminar III: Teaching Capstone 3
   - EDEL A495A Elementary Education Practicum II: Learning Environment, Mathematics, Science 3
   - EDEL A495B Elementary Education Internship 6-9
     - For Honors Option Senior Requirement:
       - HRNS A499 Thesis (3) 3
       - EDEL A495B Elementary Education Internship (6)

4. A total of 125-141 credits is required for the degree, of which 42 credits must be upper division.

BAEL and Honors College Option

Take the following Honors College Core Program Courses (16 credits):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRNS A192</td>
<td>Honors Seminar: Enduring Books</td>
<td>3</td>
</tr>
<tr>
<td>HRNS 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>
<tr>
<td>HNRS A392</td>
<td>Elementary Honors Seminar</td>
<td>1</td>
</tr>
<tr>
<td>HRNS A499</td>
<td>Honors Thesis</td>
<td>3</td>
</tr>
<tr>
<td>EDEL A495B</td>
<td>Elementary Education Internship</td>
<td>6-9</td>
</tr>
</tbody>
</table>

Important: See an advisor if considering the Honors Option.

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 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.

FACULTY
Jeff Bailey, Professor, AFIJB@uaa.alaska.edu
Robyn Bailey, Term Assistant Professor, AFRAB@uaa.alaska.edu
Susan Barstow, Term Assistant Professor, AFSDB2@uaa.alaska.edu
Liz Boario, Term Assistant Professor, ANLEB@uaa.alaska.edu
Sharon Bohjansen, Term Assistant Professor, sboljansen@uaa.alaska.edu
Nancy Boxler, Term Assistant Professor, ANNJ1@uaa.alaska.edu
Ellen Brighan, Term Assistant Professor, AEFTE1@uaa.alaska.edu
Teresa Bumsen, Associate Professor, AFTDB@uaa.alaska.edu
Robert Capuzzo, Assistant Professor, AFRMC2@uaa.alaska.edu
Keith Cates, Assistant Professor, AFKAC@uaa.alaska.edu
Carolyn Cee, Term Assistant Professor, AFMC@uaa.alaska.edu
Cathy Caulter, Assistant Professor, AFCAC@uaa.alaska.edu
Kitty Deal, Term Assistant Professor, KDEAL@kodiak.alaska.edu
Claudia Dphdhil, Professor, AFSCD@uaa.alaska.edu
Susan Garton, Associate Professor, AFSCG@uaa.alaska.edu
Bonny Headley, Term Assistant Professor, AFBC@uaa.alaska.edu
Tim Jester, Associate Professor, AFTE@uaa.alaska.edu
Dean Kanopusek, Associate Professor, AFDEK@uaa.alaska.edu
Sunny Mall, Term Assistant Professor, AFALM@uaa.alaska.edu
Ed McLaren, Associate Professor, AFEM1@uaa.alaska.edu
Kathleen O’Dell, Professor Emerita, AFKDO@uaa.alaska.edu
Paul Oniyooguk, Term Assistant Professor, AFPO@uaa.alaska.edu
Marc Robinson, Assistant Professor, MRobinson@matruska.edu
Debra Preston Russ, Associate Professor, AFDRP@uaa.alaska.edu
Hilary Setz, Associate Professor, AFHJS1@uaa.alaska.edu
Jim Setz, MAT Program Coordinator, AFJAS2@uaa.alaska.edu
Janet Steinhauer, Term Assistant Professor, ANJLS3@uaa.alaska.edu
Allan Turner, Professor, AFAAT@uaa.alaska.edu
Amina Turton, Assistant Professor, AFAT1@uaa.alaska.edu

SPECIAL EDUCATION

Professional Studies Building (PSB), Room 206, (907) 786-6317

Minor, Early Childhood Special Education

The minor in Early Childhood Special Education provides candidates with the knowledge of intervention strategies and learning environments that support the development of young children with disabilities in the birth to age 5 range.

Program Student Learning Outcomes

Upon completion of the program students will be able to:
1. Design learning environments that promote child development.
2. Develop intervention practices which consider the individual learning needs of the child.
3. Evaluate outcomes of intervention and use the information to modify intervention.

Students majoring in another subject who wish to minor in Early Childhood Special Education must complete the following requirements. A total of 18 credits are required for the minor.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDEC A303</td>
<td>Young Children in Inclusive Settings</td>
<td>3</td>
</tr>
<tr>
<td>EDESE A212</td>
<td>Human Development and Learning</td>
<td>3</td>
</tr>
<tr>
<td>EDESE A474</td>
<td>Special Children from Birth</td>
<td>3</td>
</tr>
<tr>
<td>EDESE A482</td>
<td>Inclusive Classrooms for All Children</td>
<td>3</td>
</tr>
<tr>
<td>EDESE A422Y</td>
<td>Strategies for Young Children with Special Needs in Inclusive Settings</td>
<td>3</td>
</tr>
<tr>
<td>EDESE A490</td>
<td>Special Topics: Early Childhood Special Education</td>
<td>3</td>
</tr>
</tbody>
</table>

COLLEGE OF HEALTH

The College of Health comprises a variety of departments, including the Department of Health Sciences, the Department of Human Services, the Justice Center, the School of Nursing and the School of Social Work. The Gerontology minor is also housed in the college. The college offers certificate and undergraduate and graduate degree options for students who are attracted to people-oriented careers. It also provides a special opportunity for cross-disciplinary studies as they relate to the human aspects of our culture, and helps to prepare graduates for the increasingly integrated approaches to service delivery demanded by society.

Professional programs housed within this college share a common interest in issues that impact the development, health and well-being of individuals and communities. The instructional, service and scholarship efforts of the faculty in the various curricula are enhanced and supported by collaborative research and service activities in the Center for Alcohol and Addiction Studies (CAAS), the Center for Human Development (CHD), the Alaska Area Health Education Center, the Justice Center, the Institute for Circumpolar Health Studies (ICHS), and the National Resource Center for American Indian, Alaska Native and Native Hawaiian Elders. Together, through multidisciplinary approaches, the schools, departments, centers and institutes take direct action to address the needs and potentials of Alaska’s peoples and communities.

CENTER FOR COMMUNITY ENGAGEMENT AND LEARNING

Consortium Library (LIB), Room 211G, (907) 786-4062 www.uaa.alaska.edu/engage

The Center for Community Engagement and Learning serves the entire university and connects academic programs with community needs to use scholarship and action for the mutual benefit of the university and state, its communities, and its diverse peoples. The Center offers an Undergraduate Certificate in Civic Engagement, support for faculty members interested in community engaged teaching and research, and provides opportunities for students who wish to pursue public issues, action research, and service projects.

Undergraduate Certificate, Civic Engagement

This undergraduate certificate prepares students to become active, effective, ethical citizens in their professional and personal lives. Students develop reflective, analytic and practical skills to link their learning to civic engagement through service-learning experiences, internships, community-engaged scholarship and creative activities. This program highlights scholarly, community-based engagement in students’ major coursework while facilitating connections to a broad spectrum of civic participation.

Students who earn the Certificate in Civic Engagement will be able to:
- Demonstrate democratic skills, such as communication, problem-solving, and negotiation, necessary for addressing public problems at multiple levels;
- Articulate public uses of their education and civic engagement;
- Synthesize civic imagination and the abilities and needs of individuals, groups, and communities into a vision for the future;
- Compose personal roles and ethical standards for participation in a diverse, global community.

Advising

All Certificate in Civic Engagement majors are required to meet with a Certificate advisor to create a plan of study that is integrated with
Students must complete the following requirements:

A. General University Requirements
   Complete all general university requirements for undergraduate certificates listed at the beginning of this chapter.

B. Baccalaureate Degree Requirement
   Complete a baccalaureate degree program concurrently or before the Certificate in Civic Engagement.

C. Major Requirements
   1. Complete a plan of study
      Written with a certificate advisor, reviewed and approved by Certificate Faculty Committee and submitted to director of the Center for Community Engagement and Learning and dean of College of Health, for approval, and to Office of the Registrar.
   2. Complete the following required core courses (15 credits):
      - CEL A292 Introduction to Civic Engagement (3)
      - CEL A392 Advanced Civic Engagement Seminar (3)
      - CEL A395 Civic Engagement Internship (3-9)
      - CEL A450 Civic Engagement Capstone (3)
      Students may substitute another internship and/or capstone course if approved by Certificate Faculty Committee.
   3. Complete approved electives (15 credits):
      Approved for Certificate by Certificate Faculty Committee; community-engaged learning component required in at least 9 total elective credits; courses must help students meet Certificate learning outcomes.
      Lower division (100-299) up to 6 credits
      Upper division (300-499) 9 credits minimum
   4. Complete a Civic Engagement Portfolio
      Evaluated for graduation by Certificate Faculty Committee.
   5. A total of 30 credits and the Civic Engagement Portfolio are required for the certificate.

FACULTY
Tracey Burke, Associate Professor, AFTKB1@uaa.alaska.edu
Shannon Donovan, Assistant Professor, AFSMD@uaa.alaska.edu
Diane Hirshberg, Associate Professor, AFDBH1@uaa.alaska.edu
Rhonda Johnson, Associate Professor, AFRM@uaa.alaska.edu
Judith Owens-Manley, Associate Professor, AFJO@uaa.alaska.edu
Deborah Periman, Associate Professor, AFDPK@uaa.alaska.edu
Hilary Selz, Associate Professor, Hilary@uaa.alaska.edu
Tara Smith, Associate Professor, AFTMS@uaa.alaska.edu

CENTER FOR HUMAN DEVELOPMENT
2702 Gambell St., Suite 103, Anchorage, AK 99503, (907) 272-8270 or (800) 243-2199
www.uaa.alaska.edu/centerforhumandevelopment

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.

Program Student Learning Outcomes
Students who successfully complete this program will be able to:
1. Use knowledge of therapeutic techniques, child development, and cultural responsiveness to interpret treatment plans in therapeutic settings for children and youth.
2. Apply an array of strategies to support and shape behavior of children and youth with challenging behaviors.
3. Abide by professional practices accepted in the field of children’s behavioral health.
4. 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 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 and Long Term Supports (DLS) 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.

Certificate Requirements
Complete 16 credits in the following courses:

- DLS A200 Introduction to Children’s Behavioral Health 3
- DLS A204 Person-Centered Planning 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

FACULTY
Ken Hamrick, Instructor, ANIKEH1@uaa.alaska.edu
Julie Holden, Assistant Professor, ANJEH1@uaa.alaska.edu

DENTAL ASSISTING
Allied Health Sciences Building (AHS), Room 160, (907) 786-6929
www.uaa.alaska.edu/alliedhealth

The Dental Assisting program, as part of the Allied Health Sciences department, prepares students to become skilled members of the dental health care team. Assistants greatly increase the efficiency of the dentist
in the delivery of oral health care and are valuable members of the dental care team.

The duties of the dental assistant are among the most comprehensive and varied in the dental office. The dental assistant performs a wide range of tasks requiring both interpersonal and technical skills. Some specific tasks dental assistants may perform include: assisting the dentist during a variety of procedures, providing oral health care, exposing and processing radiographs (X-rays), recording the patient’s medical history and vital signs, preparing and sterilizing the proper instruments and equipment for the dentist’s use, providing the patient with post-operative instructions, taking impressions for study casts, performing office management tasks, and performing basic dental laboratory tasks.

Many types of practice settings are available to dental assistants. An assistant may choose to work in a private practice or a group practice. In addition, an assistant can work in a general dentistry or specialty practice, such as oral and maxillofacial surgery, orthodontics, endodontics, periodontics, prosthodontics, or pediatric dentistry. Job opportunities also exist in public health facilities, federal government facilities, hospitals, dental school clinics, insurance companies, and vocational schools or community colleges and universities teaching others to become dental assistants.

The Dental Assisting program offers a 34-credit undergraduate 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 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 an advisor in 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 the applicant achieve the 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 the 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, ability to complete the application process, and dental assisting experience. If test results are low, applicants will be advised to take courses to improve reading comprehension levels, proof of successful course completion must be provided prior to acceptance into the program.

Expenses beyond tuition include activity fees, uniform fees, student organization membership, immunizations, cost of cardiopulmonary resuscitation (CPR) class, Dental Assisting National Board Exam (DANB) fees, and student health insurance.

Immunizations and CPR certification are required prior to clinical participation and must be current throughout the program. Students must be free of tooth decay and active periodontal disease.

Undergraduate Certificate, Dental Assisting

Program Student Learning Outcomes
Students graduating with an Undergraduate Certificate in Dental Assisting will be able to:

- Demonstrate skills and knowledge necessary to be competent in the dental assisting field.
- Demonstrate professional standards according to OSHA, ADA, OSAP, ADAA and radiation health and safety standards.
- Demonstrate ethical behavior in a dental office setting.

Admission Requirements
See Application Procedure above.

Certificate Requirements

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>Fall Semester</td>
<td>DA A101</td>
<td>Essentials of Dentistry</td>
<td>3</td>
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<tr>
<td></td>
<td>DA A102</td>
<td>Infection Control in Dentistry</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>DA A110</td>
<td>Dental Radiography</td>
<td>3</td>
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<td></td>
<td>DA A110L</td>
<td>Dental Radiography Lab</td>
<td>1</td>
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<tr>
<td></td>
<td>DA A127</td>
<td>Dental Office Administration</td>
<td>3</td>
</tr>
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<td></td>
<td>DA A130</td>
<td>Chairside Techniques I</td>
<td>4</td>
</tr>
<tr>
<td>Spring Semester</td>
<td>DA A150</td>
<td>Biomedical and Dental Sciences</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>DA A160</td>
<td>Materials in Dentistry</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>DA A195A</td>
<td>Clinical Practicum I</td>
<td>1</td>
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<tr>
<td></td>
<td>DA A201</td>
<td>Chairside Techniques II</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>DA A202</td>
<td>Dental Specialties for Dental Auxiliaries</td>
<td>3</td>
</tr>
<tr>
<td>Summer Semester</td>
<td>DA A295A</td>
<td>Clinical Practicum II</td>
<td>3</td>
</tr>
</tbody>
</table>

Associate of Applied Science, Dental Assisting

Program Student Learning Outcomes
Students graduating with an Associate of Applied Science in Dental Assisting will be able to:

- Demonstrate skills and knowledge necessary to be competent in the dental assisting field.
- Demonstrate professional standards according to OSHA, ADA, OSAP, ADAA and radiation health and safety standards.
- Demonstrate ethical behavior in a dental office setting.
- Demonstrate general knowledge in the fields of biology, communications and nutrition.

Admission Requirements
See Application Procedure above.

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 Courses 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
A professional appearance must be maintained during preclinical and motor skills. Dental hygienists are exposed to bacteria and viruses. Clinical dental hygiene requires the ability to sit for long periods of classes and clinics are scheduled. The student can anticipate a four-semester, 40-hour-per-week endeavor. Some evening classes and clinics will be scheduled, and some courses will require evening hours.

Once enrolled as a student in the Dental Hygiene program, the student can maintain personal medical insurance while enrolled in the program. Students are responsible for all responsibilities for illnesses and injuries experienced by the student while enrolled in the Dental Hygiene program. Students are responsible for all expenses beyond tuition generally include activity fees, instruments, uniforms, lab fees, student organization membership, graduation pin, immunizations, cardiopulmonary resuscitation (CPR) class, board exam fees, licensure fees, student health insurance, and malpractice insurance for the Western Regional Examining Boards and professional liability insurance. Please refer to the dental hygiene program website for expense estimates.

**Special Considerations**

Due to the nature of the work, dental hygiene students are not permitted to work in the classroom, laboratory, or clinic when under the influence of intoxicants, drugs, or medication affecting psychomotor responses. Guidelines for Infection Control in Dental-Health Care Settings from the Centers for Disease Control and Prevention will be followed for students with, or exposed to, infectious diseases. As a condition of participation in the Dental Hygiene program, students must abide by the university’s Student Code of Conduct, the Dental Hygiene program’s Policies and Procedures, and the American Dental Hygienists’ Association Code of Ethics for Dental Hygienists.

Application for obtaining an Alaska dental hygiene license or restorative certification requires a background check and disclosure of information concerning illegal activity, crimes, hospitalization history regarding emotional or mental illness, drug addiction, alcoholism, and contagious diseases. If a student has a history with any of the aforementioned, it is highly recommended the applicant contact the Alaska Department of Occupational Licensing or a similar government agency in any state in which the applicant wants to practice. Employability may be affected by results of background checks and/or drug testing. The UAA Dental Hygiene program has policies that require 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:

1. A signed application form indicating the understanding and acceptance of the Dental Hygiene program requirements regarding health screening, and immunizations.

2. Current Health Care Provider (American Heart Association) or Professional Rescuer (American Red Cross) certification in CPR/AED for infants, children, and adults. First-year students must present proof of certification by the first day of class. Certification must be kept current until graduation.

3. Professional liability insurance that must be maintained throughout the duration of the student’s enrollment in Dental Hygiene courses. Specific information regarding acceptable professional liability insurance policies may be obtained directly from the program.

Students enrolled in the Dental Hygiene program must provide their own transportation to all off-campus assignments. The program assumes no responsibility for illnesses and injuries experienced by the student while enrolled in the Dental Hygiene program. Students are responsible for all costs incurred due to illness or injury experienced by the student while enrolled in the Dental Hygiene program. It is required that students maintain personal medical insurance while enrolled in the program. Students are responsible for providing their own patients to satisfy clinical requirements.
Associate of Applied Science, Dental Hygiene

Description and Program Student Learning Outcomes

This degree program prepares students to sit for the ADA National Board Dental Hygiene Examination (written examination) and the WREB Dental Hygiene Examination (clinical 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 relevant to dental hygiene.
4. Collect, analyze, and record data on the general and oral health status of patients.
5. Use critical decision making skills to develop a dental hygiene diagnosis, which will provide a basis for interventions that are within the scope of dental hygiene practice and determine the need for referral to appropriate health professions as needed.
6. Formulate dental hygiene care plans, 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.
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 processing and transcript evaluation by application deadline. Students should contact the Dental Hygiene program advisor for details.
   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 courses with a minimum grade of C:
      - BIOL A111 Human Anatomy and Physiology I 4
      - BIOL A112 Human Anatomy and Physiology II 4
      - BIOL A240 Introductory Microbiology for Health Sciences (4)* 3-4
      - CHEM A103 Survey of Chemistry (3)* 3
      - CHEM A104 Introduction to Organic Chemistry and Biochemistry* 3
      * Note: Applicants who plan to apply to the Bachelor of Science in Dental Hygiene program will need to take BIOL A240 and lab courses CHEM A103L or CHEM A105L, and CHEM A104L.
   d. International students must contact the Office of Admissions regarding equivalency evaluation of transcripts.

Application Procedure

To be considered for fall admission into the Associate of Applied Science program, the application process must be completed by the deadline date posted on the program’s website.

1. Complete the AAS Dental Hygiene program application and submit to the address below.
2. Provide proof of admittance into the University of Alaska Anchorage as an AAS premajor dental hygiene student.
3. Submit official transcripts (non-UA) or request transcript credit evaluation (for UAF and UAS transcripts) to UAA Enrollment Management. Transcript credit evaluation of courses listed under Admissions Requirement 2 must be completed by the application deadline.
4. Three letters of recommendation sent to the Dental Hygiene program will need to take BIOL A240 and lab courses CHEM A103L or CHEM A105L, and CHEM A104L.
5. Submission of current Health Occupations Basic Entrance Test (HOBET) scores to the UAA Dental Hygiene program no later than the application deadline posted on the program’s website. Contact the Advising and Testing Center (786-4500) for information about HOBET administration.
6. Mandatory pre-major advising session with designated advisor.

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**
**(907) 786-6929**
**www.uaa.alaska.edu/alliedhealth/academics/dental/hygiene**

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 to progress within the program and graduate.
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 (57.5 credits):

   **Fall Semester 1st year**
   - DA A110 Dental Radiography 3
   - DA A110L Dental Radiography Laboratory 1
   - 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 3
   - 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 A302 Advanced Instrumentation for Dental Hygienists 3
   - DH A310 Oral Pain Control 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 Community Practicum III 6

2. A total of 72.5 credits is required for the degree.

Bachelor of Science, Dental Hygiene

Description and Program Student Learning Outcomes

The BSDH is designed to allow graduates of the UAA AAS, Dental Hygiene program an opportunity to increase their education to the baccalaureate level. The program offers students a broader background in community oral health as well as training in an advanced area of dental hygiene practice. At the completion of the program, students are able to:

1. Critically evaluate research relevant to dental hygiene.
2. Assess, plan, implement, and evaluate complex community oral health projects to diverse populations.
3. Perform advanced dental hygiene skills beyond the associate degree level, e.g. restorative functions and/or clinical instruction.

Admission Requirements

Students who apply to the Bachelor of Science, Dental Hygiene major are admitted in a pre-major status. The process for advancement to major status is:

1. Apply to UAA as a Bachelor of Science, Dental Hygiene pre-major.
2. Complete an advising session with a dental hygiene advisor regarding application, program admission, and development of a program of study. (See contact information below)
3. Complete an AAS, Dental Hygiene degree.
4. Complete laboratory classes for chemistry (CHEM A103L or CHEM A105L, and CHEM A104L) with a minimum grade of C.
5. Complete BIOL A240 with a minimum grade of C.
6. Complete the University Admission Requirements for Baccalaureate Programs in Chapter 7.
7. Submit a departmental application for admission to the Bachelor of Science, Dental Hygiene degree program.
8. Complete a Change of Major form from pre-major to major status, signed by a DH faculty advisor.

Advising

Students are encouraged to meet with the academic advisor each semester to review their academic progress and plan future courses. It is particularly important for students to meet with their advisor whenever academic difficulties arise.

Degree Requirements

1. Complete the General University Requirements for Baccalaureate Degrees located at the beginning of this chapter.
2. Complete the General Education Requirements for Baccalaureate Degrees located at the beginning of this chapter. Required support courses may satisfy some General Education Requirements.
3. Complete the Major Requirements listed below.

Required Support Courses

Complete the following courses with a minimum grade of C (12-13 credits):

- BIOL A240 Introductory Microbiology for Health Sciences 4
- CHEM A103L Survey of Chemistry Laboratory (1) 1
- or
- CHEM A105L General Chemistry I Laboratory (1)
- CHEM A104L Introduction to Organic Chemistry and Biochemistry Laboratory 1
- ENGL A212 Technical Writing 3
- STAT A252 Elementary Statistics (3) 3-4
- or
- STAT A253 Applied Statistics for the Sciences (4)

Major Requirements

1. Complete the requirements for an AAS in Dental Hygiene degree (see previous)
2. Complete a minimum of 10 credits (with a minimum grade of C) from the following courses:

   - CTE A411 Historical and Philosophical Foundations of Career and Technical Education (3)
   - CTE A490 Selected Topics in Career and Technical Education (1-6)
   - DH A360 Restorative Techniques for Dental Auxiliaries (5)
   - DH A390 Selected Topics in Dental Hygiene (1-6)
   - DH A395E Community Practicum in Dental Hygiene (1-3)
   - DH A460 Instructional Concepts in Dental Hygiene (1)
   - DH A495B Instructional Practicum in Dental Hygiene (1-4)
   - DH A495E Rural Practicum in Dental Hygiene (1-3)
   - ENGL A312 Advanced Technical Writing (3)
   - or
   - ENGL A313 Professional Writing (3)
   - or
5. Professional and ethical judgment in the performance of sonographic duties.

**Advising**

Special admission and application procedure requirements apply. Interested students should contact the Diagnostic Medical Sonography faculty to review the procedures and requirements for admission. Completion of admission requirements does not guarantee acceptance into the program. Students will be required to physically attend classes at the Anchorage campus for the first three semesters, and practicums may require the need for travel to clinical sites in other Alaskan communities. Due to the risks associated with working in a health care setting, students are required to have health insurance. Health insurance is available for purchase through the UAA Student Health and Counseling Center.

**Admissions Requirements**

See Associate’s Degree Admissions Requirements in Chapter 7.

Students may be admitted to UAA with Diagnostic Medical Sonography as a pre-major.

Prior to being admitted as a full major, the student must complete the following additional requirements:

1. Meet one or both of the following:
   a. Possess an Associate’s Degree, or higher, in a healthcare, treatment, or therapy/rehabilitation centered profession.
   b. Possess a national certification in a healthcare, treatment, or therapy/rehabilitation centered profession.

2. Provide proof of having worked in a healthcare, treatment, or therapy/rehabilitation centered profession within the last five years.

3. Show, from official transcripts, successful completion of the following courses with a minimum grade of C:

   - BIOL A111  Human Anatomy and Physiology I 4
   - BIOL A112  Human Anatomy and Physiology II 4
   - PHYS A123*  Basic Physics I 3
   *RADT A151, or equivalent, will be accepted in lieu of PHYS A123.

4. Show, from official transcripts, successful completion of the following courses with a minimum grade of C; or placement in a higher level course:

   - ENGL A111  Introduction to Composition 3
   - MATH A105  Intermediate Algebra 3

5. Submit a Diagnostic Medical Sonography program application.


7. Provide proof of the following:
   a. Immunity to measles, mumps, and rubella.
   b. Immunity to chickenpox.
   c. Immunity to hepatitis A and hepatitis B must have started the vaccination series prior to enrollment.
   d. Tetanus/diphtheria/pertussis (Tdap) vaccination.
   e. Freedom from active tuberculosis, proven by negative PPD skin test and a health examination.
   f. Screening for HIV (results not required).

8. Appear before a student selection panel for an interview.

9. Once admitted, and prior to the program start, submit to a national-level criminal background check.

**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 Degree Requirements located at the beginning of this chapter.

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**FACULTY**

Elizabeth Barnett, Assistant Professor, barnett@uaa.alaska.edu
Sandra Pence, Associate Professor, pence@uaa.alaska.edu
Carri Shamburger, Term Assistant Professor, cashamburger@uaa.alaska.edu

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### DIAGNOSTIC MEDICAL SONOGRAPHY

**Allied Health Science Building (AHS), Room 165, (907)786-6976**

www.uaa.alaska.edu/alliedhealth/academics/mis/dms

Diagnostic medical sonographers typically work in a variety of medical settings under the supervision of a radiologist or attending physician. Diagnostic medical sonographers use special equipment to direct high frequency sound waves into areas of the patient’s body to form images that are interpreted by a physician for diagnosis. Diagnostic medical sonography requires the ability to sit or stand for long periods of time, employ excellent eye-hand coordination, communicate effectively, and communicate findings to the appropriate physician. Examples of examinations performed by sonographers include: abdominal, gynecological, fetal, breast, vascular, small part, and superficial.

### Associate of Applied Science, Diagnostic Medical Sonography

The Diagnostic Medical Sonography program is designed for individuals who already have training and experience in a profession that provides direct care or treatment to people. This program provides education and training to prepare students for employment as a general sonographer. Graduates are eligible to sit for national certification exams in diagnostic medical sonography.

### Program Student Learning Outcomes

At the completion of the Diagnostic Medical Sonography program, students are able to demonstrate:

1. Entry-level knowledge of physics, anatomy, physiology, and pathophysiology related to sonography.
3. Proficiency in patient assessment and care activities.
4. Effective oral and written communication with patients, physicians, and other medical personnel.
Major Requirements

1. Complete the following courses with a minimum grade of C or Pass:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>DMS A101</td>
<td>Introduction to Sonography</td>
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<td>DMS A103</td>
<td>Patient Care in Sonography</td>
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<tr>
<td>DMS A105</td>
<td>Principles and Instrumentation I</td>
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<td>DMS A107</td>
<td>Abdominal Sonography I</td>
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<td>DMS A109</td>
<td>OB and Gyn Sonography I</td>
<td>2</td>
</tr>
<tr>
<td>DMS A205</td>
<td>Principles and Instrumentation II</td>
<td>2</td>
</tr>
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<td>DMS A207</td>
<td>Abdominal Sonography II</td>
<td>2</td>
</tr>
<tr>
<td>DMS A209</td>
<td>OB and Gyn Sonography II</td>
<td>2</td>
</tr>
<tr>
<td>DMS A211</td>
<td>Small Parts Sonography</td>
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</tr>
<tr>
<td>DMS A213</td>
<td>Vascular Technology</td>
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</tr>
<tr>
<td>DMS A215</td>
<td>Breast Sonography</td>
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</tr>
<tr>
<td>DMS A217</td>
<td>Fundamentals of Sonography Lab</td>
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</tr>
<tr>
<td>DMS A221</td>
<td>Pediatric Sonography</td>
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</tr>
<tr>
<td>DMS A295A</td>
<td>Clinical Practicum I</td>
<td>8</td>
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<td>DMS A295B</td>
<td>Clinical Practicum II</td>
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<td>DMS A392</td>
<td>Pathophysiology Seminar</td>
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<td>DMS A395</td>
<td>Clinical Practicum III</td>
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<tr>
<td>RADT A231</td>
<td>Sectional Anatomy for Diagnostic Imaging</td>
<td>3</td>
</tr>
</tbody>
</table>

2. A total of 71 credits are required for the degree.

FACULTY

Ryan Parnell, Instructor, rparnell@uaa.alaska.edu

FIRE AND EMERGENCY SERVICES TECHNOLOGY

Allied Health Science Building (AHS), Room 153, (907) 786-6476
www.uaa.alaska.edu/alliedhealth/academics/fire.cfm

The Fire and Emergency Services Technology program provides entry-level knowledge and skills for students planning a career in emergency services as well as providing for career advancement and professional development of current firefighters.

It may take more than two years to complete the degree. The Associate of Applied Science degree has a technical core which follows the National Fire Academy’s Fire and Emergency Service Higher Education model core curriculum for two-year degree programs. The technical core consists of courses in principles of emergency services, building construction, fire prevention, safety and survival, protection systems, and fire behavior and combustion. Each student must complete the technical core as well as MATH A105 or GER Quantitative Skills course, a natural science with lab, and remaining UAA AAS General Course Requirements (see earlier in this chapter for further details). The student also completes courses from a variety of program electives.

For baccalaureate degree options, contact a Fire and Emergency Services Technology advisor.

Advising

Upon admission to the program, students are strongly encouraged to meet with their academic advisor each semester for the purpose of reviewing their academic progress and planning future courses. It is particularly important for students to meet with their advisor whenever academic difficulties arise.

Associate of Applied Science, Fire and Emergency Services Technology

Program Student Learning Outcomes

Students graduating with an Associate of Applied Science in Fire and Emergency Services Technology will be able 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 types of building construction and their uniqueness under fire conditions and how these components are related to firefighter and life safety.
- Relate how the basic principles and history related to the national firefighter life safety initiatives foster the need for cultural and behavioral change throughout the emergency services.

Admission Requirements

Satisfy the Admission to Certificate and Associate’s Degree Program Requirements in Chapter 7. 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 P) in all Fire and Emergency Service Technology (FIRE and EMT) 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 Course Requirements located at the beginning of this chapter.
3. Complete the Major Requirements listed below with a minimum grade of C.

Major Requirements

1. Complete the following required courses (28 credits):

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRE A101</td>
<td>Principles of Emergency Services</td>
<td>3</td>
</tr>
<tr>
<td>FIRE A105</td>
<td>Fire Prevention</td>
<td>3</td>
</tr>
<tr>
<td>FIRE A121</td>
<td>Fire Behavior and Combustion</td>
<td>3</td>
</tr>
<tr>
<td>FIRE A206</td>
<td>Building Construction Issues Related to Fire Protection</td>
<td>3</td>
</tr>
<tr>
<td>FIRE A214</td>
<td>Fire Protection Systems</td>
<td>3</td>
</tr>
<tr>
<td>FIRE A221</td>
<td>Principles of Fire and Emergency Services Safety and Survival</td>
<td>3</td>
</tr>
<tr>
<td>MATH A105</td>
<td>Intermediate Algebra or GER Quantitative Skills course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Natural science with lab</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Social science (PS, PSY, or SOC)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Math, natural science, and social science may also meet AAS General Course Requirements.</td>
<td></td>
</tr>
</tbody>
</table>

2. Complete 12 credits from the following courses with a minimum grade of C:

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMT A130</td>
<td>Emergency Medical Technician I (6)</td>
<td></td>
</tr>
<tr>
<td>EMT A230</td>
<td>Emergency Medical Technician II (3)</td>
<td></td>
</tr>
<tr>
<td>EMT A231</td>
<td>Emergency Medical Technician III (3)</td>
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<tr>
<td>FIRE A107</td>
<td>Strategy and Tactics of Fire Suppression (3)</td>
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<tr>
<td>FIRE A111</td>
<td>Principles of Fire and Emergency Services Adminstration (3)</td>
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<td>FIRE A117</td>
<td>Rescue Practices (3)</td>
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<td>FIRE A123</td>
<td>Fire Investigation I (3)</td>
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<td>FIRE A131</td>
<td>Firefighter I, Series I (3)</td>
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<td>FIRE A133</td>
<td>Firefighter I, Series II (3)</td>
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<td>FIRE A135</td>
<td>Firefighter I, Series III (3)</td>
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<td>FIRE A137</td>
<td>Firefighter I, Series IV (3)</td>
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<td>FIRE A151</td>
<td>Wildland Fire Control I (3)</td>
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</tbody>
</table>
A total of 18 credit hours is required for the minor. The undergraduate Minor in Gerontology is comprised of a selection of courses that specifically relate to issues concerning the aging process. A focus on the aging process and issues will be emphasized. Because of its multidisciplinary nature, there is no one preferred student major background necessary to complete the minor program requirements. Practica are individualized and represent an applied or practical side of the minor and are offered by various departments. These practica are typically listed under A490. Topics must be reviewed and approved by the gerontology committee.

Practicum Requirements

Practicum placement requires departmental approval and will require various documentation which may include: background checks, proof of immunizations, release forms, proof of insurance, and others as dictated by individual sites.

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 toward 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
   - FIRE A170 Occupational Safety and Health for Emergency Services (3)
   - FIRE A190 Selected Topics in Fire and Emergency Services (1-3)
   - FIRE A201 Principles of Emergency Management (3)
   - FIRE A202 Fire Protection Hydraulics and Water Supply (3)
   - FIRE A203 Hazardous Materials Chemistry (3)
   - FIRE A216 Methods of Instruction for Fire and Emergency Service (3)
   - FIRE A220 Legal Aspects of Emergency Services (3)
   - FIRE A223 Fire Investigation II (3)
   - FIRE A230 Fire Department Organizational Theory and Behavior (3)
   - FIRE A295 Fire and Emergency Services Technology Practicum (3)

2. Complete 9 additional credits from FIRE, FSA, or EMT courses from the courses listed above with a minimum grade of C or from the General Education Requirements (GERs) course list. 11 credits

3. Complete an additional 11 credits from FIRE, FSA, or EMT courses from the courses listed above with a minimum grade of C or from the General Education Requirements (GERs) course list.

4. A total of 60 credits is required for the degree.

HEALTH SCIENCES

Diplomacy Building (DPL), Room 305, (907) 786-5481
www.uaa.alaska.edu/healthsciences

Bachelor of Science, Health Sciences

The Department of Health Sciences takes a multi-disciplinary approach to preparing students for careers in the areas of health education and health promotion, public health, community health, health care delivery, disease prevention, and rehabilitation. The Bachelor of Science in Health Sciences (BSHS) includes three tracks:

- Health Educator
- Physician Assistant (PA)
- Pre-professional track with emphasis in occupational therapy (OT), physical therapy (PT), physician assistant (PA), or pharmacy

BSHS Health Educator Track

The Bachelor of Science in Health Sciences Health Educator Track provides training in the competencies for health educators identified by the National Health Educators Competencies Update Project and qualifies students to take the Certified Health Educator Specialist (CHES) exam. In addition it provides education in population-based health and a community health education practicum. The Health Educator track provides a good foundation for careers or graduate study in health education, public health and community health promotion.

Admission Requirements

Complete the Baccalaureate Degree Programs Admission Requirements described in Chapter 7.

Field Practicum

The practicum provides students with an opportunity to apply health sciences and health education knowledge and skills to specific assigned projects within a community health organization. Placements may become competitive. The Department of Health Sciences makes every effort to find appropriate field placements for students; however, admittance to the BSHS Health Educator Track does not guarantee acceptance by cooperating health agencies.

FACULTY

Patrick Cunningham, Associate Professor, AFPMC@uaa.alaska.edu
Ann Jache, Chair, jache@uaa.alaska.edu
Rosellen Rosich, Professor, AFMR@uaa.alaska.edu

FIRE A295: Fire and Emergency Services Technology Practicum (3)

SOC A310: Sociology of Aging (3)
PSY A450: Adult Development and Aging (3)

2. Complete 9 additional credits from the list below. Six of the credits must be upper division courses. Up to 6 credits may be from approved practicum courses related to gerontology.

- AKNS A492: Cultural Knowledge of Native Elders (3)
- HUMS A416: Substance Abuse and the Older Adult (3)
- NS A434: Health Care of the Elderly (3)
- PSY A143: Death and Dying (3)

Approved selected/special topics course(s) related to Gerontology (1-3)*

** Practica related to gerontological issues may also be used to meet minor program requirements. Practica are individualized and represent an applied or practical side of the minor.

A maximum of 6 credits may be from practicum courses.

FACULTY

Tim Benningfield, Assistant Professor/Program Coordinator, tlbenningfield@uaa.alaska.edu

www.uaa.alaska.edu/gerontology

SOC A310, PSY A450: Multidisciplinary Approach (3)

1. Complete required minor core courses:

- SOC A110 Introduction to Gerontology (3)
- FIRE A170 Occupational Safety and Health for Emergency Services (3)
- FIRE A190 Selected Topics in Fire and Emergency Services (1-3)
- FIRE A201 Principles of Emergency Management (3)
- FIRE A202 Fire Protection Hydraulics and Water Supply (3)
- FIRE A203 Hazardous Materials Chemistry (3)
- FIRE A216 Methods of Instruction for Fire and Emergency Service (3)
- FIRE A220 Legal Aspects of Emergency Services (3)
- FIRE A223 Fire Investigation II (3)
- FIRE A230 Fire Department Organizational Theory and Behavior (3)
- FIRE A295 Fire and Emergency Services Technology Practicum (3)

3. Complete an additional 11 credits from FIRE, FSA, or EMT courses from the courses listed above with a minimum grade of C or from the General Education Requirements (GERs) course list. 11 credits

4. A total of 60 credits is required for the degree.

Practicum Requirements

Practicum placement requires departmental approval and will require various documentation which may include: background checks, proof of immunizations, release forms, proof of insurance, and others as dictated by individual sites.

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 toward 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 (3)
   - FIRE A170 Occupational Safety and Health for Emergency Services (3)
   - FIRE A190 Selected Topics in Fire and Emergency Services (1-3)
   - FIRE A201 Principles of Emergency Management (3)
   - FIRE A202 Fire Protection Hydraulics and Water Supply (3)
   - FIRE A203 Hazardous Materials Chemistry (3)
   - FIRE A216 Methods of Instruction for Fire and Emergency Service (3)
   - FIRE A220 Legal Aspects of Emergency Services (3)
   - FIRE A223 Fire Investigation II (3)
   - FIRE A230 Fire Department Organizational Theory and Behavior (3)
   - FIRE A295 Fire and Emergency Services Technology Practicum (3)

2. Complete 9 additional credits from the list below. Six of the credits must be upper division courses. Up to 6 credits may be from approved practicum courses related to gerontology.

- AKNS A492: Cultural Knowledge of Native Elders (3)
- HUMS A416: Substance Abuse and the Older Adult (3)
- NS A434: Health Care of the Elderly (3)
- PSY A143: Death and Dying (3)

Approved selected/special topics course(s) related to Gerontology (1-3)*

** Practica related to gerontological issues may also be used to meet minor program requirements. Practica are individualized and represent an applied or practical side of the minor.

A maximum of 6 credits may be from practicum courses.

FACULTY

Patrick Cunningham, Associate Professor, AFPMC@uaa.alaska.edu
Ann Jache, Chair, jache@uaa.alaska.edu
Rosellen Rosich, Professor, AFMR@uaa.alaska.edu

HEALTH SCIENCES

Diplomacy Building (DPL), Room 305, (907) 786-5481
www.uaa.alaska.edu/healthsciences

Bachelor of Science, Health Sciences

The Department of Health Sciences takes a multi-disciplinary approach to preparing students for careers in the areas of health education and health promotion, public health, community health, health care delivery, disease prevention, and rehabilitation. The Bachelor of Science in Health Sciences (BSHS) includes three tracks:

- Health Educator
- Physician Assistant (PA)
- Pre-professional track with emphasis in occupational therapy (OT), physical therapy (PT), physician assistant (PA), or pharmacy

BSHS Health Educator Track

The Bachelor of Science in Health Sciences Health Educator Track provides training in the competencies for health educators identified by the National Health Educators Competencies Update Project and qualifies students to take the Certified Health Educator Specialist (CHES) exam. In addition it provides education in population-based health and a community health education practicum. The Health Educator track provides a good foundation for careers or graduate study in health education, public health and community health promotion.

Admission Requirements

Complete the Baccalaureate Degree Programs Admission Requirements described in Chapter 7.

Field Practicum

The practicum provides students with an opportunity to apply health sciences and health education knowledge and skills to specific assigned projects within a community health organization. Placements may become competitive. The Department of Health Sciences makes every effort to find appropriate field placements for students; however, admittance to the BSHS Health Educator Track does not guarantee acceptance by cooperating health agencies.
Departmental Honors

The BSHS Health Educator Track recognizes exceptional performance by conferring Departmental Honors in Health Sciences. In order to receive Honors in Health Sciences, a student must meet each of the following requirements:

1. Satisfy all requirements for the BSHS Health Educator Track degree.
2. Earn a GPA of 3.50 or higher in upper division (300- and 400-level) BSHS core and focus sequence courses.
3. Meet the requirements for graduation with honors as listed in Chapter 7.
4. Complete the HS A492 Senior Seminar: Contemporary Health Policy with a grade of B or better.
5. Complete a senior project or thesis (HS A499 Senior Thesis in Health Sciences) with a grade of B or better. The Health Sciences faculty must approve the project/thesis proposal and the final written report.
6. Notify the departmental advisor in writing on or before the date of filing an Application for Graduation with the Office of the Registrar.

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 39 credits of required core courses:
   - HS A210 Introduction to Environmental Health 3
   - HS A220 Core Concepts in Health Sciences 3
   - HS A230 Introduction to Global Health 3
   - HS A326 Introduction to Epidemiology 3
   - HS A345 Planning and Implementation of Health Education Programs 3
   - HS/SOC A370 Medical Sociology 3
   - HS/HUMS A420 Introduction to Program Evaluation 3
   - HS/NS A433 Health Education: Theory and Practice 3
   - HS A492 Senior Seminar: Contemporary Health Policy 3
   - HS A495 Health Sciences Practicum 3
   - PEP A384 Cultural and Psychological Aspects of Health and Physical Activity 3
   - PHIL A302 Biomedical Ethics 3
   - PSY A372 Community Psychology 3

2. Complete the following support courses (33-34 credits):
   - BIOL A111 Human Anatomy and Physiology I 4
   - BIOL A112 Human Anatomy and Physiology II 4
   - BIOL A240 Introduction to Microbiology for Health Sciences 4
   - COMM A241 Public Speaking 3
   - DN A203 Nutrition for the Health Sciences 3
   - ENGL A212 Technical Writing (3) or
   - ENGL A213 Writing in the Social and Natural Sciences (3) or
   - ENGL A214 Persuasive Writing (3) or
   - PSY A111 General Psychology 3
   - PSY A150 Lifespan Development 3
   - STAT A252 Elementary Statistics (3) or
   - STAT A253 Applied Statistics for the Sciences (4) or
   - PSY A260 Statistics for Psychology (3) and
   - PSY A260L Statistics for Psychology Lab (1)
   - SWK A243 Cultural Diversity and Community Service Learning 3

3. Complete 3 credits Natural Science GER in a discipline other than Biology.

4. Complete one of the following focus area sequences (6-9 credits):
   - Aging (6 credits)
     - SOC A110 Introduction to Gerontology: Multidisciplinary Approach 3
     - SOC A310 Sociology of Aging 3
   - Public Policy (6 credits)
     - PS A101 Introduction to American Government (3) 3
     - PS A102 Introduction to Political Science (3) or
     - PS A347 Public Administration (3) 3
     - PS A348 Public Policy (3)
   - Nutrition Sequence 1 (6 credits)
     - DN A145 Child Nutrition (3) 3
     - DN A147 Geriatric Nutrition (3) and
     - DN A415 Community Nutrition 3
   - Nutrition Sequence 2 (6 credits)
     - DN A310 Nutrition Communication 3
     - DN A355 Weight Management and Eating Disorders 3
   - Medical Anthropology (9 credits)
     - ANTH A202 Cultural Anthropology 3
     - ANTH A205 Biological Anthropology 3
     - ANTH A455 Medical Anthropology 3
   - Communication (6 credits)
     - COMM A235 Small Group Communication (3) 3
     - COMM A237 Interpersonal Communication (3) and
     - COMM A305 Intercultural Communication 3
   - Research Methods (7-8 credits)
     - PSY A261 Research Methods in Psychology (4)-4
     - SOC A361 Social Science Research Methods (3) and
     - PSY/SOC A453 Application of Statistics to the Social Sciences 4

5. A total of 120 credits is required for this degree, of which 42 must be upper division.

Physician Assistant Track

Physician assistants (PAs) are health care professionals licensed to practice medicine with physician supervision. As part of their comprehensive responsibilities, PAs conduct physical exams, diagnose and treat illnesses, order and interpret tests, counsel on preventive health care, assist in surgery, and write prescriptions. 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 licensed practical nurse (LPN), registered nurse (RN), paramedic, corpsman and community health practitioners.

The BSHS Physician Assistant Track is offered in conjunction with the MEDEX Northwest Physician Assistant (PA) training program at
the University of Washington (UW), School of Medicine. The MEDEX (Medicine Extension) model was developed in 1964 at the University of Washington with a strong emphasis on the deployment of students and graduates into medically underserved communities.

The BSHS Physician Assistant Track provides a BS degree for students who complete the education and clinical experience required to work as a physician assistant. The program consists of a minimum of two years of pre-major coursework and health care experience followed by the MEDEX Northwest PA training program curriculum. The MEDEX curriculum includes one year of clinical and didactic instruction at approved training sites, and a year of clinical and family practice clerkships. UAA students can complete all of their training in Alaska.

Upon successful completion of BSHS PA Track degree requirements (see below), the University of Alaska Anchorage awards a Bachelor of Science in Health Sciences. In addition, upon successful completion of the MEDEX PA program the University of Washington School of Medicine grants a Physician Assistant Certificate. Also upon completion, students are eligible to sit for the National Certifying Examination for Physician Assistants.

Program Student Learning Outcomes

Graduates of the BSHS Physician Assistant Track will be able to:

• Perform data collection, medical interviewing and physical examination skills, and communicate the acquired information effectively.

• Formulate medical decisions and treatment plans.

• Perform procedural skills appropriate to the physician assistant’s role.

• Provide education to patients about appropriate treatments and interventions to maximize health.

• Prescribe medication and other treatment modalities to enable the physician assistant to function at the full scope of practice as allowed by individual state law.

• Provide assessment and care for common mental health conditions and concerns.

• Practice as a physician assistant within 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. While students may earn a PA certificate through a number of training programs, special arrangements have been made with UW so that the UAA BSHS Physician Assistant Track may be awarded in conjunction with coursework taken through the UW MEDEX Program. Students will receive their first year of coursework at UAA but will be admitted and registered at UW. Students will be co-enrolled during their clinical year clerkship to meet the UAA degree requirements. Students co-enrolled at Medex must complete their clinical year clerkship courses at UAA to receive the certificate from UW and their BSHS from UAA. Students who have already completed PA training and hold a PA certificate who are not co-enrolled at Medex should review the Certified Physician Assistant’s Degree Completion Admission Requirements section of this catalog.

Procedures for Participation of UAA Students in the UW MEDEX Northwest Physician Assistant Program

Up to 20 students may be admitted to the Anchorage training site of the UW MEDEX program annually, in accordance with the joint selection process established in the collaborative agreement between UAA and UW. Applicants are evaluated on their previous clinical experience and their commitment to practice in Alaska, particularly in underserved areas, in addition to their overall academic performance in the pre-physician assistant curriculum.

Alaska students admitted into the MEDEX program spend their junior year of the PA program at the UAA training site where they receive intense clinical and didactic instruction. The senior year of the BSHS program is spent in training sites throughout Alaska and the Washington, Wyoming, Alaska, Montana, and Idaho (WWAMI) region currently utilized by the MEDEX program.

The practicum year corresponds to UW’s year of clinical placement and supervision that completes the MEDEX certificate program. The clinical year begins in September and ends in early September the following year. The clinical placements call for 35-40 hours a week in supervised clinical training and 10-20 hours a week in self-study.

At the completion of the MEDEX PA program, students are eligible to sit for the National Certifying Examination for Physician Assistants. The 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 Health Sciences Department to obtain details about entering this degree pathway.

Admission Requirements

Complete the Admission to Baccalaureate Programs Requirements in Chapter 7. 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.) Students who already hold a current PA certificate do not need to take the UAA BSHS pre-major courses.

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 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 certificate program, and hold current NCCPA certification may be admitted to the UAA BSHS program to complete their degrees. This program is only available to those students who have not previously completed a Bachelors program. They must meet the Baccalaureate Degree Programs Admission Requirements in Chapter 7 and must submit official transcripts and official documentation of successful PA program completion.

Students admitted to the BSHS program who hold a current PA Certificate through an ARC-PA accredited program and satisfy all UAA requirements including completion of 30 credits in residence may be awarded credits for the certificate and apply those credits toward the BSHS. Contact the Health Sciences Department for details.

Students who have already completed PA training and hold a current PA certificate are not required to take the clinical year clerkship courses HS A463, HS A464, HS A465, or HS A466.

Graduation Requirements

Students must complete the following requirements:

A. General University Requirements

All students must complete all General University Requirements for All Baccalaureate Degrees listed at the beginning of this chapter except in the case of the following:

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. Students who already hold a current PA certificate are not required to take HS A463, HS A464, HS A465, or HS A466.

4. A total of 120 credits is required for the degree, of which 42 must be upper division.

BSHS Pre-Professional Track

The Bachelor of Science in Health Sciences Pre-Professional (PP) Track provides training in public health and health education along with preparation for occupational therapy (OT), pharmacy, physical therapy (PT), physician assistant, or other professional health-related graduate programs. The BSHS PP track includes an OT option, a PT option, a PA option and a pharmacy option (See Major Requirements below).

Prerequisites for graduate programs vary across graduate schools. The UAA BSHS PP track includes most prerequisites for many OT, PT, PA and pharmacy graduate programs. However, students must check the prerequisites for the schools they plan to attend in order to ensure that they meet all admission requirements. Students are encouraged to meet with an advisor in the Health Sciences department early in their academic program to assist with course selection.

Admission Requirements

Complete the Baccalaureate Degree Programs Admission Requirements in Chapter 7.

Departmental Honors

The BSHS Pre-Professional Track, recognizes exceptional performance by conferring Departmental Honors in Health Sciences. In order to receive Honors in Health Sciences, a student must meet each of the following requirements:

1. Satisfy all requirements for the BSHS, Pre-Professional Track degree.
2. Earn a GPA of 3.50 or higher in upper division (300- and 400-level) BSHS core and focus sequence courses.
3. Meet the requirements for graduation with honors as listed in Chapter 7.
4. Complete HS A492 Senior Seminar: Contemporary Health Policy with a grade of B or better.
5. Complete a senior project or thesis (HS A498 Senior Project in Health Sciences or HS A499 Senior Thesis in Health Sciences) with a grade of B or better. Health Sciences faculty must approve the project/thesis proposal and the final written report.
6. Notify the departmental advisor in writing on or before the date of filing an Application for Graduation with the Office of the Registrar.

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 33 credits of required core courses:
   - HS A210 Introduction to Environmental Health 3
   - HS A220 Core Concepts in Health Sciences 3
   - HS A230 Introduction to Global Health 3
   - HS A326 Introduction to Epidemiology 3
   - HS A345 Planning and Implementation of Health Education Programs 3
   - HS/SOC A370 Medical Sociology 3
   - HS/ HUMS A420 Introduction to Program Evaluation 3
   - HS/NS A433 Health Education: Theory and Practice 3
   - HS A492 Senior Seminar: Contemporary Health Policy 3
   - PEP A384 Cultural and Psychological Aspects of Health and Physical Activity 3
   - PHIL A302 Biomedical Ethics 3

2. Complete the following support courses (36 or 39 credits):
   - 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
   - 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

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DN A203 Nutrition for Health Sciences 3
ENGL A212 Technical Writing (3) 3
or
ENGL A213 Writing in the Social and Natural Sciences (3) 3
or
ENGL A214 Persuasive Writing (3)
PSY A111 General Psychology (3) 3
or
PSY A150 Lifespan Development (3)
STAT A252 Elementary Statistics (3) 3-4
or
STAT A253 Applied Statistics for the Sciences (4)
PSY A260 Statistics for Psychology (3) and
PSY A260L Statistics for Psychology Lab (1)
3. Complete the one of the following option requirements
   a. Occupational Therapy option (10 credits)
      PEP A382 Kinesiology and Biomechanics 4
      PEP A383 Movement Theory and Motor Development 3
      SOC A310 Sociology of Aging 3
   b. Physical Therapy option (18 credits)
      PEP A382 Kinesiology and Biomechanics 4
      PEP A383 Movement Theory and Motor Development 3
      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
      SOC A310 Sociology of Aging 3
   c. Physician Assistant option (9-10 credits)
      BIOL A240 Introduction to Microbiology for Health Sciences 3
      PHYS A123 Basic Physics I (3) 3-4
      PHYS A123L Basic Physics I Laboratory (1) or
      CHEM A321 Organic Chemistry I (3)
      SOC A310 Sociology of Aging 3
   d. Pharmacy option (21 credits)
      CHEM A321 Organic Chemistry I 3
      CHEM A322 Organic Chemistry II 3
      CHEM A323L Organic Chemistry Laboratory 2
      COMM A241 Public Speaking 3
      ECON A201 Principles of Macroeconomics 3
      ECON A202 Principles of Microeconomics 3
      MATH A200 Calculus 4
4. A total of 120 credits is required for this degree, of which 42 must be upper division.

Minor, Public Health

Public health is a diverse field that focuses on improving the health of the entire population through community-based health promotion and disease prevention activities and policies. Students majoring in a subject other than Health Sciences who wish to minor in Public Health must complete the following requirements. A total of 18 credits is required, of which 9 must be upper division.

1. Complete the following minor core courses (9 credits):
   HS A220 Core Concepts in Health Sciences 3
   HS A230 Introduction to Global Health 3
   HS A326 Introduction to Epidemiology 3
2. Complete 9 additional credits from the list below:
   HS A210 Introduction to Environmental Health 3
   HS A345 Planning and Implementation of Health Education Programs

FACULTY
Bret Kessler, Assistant Professor, bkessler@uaa.alaska.edu
R. Steven Konkel, Associate Professor, steven.konkel@uaa.alaska.edu
John Riley, Instructor, Coordinator, PA Program, ajriley@uaa.alaska.edu

HUMAN SERVICES

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.

Program Student Learning Outcomes
Students completing this certificate are prepared to:

- Understand the nature of conflict through theory and collaborative practices.
- Demonstrate enhanced communication skills and interpersonal skills to include negotiation.
- Incorporate conflict management skills in human service practice.
- Integrate concepts of diversity into various collaborative practices.

Admission Requirements
Satisfy the admission requirements for Occupational Endorsements found in Chapter 7.
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

Program Student Learning Outcomes
Students graduating with an Associate of Applied Science in Human Services will be able to:

- Analyze and navigate community-based human services agencies and service delivery systems in order to secure a variety of community resources appropriate for clients.
- Utilize a strengths-based approach to working with people and their problems in living.
- Effectively use intervention and core paraprofessional counseling skills.
- Apply 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:
  - Understand agencies, target populations, services delivered, and interaction with community partners.
  - Develop a professional self and identity with appropriate use of supervision.
  - Apply client/community intervention skills.
- Qualify for employment in the human services workforce.
- Build on human services AAS degree as a foundation for further education.

Admission Requirements
Satisfy the Admission Requirements for Undergraduate Certificate and Associate Degree Programs found in Chapter 7.

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 Degrees located at the beginning of this chapter.

Major Requirements

1. Complete the following required courses (30 credits):
   - ANTH A200  Natives of Alaska (3)  3
   - ANTH A202  Cultural Anthropology (3)  3
   - HUMS A101  Introduction to Human Services  3
   - HUMS A107  History and Systems of Human Services  3
   - HUMS A185  Introduction to Field Work  3
   - HUMS A223  Introduction to Paraprofessional Counseling I  3
   - HUMS A256  Groups and Organizations  3
   - HUMS A295A  Human Services Practicum I  3
   - HUMS A295B  Human Services Practicum II  3
   - HUMS A324  Introduction to Paraprofessional Counseling II  3
   - PSY A111  General Psychology (3)  3
   - PSY A150  Lifespan Development (3)
2. Complete 9 credits from the following list of selectives:
   - HUMS/ SWK A106  Introduction to Social Welfare (3)
   - 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 A155  Human Relations in the Workplace (3)
   - HUMS A224  Conflict and Collaborative Systems (3)
   - HUMS A226  Intervention Continuum in Substance Abuse Counseling (3)
3. Choose 12 credits of electives. Consultation with faculty advisor recommended.
4. A total of 60 credits is required for the degree.

Bachelor of Human Services

Program Student Learning Outcomes
Students graduating with a Bachelor of Human Services will:

- Possess an understanding of knowledge, skills and values integral to the field of Human Services.
- Possess advanced skill sets necessary to provide direct and indirect client services in a community/professional setting.
- Receive satisfactory program services to include: academic advising, course offerings, practicum experiences and appropriate faculty and staff support.

Admission Requirements
Complete the Requirements for Admission to Baccalaureate Degree programs in Chapter 7. 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/hums or the Human Services Student Handbook for the Bachelor of Human Services admission process.

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...
The Justice 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:  
   - 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)

3. A total of 18 credits is required for the minor.

**FACULTY**

Laura Kelley, Professor/Chair, lwkelley@uaa.alaska.edu  
Ira Rosnel, Assistant Professor, irosnel@uaa.alaska.edu

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**Minors, 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:  
   - 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)

3. A total of 18 credits is required for the minor.

**FACULTY**

Laura Kelley, Professor/Chair, lwkelley@uaa.alaska.edu  
Ira Rosnel, Assistant Professor, irosnel@uaa.alaska.edu
• Describe processes of justice policy development and the requirements of evidence-based policymaking.
• Synthesize the history and development of the institutions of government forming the sources of American law and the social, economic and cultural forces that influence the development of law.

Admission Requirements
1. Complete the Admission to Baccalaureate Programs Requirements in Chapter 7.
2. Complete JUST A110, JUST A200, and JUST A201 with a minimum grade of D.

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 core courses (21 credits):
   - JUST A110 Introduction to Justice 3
   - JUST A200 Introduction to Research Methods in Justice 3
   - JUST A201 Justice Data Analysis 3
   - JUST/ SOC A251 Crime and Delinquency 3
   - JUST A315 Development of Law 3
   - JUST A330 Justice and Society 3
   - JUST A360 Justice Theory and Policy Analysis 3
2. Complete two of the following three courses 6
   - JUST A334 Police and Society (3)
   - JUST A374 The Courts (3)
   - JUST A384 Contemporary Corrections (3)
3. Complete 18 credits of electives in Justice or Legal Studies; 12 credits must be upper division 18
   Note: Legal Studies courses fulfill the Justice elective requirements for the Bachelor of Arts in Justice except where the student has elected a Legal Studies Minor or Major; Legal Studies courses cannot be used (counted twice) to meet both the requirements of the Minor in Justice and the Bachelor of Arts or Minor in Legal Studies.
4. Complete a university-approved minor in another discipline. Specific requirements for minors are listed in the catalog by school or department. 18-21
5. All Justice majors must take the Justice Exit Examination. There is no minimum score required for graduation. 20-21
6. A total of 120 credits is required for the degree, of which 42 credits must be upper division.

Minor, Justice
Students who wish to complement their studies in another discipline with knowledge of crime, law, and justice may declare a Justice minor. A total of 18 credits is required for the minor, 9 of which must be upper division.
1. JUST A110 Introduction to Justice 3
2. JUST/ SOC A251 Crime and Delinquency 3
3. Complete 9 credits of upper division electives in Justice or Legal Studies* 9
4. Complete 3 credits of electives in Justice or Legal Studies; any level* 3

* Note: Legal Studies courses fulfill the Justice elective requirements for the Minor in Justice except where the student has elected a Bachelor of Arts or Minor in Legal Studies; Legal Studies courses cannot be used (counted twice) to meet both the requirements of the Minor in Justice and the Bachelor of Arts or Minor in Legal Studies.

LEGAL STUDIES
Consortium Library (LIB), Room 213, (907) 786-1810
http://justice.uaa.alaska.edu

The UAA Justice Center, established by the Alaska Legislature in 1975, has a mandate to provide statewide justice-related education, research, and service. The Justice Center is an interdisciplinary unit that provides undergraduate, graduate, and professional education; conducts research in the areas of crime, law, and justice; and provides service to government units, justice agencies, and community organizations throughout urban and rural Alaska to promote a safe, healthy, and just society.

The Justice Center offers a variety of programs that prepare students for work in law-related or public service fields. The core of each program is a foundational sequence of courses combining theoretical knowledge of the law with skills-based training in American legal practice.

Legal Studies Goals
Students in all programs will acquire:
1. Broad-based knowledge achieved through general college education.
2. Exceptionally strong competency in critical thinking and in written and oral communication skills.
5. Operational knowledge of legal investigatory and discovery techniques.
6. Command of skills required for legal research, critical analysis, and technical drafting.
7. Knowledge of theories of law, historical influences on the development of law, and fundamental principles of substantive law.
8. Appreciation for the role of law in the allocation of public resources and regulation of social and economic relationships.

To accomplish these goals, the following program options are offered: Certificate, Legal Nurse Consultant Paralegal; Associate of Applied Science, Paralegal Studies; Bachelor of Arts, Legal Studies; Minor, Legal Studies; and Post-Baccalaureate Certificate, Paralegal Studies. (See Chapter 11 for information about the post-baccalaureate certificate.) Students may also work toward Pro Bono Service Honors.
4. Consultant Paralegal will be able to:

Students graduating with an Undergraduate Certificate in Legal Nurse Program Student Learning

The program is not accredited as a nursing specialty. Students graduating with an Undergraduate Certificate in Legal Nurse Program may wish to sit for the American Association of Legal Nurse Consultants (AALNC) Code of Ethics and Conduct, the AALNC’s Scope and Standards of Practice, and the Alaska Bar Association’s Rules of Professional Responsibility. Students must meet the University Admission Requirements for Admission to Undergraduate Certificate and Associate Degree Programs.

Admission Requirements

1. Students must meet the University Admission Requirements for Admission to Undergraduate Certificate and Associate Degree Programs.

2. Students must hold an associate of arts or baccalaureate degree in nursing from an accredited institution before receiving the LNC Paralegal Certificate. Nursing majors and pre-majors who have not completed their degree will be admitted to the program as pre-majors and may proceed through the Legal Studies and Justice courses in the program provided all individual course prerequisites are met. Courses with the LNC prefix are open to nursing graduates only.

3. Students must have completed the equivalent of ENGL A111 with a minimum grade of C and (ENGL A211 or ENGL A212 or ENGL A213 or ENGL A214 or ENGL A311 or ENGL A312 or ENGL A313 or ENGL A414 or ENGL A487) with a minimum grade of B.

4. Students must have achieved a minimum GPA of 2.0 in their degree program or hold a 2.0 overall GPA at UAA to be admitted to the program as majors or pre-majors.

5. Students who do not meet the admissions requirements will be admitted as pre-majors. Students may take up to 12 credit hours of Legal Studies courses while in pre-major status.

Advising

1. Students who have not completed the English prerequisites for admission to the program should begin their English coursework in their first semester as a pre-major.

2. Proficiency in the use of computers and standard office software is an important component of the work of LNC Paralegals. Students are strongly encouraged to build their technological skills through coursework in Computer Information and Office Systems (CIOS), Computer Information Systems (CIS), or Computer and Networking Technology (CNT) as they progress through the program.

3. Campus restrictions for this program are enforced in accordance with American Bar Association Guidelines for the Approval of Paralegal Education Programs. Therefore, the certificate cannot be completed at extended campuses. Courses designated in this catalog as legal specialty courses may be taken only at the Anchorage campus.

4. Students interested in the LNC Paralegal certificate should consult a faculty advisor in the Justice Center before enrolling in Legal Studies or LNC Paralegal courses.

Certificate Requirements

1. Complete the following required core courses (30 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEGL A101</td>
<td>Introduction to Law</td>
</tr>
</tbody>
</table>

University of Alaska Anchorage 2013-2014 Catalog
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Studies will be able to:

Students graduating with an Associate of Applied Science in Paralegal attorney. The program does not train lawyers.

authorized to perform substantive legal work under the supervision of a licensed

services to the public. The program offers training for paraprofessionals who are

Note: Students obtaining a degree are not authorized to provide direct legal

credits toward completion of the baccalaureate degree.

The Associate of Applied Science in Paralegal Studies is coordinated

government regulation and legal processes is required. The program is

“who is employed or retained by a lawyer, law office, corporation,

“who is employed or retained by a lawyer, law office, corporation,

The American Bar Association defines a paralegal as a person

“who is employed or retained by a lawyer, law office, corporation,

The Associate of Applied Science in Paralegal Studies provides students

with the specialized skills and knowledge to build a career performing

substantive legal work under the supervision of a lawyer, in accordance

with American Bar Association standards, or to work in a variety

of public service and government agencies where familiarity with

government regulation and legal processes is required. The program is

approved by the American Bar Association.

The Associate of Applied Science in Paralegal Studies is coordinated

with the Bachelor of Arts in Legal Studies. Students obtaining the

Associate degree may apply their core courses and general education

credits toward completion of the baccalaureate degree.

Note: Students obtaining a degree are not authorized to provide direct legal

services to the public. The program offers training for paraprofessionals who are

authorized to perform substantive legal work under the supervision of a licensed

attorney. The program does not train lawyers.

Program Student Learning Outcomes

Students graduating with an Associate of Applied Science in Paralegal Studies will be able to:

• Produce superior university-level written documents and oral reports.

• Identify and accurately apply the rules of professional ethics governing lawyers and nonlawyer staff, and the rules governing

the unauthorized practice of law in Alaska.

• Interpret and accurately apply legal terminology and foundational principles of substantive and procedural law in the analysis of legal issues.

• Develop and execute legal research plans using law library resources and commonly used legal research databases.

• Synthesize primary and secondary legal authorities and draft memoranda of legal analysis.

• Prepare legal investigation and discovery plans and draft legal pleadings that conform to the rules of civil procedure and incorporate standard techniques and resources for managing a case in litigation.

• Relate legal rules and doctrines to client problems in the performance of entry-level paralegal duties in a private law firm, public legal service agency, or law department.

Admission Requirements

1. Students must complete the University’s Admission to Associate of Applied Science programs requirements.

2. Students must have completed ENGL A111 with a minimum grade of C and (ENGL A211 or ENGL A212 or ENGL A213 or ENGL A214 or ENGL A311 or ENGL A312 or ENGL A313 or ENGL A414 or ENGL A487) with a minimum grade of B.

3. Students must have a 2.00 overall GPA.

4. Students who do not meet the admissions requirements will be admitted as pre-majors. Students may take up to 12 credit hours of Legal Studies courses while in pre-major status.

Advising

1. Students who have not completed the English prerequisites for admission to the program should begin their English coursework in their first semester as a pre-major.

2. Campus restrictions for this program are enforced in accordance with American Bar Association Guidelines for the Approval of Paralegal Education Programs. Therefore, the degree cannot be completed at extended campuses. Courses designated in this catalog as legal specialty courses may be taken only at the Anchorage campus.

3. Students interested in the Associate of Applied Science, Paralegal Studies should consult a faculty advisor in the Justice Center before enrolling in Legal Studies courses.

4. Students who plan to pursue a baccalaureate degree in addition to the Associate of Applied Science should also consult an academic advisor in their intended area of baccalaureate study for appropriate general elective course selections.

Major Requirements

1. Complete 9 credits in written communication skills with the minimum grades stated below:

   ENGL A111 Introduction to Composition 3
   ENGL A211 Academic Writing About Literature (3)
   ENGL A212 Technical Writing (3)
   ENGL A213 Writing in the Social and Natural Sciences (3)

   and one of the following with a minimum grade of B: 3

   ENGL A311 Advanced Composition (3)
   ENGL A312 Advanced Technical Writing (3)
   ENGL A313 Professional Writing (3)
   ENGL A414 Research Writing (3)
   ENGL A487 Standard Written English (3)

2. Complete 3 credits in oral communication skills with a minimum grade of C 3

   COMM A111 Fundamentals of Oral Communication (3)
   COMM A235 Small Group Communication (3)
   COMM A237 Interpersonal Communication (3)
   COMM A241 Public Speaking (3)

3. Complete 3 credits in quantitative skills from the University’s General Education Requirements with a minimum grade of D. 3

4. Complete 3 credits in Computer Information and Office Systems or Computer Information Systems with a minimum grade of C. 3

5. Complete 12 credit hours selected from the General Course Requirements for Associate of Applied Science Degrees found at the beginning of this chapter with a minimum grade of D. Courses used to fulfill the Written Communication Skills, Oral Communication Skills or Quantitative Skills or degree requirements may not be used to meet this requirement. No more than 7 credits may be taken from any one disciplinary area. Note that students are strongly advised to select courses that
9. Able to:

Students graduating with a Bachelor of Arts in Legal Studies will be able to:

- Produce superior university-level written documents and oral reports.
- Identify and accurately apply the rules of professional ethics governing lawyers and nonlawyer staff, and the rules governing the unauthorized practice of law in Alaska.
- Interpret and accurately apply legal terminology and foundational principles of substantive and procedural law in the analysis of legal issues.
- Develop and execute legal research plans using law library resources and commonly used legal research databases.
- Synthesize primary and secondary legal authorities and draft memoranda of legal analysis.
- Prepare legal investigation and discovery plans and draft legal pleadings that conform to the rules of civil procedure and incorporate standard techniques and resources for managing a case in litigation.
- Assess and critique theories of law and the impact of American law, both historically and currently, on social and economic relationships, access to public resources, and individual liberties.
- Construct from disparate fields of substantive law a unified theory of law as a mechanism for ordering social and economic relationships.

Admission Requirements

1. Students must complete the University’s Admission to Baccalaureate Programs Requirements.
2. Students must have completed ENGL A111 with a minimum grade of C and (ENGL A211 or ENGL A212 or ENGL A213 or ENGL A214 or ENGL A311 or ENGL A312 or ENGL A313 or ENGL A414 or ENGL A487) with a minimum grade of B.
3. Students must have a 2.00 overall GPA.
4. Students who do not meet the admissions requirements will be admitted as pre-majors. Students may take up to 12 credit hours of Legal Studies courses while in pre-major status.

Advising

1. Students who have not completed the English prerequisites for admission to the program should begin their English coursework in their first semester as a pre-major.
2. Students are strongly encouraged to complete a Certificate in Civic Engagement or to augment their degree with a Justice Minor or a minor in another discipline. Students should note, however, that courses that may be used to satisfy either the Legal Studies degree or the Justice Minor will not be counted toward the completion requirements of both programs.
3. Proficiency in the use of computers and standard office software is an important component of legal practice. Students are strongly encouraged to build their technological skills through coursework in Computer Information and Office Systems (CIO5), Computer Information Systems (CIS), or Computer and Networking Technology (CNT) as they progress through the program.
4. Campus restrictions for this program are enforced in accordance with American Bar Association Guidelines for the Approval of Paralegal Education Programs. Therefore, the Legal Studies degree cannot be completed at extended campuses. Courses designated in this catalog as legal specialty courses may be taken only at the Anchorage campus.
5. Transfer credit for Legal Studies and Justice courses will be determined at the departmental level.
6. Legal Studies majors who have completed the Associate of Applied Science in Paralegal Studies at the University of Alaska Fairbanks will receive full transfer credit for their courses in accordance with the Articulation Agreement on file in the Justice Center and posted on the Justice Center website. However, students must complete 120 total credit hours for the degree; 42 of those credits must be upper division.
7. Students interested in the Bachelor of Arts, Legal Studies should consult a faculty advisor in the Justice Center before enrolling in Legal Studies courses.

Bachelor of Arts, Legal Studies

The Bachelor of Arts in Legal Studies provides students with a broad educational background in American law and policy that prepares them well for a lifetime of informed civic participation. Students will also acquire the technical skills and specialized knowledge that will enable them to build a career working under the supervision of lawyers in federal and state agencies or court systems, in a variety of legal service settings, in private law offices or corporate legal departments, and in a multitude of other public and private organizations where familiarity with government regulation and legal processes is required. The program also lays the academic foundation for students who later wish to advance to graduate programs in law or public policy. The program is approved by the American Bar Association.

Note: Students obtaining a degree are not authorized to provide direct legal services to the public. The program offers training for paraprofessionals who are authorized to perform substantive legal work under the supervision of a licensed attorney. The program does not train lawyers.

Program Student Learning Outcomes

Students graduating with a Bachelor of Arts in Legal Studies will be able to:

- Identify and accurately apply the rules of professional ethics governing lawyers and nonlawyer staff, and the rules governing the unauthorized practice of law in Alaska.
- Interpret and accurately apply legal terminology and foundational principles of substantive and procedural law in the analysis of legal issues.
- Develop and execute legal research plans using law library resources and commonly used legal research databases.
- Synthesize primary and secondary legal authorities and draft memoranda of legal analysis.
- Prepare legal investigation and discovery plans and draft legal pleadings that conform to the rules of civil procedure and incorporate standard techniques and resources for managing a case in litigation.
- Assess and critique theories of law and the impact of American law, both historically and currently, on social and economic relationships, access to public resources, and individual liberties.
- Construct from disparate fields of substantive law a unified theory of law as a mechanism for ordering social and economic relationships.

Admission Requirements

1. Students must complete the University’s Admission to Baccalaureate Programs Requirements.
2. Students must have completed ENGL A111 with a minimum grade of C and (ENGL A211 or ENGL A212 or ENGL A213 or ENGL A214 or ENGL A311 or ENGL A312 or ENGL A313 or ENGL A414 or ENGL A487) with a minimum grade of B.
3. Students must have a 2.00 overall GPA.
4. Students who do not meet the admissions requirements will be admitted as pre-majors. Students may take up to 12 credit hours of Legal Studies courses while in pre-major status.

Advising

1. Students who have not completed the English prerequisites for admission to the program should begin their English coursework in their first semester as a pre-major.
2. Students are strongly encouraged to complete a Certificate in Civic Engagement or to augment their degree with a Justice Minor or a minor in another discipline. Students should note, however, that courses that may be used to satisfy either the Legal Studies degree or the Justice Minor will not be counted toward the completion requirements of both programs.
3. Proficiency in the use of computers and standard office software is an important component of legal practice. Students are strongly encouraged to build their technological skills through coursework in Computer Information and Office Systems (CIO5), Computer Information Systems (CIS), or Computer and Networking Technology (CNT) as they progress through the program.
4. Campus restrictions for this program are enforced in accordance with American Bar Association Guidelines for the Approval of Paralegal Education Programs. Therefore, the Legal Studies degree cannot be completed at extended campuses. Courses designated in this catalog as legal specialty courses may be taken only at the Anchorage campus.
5. Transfer credit for Legal Studies and Justice courses will be determined at the departmental level.
6. Legal Studies majors who have completed the Associate of Applied Science in Paralegal Studies at the University of Alaska Fairbanks will receive full transfer credit for their courses in accordance with the Articulation Agreement on file in the Justice Center and posted on the Justice Center website. However, students must complete 120 total credit hours for the degree; 42 of those credits must be upper division.
7. Students interested in the Bachelor of Arts, Legal Studies should consult a faculty advisor in the Justice Center before enrolling in Legal Studies courses.
Major Requirements

1. Complete 9 credits in written communication skills with the minimum grades stated below:
   - ENGL A111 Introduction to Composition 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)
   - ENGL A311 Advanced Composition (3)
   - ENGL A312 Advanced Technical Writing (3)
   - ENGL A313 Professional Writing (3)
   - ENGL A414 Research Writing (3)
   - ENGL A487 Standard Written English (3)

2. Complete the following required core courses with a minimum grade of C in each course (30 credits):
   - JUST A315 Development of Law 3
   - JUST A374 The Courts 3
   - LEGL A101 Introduction to Law 3
   - LEGL A215 Legal Ethics and the Role of the Legal Professional 3
   - LEGL/A481 Criminal Law and Procedure 3
   - LEGL A356 Legal Research, Analysis, and Writing 3
   - LEGL A367 Civil Procedure and Pretrial Practice 3
   - LEGL A377 Evidence, Investigation, and Discovery 3
   - LEGL A487 Trial and Advanced Litigation Processes 3
   - LEGL A489 Legal Studies Senior Seminar 3

3. Complete 15-17 credits (12 upper division) from the following list of law-related electives with a minimum grade of C in each course: 15-17
   - ATA A133 Aviation Law and Regulations (3)
   - BA A432 Real Estate Law (3)
   - CM A401 Construction Law (3)
   - GEO A267 Boundary Law I (4)
   - GEO A457 Boundary Law II (4)
   - JPC A202 First Amendment and Media Ethics (3)
   - JPC A313 Movies and the First Amendment (3)
   - JUST/BA A241 Business Law I (3)
   - JUST/BA A242 Business Law II (3)
   - JUST/PS A343 Constitutional Law (3)
   - JUST/JPC A413 Communications Law (3)
   - JUST A443 Civil Liberties (3)
   - LEGL/A480 Social and Legal Issues (3)
   - JUST A485 Tribal Courts and Alaska Native Rights (3)
   - LEGL A495 Legal Studies Internship (3)
   - PS A424 International Law (3)
   - SOC A308 Sociology of Law (3)
   - PHIL A406 Philosophy of Law (3)
   - PS A424 International Law (3)
   - LEGL A385 Health Care Law and Regulatory Compliance (3)
   - JUST A340 Family Law (3)
   - LEGL A362 Contracts, Debt, and Principles of Ownership (3)
   - LEGL A380 Torts, Workers’ Compensation, and Insurance Law (3)
   - LEGL A385 Health Care Law and Regulatory Compliance (3)
   - LEGL/A101 Introduction to Law 3

4. Complete a minimum of 3 credits of Civic Engagement Internship, CEL A395 with a minimum grade of C. 3-9
5. Students must achieve a minimum grade of C in each Legal Studies core course and in the Legal Studies electives to receive the degree. Courses may be repeated twice to improve grades.

6. All Legal Studies majors must take the Legal Studies Exit Examination. There is no minimum score required for graduation.
7. A total of 120 credits is required for the degree, 30 of which must be in residence. At least 42 credits must be upper division, 24 of which must be in residence.

Minor, Legal Studies

Students seeking a baccalaureate degree in another subject may obtain a minor in Legal Studies by completing each of the following courses. The Legal Studies Minor provides students with the technical skills and specialized knowledge to work under the supervision of lawyers in federal and state agencies or court systems, in a variety of legal service settings, in private law offices or corporate legal departments, and in a multitude of other public and private organizations where familiarity with government regulation and legal processes is required. The program also lays the academic foundation for students who later wish to advance to graduate programs in law or public policy. The program is approved by the American Bar Association.

Note: Students obtaining a Legal Studies Minor are not authorized to provide direct legal services to the public. The program offers training for paraprofessionals who are authorized to perform substantive legal work under the supervision of a licensed attorney. The program does not train lawyers.

Program Student Learning Outcomes

In addition to the broad-based knowledge and critical thinking, writing, oral communication, and quantitative skills acquired in their baccalaureate program, students who complete the Legal Studies Minor will:

1. Produce superior university-level written documents and oral reports.
2. Identify and accurately apply the rules of professional ethics governing lawyers and nonlawyer staff, and the rules governing the unauthorized practice of law in Alaska.
3. Interpret and accurately apply legal terminology and foundational principles of substantive and procedural law.
4. Develop and execute legal research plans using law library resources and commonly used legal research databases.
5. Synthesize primary and secondary legal authorities and draft memoranda of legal analysis.
6. Prepare legal investigation/discovery plans and draft legal pleadings that conform to the rules of civil procedure and incorporate standard techniques and resources for managing a case in litigation.

Advising

1. Proficiency in the use of computers and standard office software is an important component of legal practice. Students are strongly encouraged to build their technological skills through coursework in Computer Information and Office Systems (CIS), Computer Information Systems (CIS), or Computer and Networking Technology (CNT) as they progress through the Legal Studies Minor.
2. Campus restrictions for this program are enforced in accordance with American Bar Association Guidelines for the Approval of Paralegal Education Programs. Therefore, the Legal Studies Minor cannot be completed at extended campuses. Courses designated in this catalog as legal specialty courses may be taken only at the Anchorage campus.
3. Students interested in the Legal Studies Minor should consult a faculty advisor in the Justice Center before enrolling in Legal Studies courses.

Minor Requirements

1. A total of 21 credits is required for the minor.
2. A minimum grade of C in each course is required. Courses may be repeated twice to improve grades.
3. Students must complete the following courses (21-24 credits):
   - LEGL A101 Introduction to Law 3
LEGL A215  Legal Ethics and the Role of the Legal Professional  3
LEGL A356  Legal Research, Analysis, and Writing  3
LEGL A367  Civil Procedure and Pretrial Practice  3
LEGL A377  Evidence, Investigation, and Discovery  3
LEGL A487  Trial and Advanced Litigation Processes  3
LEGL A489  Legal Studies Senior Seminar (3)  3
or
LEGL A495  Legal Studies Internship (with instructor approval) (3-6)

4. All students minoring in Legal Studies must take the Legal Studies Exit Examination. There is no minimum score required for graduation.

5. Legal Studies courses fulfill the Justice elective requirements for the Justice BA except where the student has elected a Legal Studies Minor. Legal Studies courses cannot be used (counted twice) to meet both the requirements of the Legal Studies Minor and the Bachelor of Arts in Justice.

FACULTY
John Angell, Professor Emeritus, AHJEA@uaa.alaska.edu
Allan Barnes, Professor, arbarnes@uaa.alaska.edu
Jason Brandeis, Assistant Professor, jbrandeis@uaa.alaska.edu
Sharon Chumard, Associate Professor, schumard@uaa.alaska.edu
Robert Congdon, Professor Emeritus, AFRGC@uaa.alaska.edu
Ronald Everett, Associate Professor, rrevet@uaa.alaska.edu
Ryan Fortson, Assistant Professor, rfortson@uaa.alaska.edu
Kristin Knudsen, Assistant Professor, kknudsen@uaa.alaska.edu
Cory Lepage, Assistant Professor, crlepuge@uaa.alaska.edu
Bradley Myrstol, Associate Professor, bamyrstol@uaa.alaska.edu
Troy Payne, Assistant Professor, tpayne9@uaa.alaska.edu
Deborah Periman, Program Coordinator/Associate Professor, dperiman@uaa.alaska.edu
Manny Rivera, Associate Professor, mrivera11@uaa.alaska.edu
Andre Rosay, Director, abrosay@uaa.alaska.edu
Nancy Schafer, Professor Emeritus, AHNES@uaa.alaska.edu

MEDICAL ASSISTING
Allied Health Sciences Building (AHS), Room 161, (907) 786-6928
www.uaa.alaska.edu/alliedhealth/academic/medassist

Medical assistants are multi-skilled allied health professionals specifically trained to work in ambulatory settings, such as physicians’ offices, clinics, and outpatient care centers. These multi-skilled personnel can perform administrative and clinical procedures. Clinical duties include assisting with examinations, recording vital signs, preparing patients for various procedures, sterilizing instruments, maintaining examining rooms, drawing blood, recording electrocardiograms, removing sutures and changing dressings. Administrative responsibilities of the medical assistant include answering telephones and greeting patients, maintaining medical records, performing medical coding, completing health insurance forms, scheduling appointments, and preparing medical and financial reports.

The UAA Medical Assisting program offers an Associate of Applied Science degree in Medical Assisting, as well as preparation for the Certified Medical Assistant (CMA) examination and an Occupational Endorsement Certificate in Medical Office Coding. The UAA 40-credit CMA Examination Preparation course of study is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caauh.org) upon the recommendation of the Medical Assisting Education Review Board: Commission on Accreditation of Allied Health Education Programs, 1361 Park Street, Clearwater, FL 33756, (727) 210-2350. Students who complete the UAA CMA Examination Preparation courses, as outlined below, are eligible to sit for the CMA examination. Please note: Individuals who have been found guilty of a felony, or pleaded guilty to a felony, are not eligible to take the CMA examination; however, a waiver may be granted by the American Association of Medical Assistants (AAMA) Certifying Board in cases of mitigating circumstances.

In order to perform medical assisting duties, a student should have good manual dexterity, visual ability to locate patient veins and interpret color changes, and good hearing acuity. Most medical assistants should be able to lift in order to assist patients, and be able to bend, reach, and kneel; many medical assistants are required to stand for long periods of time. Please contact the Medical Assisting Department for a list of medical assisting technical standards required for students to successfully complete the clinical portion of the Medical Assisting program.

Other employment opportunities for which the Medical Assisting program provides training include medical transcriptionist, medical receptionist, medical coder, and health insurance specialist. Medical 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

Program Description and Student Learning Outcomes
Medical office coders work in medical office and outpatient settings coding medical records for statistical and reimbursement purposes.

This program prepares students to work as medical coders in outpatient settings. The program is based upon the American 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:


Admission Requirements

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 PRFE A107 and PRFE A108, or ENGL A109.
Undergraduate Programs, College of Health

Admission Requirements

1. Complete the following required courses with a minimum grade of C in each course:
   - BIOL A100 Human Biology 3
   - 3 credits from the following:
     - CIS A105 Introduction to Personal Computers and Application Software (3)
     - or
     - CIOS A130A Word Processing I: MS Word (1)
     - and
     - CIOS A135A Spreadsheets I: MS Excel (1)
     - and
   - One additional credit of CIOS coursework (1)
   - MA A101 Medical Terminology 3
   - MA A104 Essentials of Human Disease 3
   - MA A120 Medical Office Procedures 4
   - MA A140 Medical Transcription I (2-3) 2
   - MA A220 Coding for the Medical Office 3
   - MA A230 Billing and Insurance for the Medical Office 3
   - MA A250 Clinical Procedures I 4
   - MA A255 Clinical Procedures II 4
   - PSY A150 Lifespan Development 3
   - Complete MA A295 Medical Office Externship. 5

3. Successful completion of the above-listed 40 credits is required to be eligible to sit for the Certified Medical Assistant (CMA) Examination.

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

Program Student Learning 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 office practice (externship) begins in May. Some courses are offered only once per year. Students should meet with an academic advisor prior to registering for classes in order to determine the best sequencing of courses for their program of study. Part-time students are welcome.

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. 8-9

2. Complete 8 to 9 credits in the following courses:
   - 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

Jean Thompson, Term Assistant Professor, jthompson7@uaa.alaska.edu
Pam Venticen, Term Assistant Professor, pkuentgen@uaa.alaska.edu
Robin Wahto, Director, Professor, rjwahto@uaa.alaska.edu

MEDICAL LABORATORY SCIENCE

Allied Health Sciences Building (AHS) Room 169, (907) 786-4930, www.uaa.alaska.edu/alliedhealth/academics/medlab

The mission of the Medical Laboratory Science Department is to graduate competent and ethical clinical laboratory professionals with the knowledge and the skills for career entry. It is also the department’s mission to prepare graduates for leadership roles in the clinical laboratory and professional organizations and to instill an understanding of the need for maintaining continuing competency in a rapidly changing and dynamic profession.

The Medical Laboratory Science Department has a strong commitment to the career ladder approach to higher education. With career ladder programs, the students enrolled in the Bachelor of Science have an option to gain phlebotomy certification in one year and medical laboratory technician certification in two years as they pursue a bachelor’s degree. The AAS graduates who wish to obtain a bachelor’s degree in Medical Laboratory Science may “career ladder” without loss of credit.
General admission requirements for all students entering programs offered by the Medical Laboratory Science Department include:

1. Complete the Medical Laboratory Science program application.
2. Read and sign the Essential Requirements for Enrollment.
3. High school diploma or GED equivalency.
4. Documentation of the following prior to enrollment in either MEDT A101 or MEDT A132:
   - Immunity to rubella, rubella, mumps and chicken pox confirmed by titer or current immunization.
   - Immunity to hepatitis A and hepatitis B. Students must have started the immunization series prior to enrolling in the courses.
   - Proof of one dose of Tdap as an adult followed by Td booster every ten years thereafter.
   - Freedom from active tuberculosis, demonstrated by initial 2-step PPD followed by annual PPD. If PPD is positive, proof of negative chest x-ray is required.
5. Documentation of the following prior to enrolling in a practicum (MEDT A195A, MEDT A195B, MEDT A395 or MEDT A495):
   - Influenza immunization for students enrolling in clinical practicums during flu season.
   - Criminal background check within six months prior to start of practicum; some facilities also require drug screening.
   - Personal medical insurance.

Additional admission requirements are listed under program descriptions.

The Medical Laboratory Science Department assumes no responsibility for illness or injuries experienced by students in conjunction with student labs. It is strongly recommended that students maintain personal medical insurance while enrolled in any of the programs offered by the Medical Laboratory Science Department. Students enrolled in practicum (MEDT A195A, MEDT A195B, MEDT A395 or MEDT A495) must provide their own transportation to the clinical facility. Personal protective equipment is provided by the training facility. The clinical facilities require proof of medical insurance coverage; therefore, students are required to maintain personal medical insurance while enrolled in practicum courses. Medical insurance is available through the Student Health and Counseling Center. Liability insurance is purchased by the Medical Laboratory Science Department to cover the student's practicum. The occupational endorsement certificate, AAS, and BS degrees are not contingent upon the students passing any type of external certification or licensure examination.

The AAS in Medical Laboratory Technology and the BS in Medical Laboratory Science 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 Laboratory Science

Students majoring in Medical Laboratory Science are eligible to graduate with departmental honors by satisfying the following requirements:

1. Meet the requirements for a BS in Medical Laboratory Science.
2. Earn a grade point average of 3.5 or higher in courses applicable to the degree requirements. Only UAA and transfer courses taken within the last seven years will be included in the GPA for departmental honors.
3. Obtain approval to enroll in the Honors Elective from the program director.
4. Pass the Honors Elective course, MEDT A402, Medical Laboratory Science 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 Student Learning Outcomes

The specific educational outcomes for the program are to produce graduates who:

1. Select the appropriate site and demonstrate the proper technique for collecting, handling, and processing blood and non-blood specimens.
2. Demonstrate professional conduct, stress management, interpersonal, and communication skills with patients, peers, other health care personnel, and the public, recognizing possible legal implications.
3. Recognize and adhere to infection control and safety policies and procedures.
4. Demonstrate an understanding of test requisitioning.
5. Identify factors that affect specimen collection procedures and test results, and take appropriate actions within predetermined limits when applicable.
6. Recognize and act upon individual needs for continuing education as a function of growth and maintenance of professional competence.
7. Perform point-of-care testing according to standard operating procedures.

Certificate Requirements

2. Complete the General Admissions Requirements for all programs in the Medical Laboratory Science 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 Science 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 P in the following courses:
   - MEDT A101 Phlebotomy Procedures 3
   - MEDT A110 Specimen Processing 3
   - MEDT A195A Phlebotomy Practicum 3
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 Student Learning Outcomes

The specific educational outcomes for the program are to produce graduates who have met the educational outcomes for the Phlebotomist OEC and who:

1. Perform waived testing according to standard operating procedures.
3. Select both appropriate media for inoculation of clinical specimens and incubations conditions based on the culture requirements for the potential pathogens.
Certificate Requirements
2. Complete the General Admissions Requirements for all programs in the Medical Laboratory Science 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 Science 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 P 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
The National Accrediting Agency for Clinical Laboratory Sciences provides the following description: At career entry, the medical laboratory technician will be able to perform routine clinical laboratory tests (such as hematology, clinical chemistry, immunohematology, microbiology, serology/immunology, coagulation, molecular, and other emerging diagnostics) as the primary analyst making specimen-oriented decisions on predetermined criteria, including a working knowledge of critical values. Communication skills will extend to frequent interactions with members of the health care team, external relations, customer service and patient education. The level of analysis ranges from waived and point-of-care testing to complex testing encompassing all major areas of the clinical laboratory. The medical laboratory technician will have diverse functions in areas of pre-analytical, analytical, and post-analytical processes. The medical laboratory technician will have responsibilities for information processing, training, and quality control monitoring wherever clinical laboratory testing is performed.

Upon graduation and initial employment, the medical laboratory technician should be able to demonstrate entry-level competencies in the above areas of professional practice. Graduates are eligible to sit for national certification examinations in medical laboratory technology after completing the program.

Program Student Learning Outcomes
The specific educational outcomes for the program are to produce graduates who:
- Demonstrate entry-level competencies for medical laboratory technicians in the following disciplines: hematology, chemistry, immunology, blood bank, urine and body fluid analysis, microbiology, and laboratory operations.
- Demonstrate professional behavior including sound work ethics, cultural responsiveness, and appearance while interacting with patients and healthcare professionals.
- Demonstrate continuing competency through certification maintenance.
- Demonstrate a commitment to the laboratory profession through active involvement in a professional organization.

Admission Requirements
1. Complete the Associate’s Degree Programs Admission Requirements at the beginning of Chapter 7.
2. Complete the General Admissions Requirements for all programs in the Medical Laboratory Science Department that are listed at the beginning of this section.
3. Meet with academic 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 P in all Medical Laboratory Science (MEDT) courses required for the degree and demonstrate professional behavior as defined by the “Medical Laboratory Science Department Core Abilities” and associated behavior criteria. Satisfactory progress is demonstrated by exhibiting Developing Level Criteria by the end of the second year (assessed by core faculty), and Entry Level Criteria by the end of the clinical practicum (assessed by clinical instructors). Students must receive a score of 3 or higher on the Developing Level Criteria in order to progress in the program and demonstrate the Critical Core Abilities during clinical practicum in order to graduate from the program. Students who are unable to earn an acceptable grade in 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 for a subsequent semester. Students receive a letter stating they are an alternate; they sign and return the letter acknowledging alternate status.

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 21 credits of support courses for the Medical Laboratory Technology major with a minimum grade of C.

- BIOL A111 Human Anatomy and Physiology I 4
- BIOL A112 Human Anatomy and Physiology II 4
- CHEM A103/L Survey of Chemistry with Laboratory 4
- CHEM A104 Introduction to Organic Chemistry and Biochemistry 3
- CIS A105 Introduction to Personal Computers and Application Software (3) or
- CIS A110 Computer Concepts in Business (3) 3
- ENGL A212 Technical Writing (3) 3
- ENGL A213 Writing in the Social and Natural Sciences (3)

Major Requirements
1. Complete the following major courses with a minimum grade of C or P (43-44 credits):
   - MEDT A132 Introduction to Laboratory Medicine (3) 3-4 or
   - MEDT A101 Phlebotomy Procedures (3)
   - 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 1
   - MEDT A395 Medical Laboratory Technology Practicum 12

2. A total of 70-71 credits is required for the degree.
Bachelor of Science, 
Medical Laboratory Science

Medical Laboratory Scientist
The National Accrediting Agency for Clinical Laboratory Sciences 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 Student Learning Outcomes
The specific educational outcomes for the program are to produce graduates who:

• Demonstrate entry-level competencies for medical laboratory scientists in the following disciplines: hematology, chemistry, immunology, blood bank, urine and body fluid analysis, microbiology, and laboratory operations.
• Demonstrate professional behavior including sound work ethics, cultural responsiveness and appearance while interacting with patients and health care professionals.
• Evaluate published studies as an informed consumer.
• Demonstrate continuing competency by certification maintenance.
• Use educator skills to create and deliver an instructional unit.
• Use laboratory management skills to plan, organize, staff and cost out a new clinical laboratory service.
• Demonstrate a commitment to the laboratory profession through active involvement in a professional organization.

Admission Requirements
1. Complete the Baccalaureate Degree Programs Admission Requirements in Chapter 7.
2. Complete the General Admission Requirements for all programs in the Medical Laboratory Science Department that are listed at the beginning of this section.
3. Meet with academic advisor regarding application, program admission, and development of a program of study.

Academic Progress
In order to progress within the Bachelor of Science Medical Laboratory Science program, students must earn a minimum grade of C or P in all Medical Laboratory Science courses required for the degree and demonstrate professional behavior as defined by the “Medical Laboratory Science Department Core Abilities” and associated behavior criteria. Satisfactory progress is demonstrated by exhibiting Developing Level Criteria by the end of the second year (assessed by core faculty), and Entry Level Criteria by the end of the Medical Laboratory Science Practicum (assessed by clinical instructors). Students must receive a score of 3 or higher on the Developing Level Criteria in order to progress in the program and demonstrate the Critical Core Abilities during clinical practicum in order to graduate from the program. Students who are unable to earn an acceptable grade in 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 for a subsequent semester. Students receive a letter stating they are an alternate; they sign and return the letter acknowledging alternate status.

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 Laboratory Science 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 Laboratory Science major with a minimum grade of C.

- BIOL A111 Human Anatomy and Physiology I 4
- BIOL A112 Human Anatomy and Physiology II 4
- CHEM A103 Survey of Chemistry (3) and 4
- CHEM A103L Survey of Chemistry Laboratory (1) or
- CHEM A105 General Chemistry I (3) and
- CHEM A105L General Chemistry I Laboratory (1)
- CHEM A104 Introduction to Organic Chemistry and Biochemistry (3) and 4-7
- CHEM A104L Introduction to Organic Chemistry and Biochemistry Laboratory (1) or
- CHEM A106 General Chemistry II (3) and
- CHEM A106L General Chemistry II Laboratory (1) and
- CHEM A321 Organic Chemistry I (3)
- CIS A110 Computer Concepts in Business 3
- ENGL A212 Technical Writing (3) 3
- ENGL A213 Writing in the Social and Natural Sciences (3)
- MATH A107 College Algebra (or any MATH course for which MATH A107 is a prerequisite) 3-4
- PHIL A302 Biomedical Ethics (3) 3
- PHIL A305 Professional Ethics (3)
- STAT A252 Elementary Statistics (3) 3-4
- STAT A253 Applied Statistics for the Sciences (or any STAT course for which STAT A252 or STAT A253 is a prerequisite) (4)

Major Requirements
1. Complete the following major courses with a minimum grade of C or P (71-72 credits):
- MEDT A132 Introduction to Laboratory Medicine (3) 3-4
- MEDT A101 Phlebotomy Procedures (3)
- MEDT A133 Basic Techniques in Laboratory Medicine (1)
- MEDT A202 Clinical Chemistry 6
After completion of this program students will be able to:

1. A pre-pharmacy degree and ultimately a Doctor of Pharmacy degree.
2. Have a solid background to continue further study in the field of pharmacy, pursuing Certification Board examination (PTCB). They will also have a solid technician and to successfully sit for the national Pharmacy Technician exam.
3. Be well-prepared to work in various settings as a pharmacy of the Occupational Endorsement Certificate, Pharmacy Technology, for Pharmacy Technician Training developed by the Accreditation technicians. The program meets the outcomes of the "Model Curriculum Program Description and Student Learning 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
   - PHAR A105 Pharmacology for Technicians I
   - PHAR A107 Pharmacy Calculations
   - PHAR A111 Techniques of Pharmacy Practice
   - PHAR A115 Pharmacology for Technicians II
   - PHAR A192 Topics in Pharmacy
2. A total of 16 credits is required for this certificate.

FACULTY

Debra Cieplak, Term Assistant Professor, AFDAS@uaa.alaska.edu

RADIOLOGIC TECHNOLOGY

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


Student must be at least 18 years or older.

Program Student Learning Outcomes

This program prepares students to work as limited radiographers with knowledge of the curriculum content identified by the American Society of Radiologic Technologists (ASRT). After completion of this program the students will be able to demonstrate:

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.

**Program Student Learning Outcomes**

This program prepares students to work as radiologic technologists with knowledge in the general education, the radiologic technology, and the curriculum content areas identified by the American Society of Radiologic Technology (ASRT). At the completion of this program, students will be able to demonstrate:

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. 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) 3-4
   - MATH A107* College Algebra (4)
   *Or any MATH course for which MATH A105 or MATH A107 is a prerequisite.
   Select one of the following: 3
   - 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, ronclung@uaa.alaska.edu
Ryan Parnell, Term Instructor, rparnell@uaa.alaska.edu
Kathryn Slagle, Assistant Professor, kslagle@uaa.alaska.edu
Erica Koch Wight, Assistant Professor, ekwight@uaa.alaska.edu

**SCHOOL OF NURSING**

Health Science Building (HSB), Room 101, (907) 786-4550
www.uaa.alaska.edu/schoolofnursing

The mission of the Nursing program is to educate students for productive citizenship, personal growth, and professional nursing practice. The department offers potential students interested in becoming qualified to practice as a registered nurse two options: the Associate of Applied
Science 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.

**Program Student Learning Outcomes**

Students graduating with an Associate of Applied Science in Nursing will be able to:

- Utilize critical thinking skills to assess and diagnose nursing needs and to prioritize, plan, implement, and evaluate care for patients and their families in institutional and community based settings.
- Effectively communicate verbally, in writing, and electronically with health team members, patients, and their families.
- Plan, implement, and evaluate care that is safe, evidence-based, caring, and developmentally and culturally sensitive within ethical, legal, and professional standards.
- Coordinate care of small groups of patients in collaboration with other members of the health care team.
- Develop a plan for lifelong learning and continuing professional development.

**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 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 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 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 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 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 admission requirements must be completed prior to February 1 (see items 1-6 below).

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 courses are: MATH A055, BIOL A102 and BIOL A103, and 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 National League for Nursing Pre-admission Exam (PAX-RN) 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 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/NURS A120L must be completed within four years.

**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 Degree Requirements (15 credits) located at the beginning of this chapter.

**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 Laboratory 4
   - NURS A125 Adult Nursing I 3
   - NURS A125L Adult Nursing I Laboratory 4
   - NURS A180 Basic Nursing Pharmacology 3
   - NURS A220 Perinatal Nursing 3
   - NURS A220L Perinatal Nursing Laboratory 1
   - NURS A221 Advanced Parenteral Therapy Laboratory 1
   - NURS A222 Pediatric Nursing 3
   - NURS A222L Pediatric Nursing Laboratory 1
   - NURS A225 Adult Nursing II 3
   - NURS A225L Adult Nursing II Laboratory 3
   - NURS A250 Psychiatric Nursing 3
   - NURS A250L Psychiatric Nursing Laboratory 1
   - NURS A255 Staff Nurse: Legal, Ethical, and Organizational Issues 1
   - PSY A150 Lifespan Development 3
   - Social Science chosen from General Education List 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 a 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 Human Anatomy and Physiology I
   - ENGL A111 Introduction to Composition
   - 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 reference 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 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 of Applied Science Degrees.

2. Complete the Associate of Applied Science General Degree Requirements (15 credits).

**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/NURS A125L of the AAS Nursing program. Upon successful completion of NURS A125 with a C or higher, and NURS A125L with a P, the student will be granted UAA course credits for NURS A120 and NURS A120L, for a total of 7 credits. To
receive credit, the student must complete the appropriate form and pay an administrative fee per UAA policy.

Note: Any direct articulation LPN student not passing NURS A125/NURS A125L will not receive credit for NURS A120/NURS A120L and will need to take these courses to continue toward the AAS degree in Nursing.

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 A180 Basic Nursing Pharmacology 3
   - NURS A220 Perinatal Nursing 3
   - NURS A220L Perinatal Nursing Laboratory 1
   - NURS A221 Advanced Parenteral Therapy Laboratory 1
   - NURS A222 Pediatric Nursing 3
   - NURS A222L Pediatric Nursing Laboratory 1
   - NURS A225 Adult Nursing II 3
   - NURS A225L Adult Nursing II Laboratory 3
   - NURS A250 Psychiatric Nursing 3
   - NURS A250L Psychiatric Nursing Laboratory 1
   - NURS A255 Staff Nurse: Legal, Ethical, and Organizational Issues 1
   - PSY A150 Lifespan Development 3

2. Complete electives to total 70 credits. 6

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 assess, plan, implement, and evaluate health care to meet the needs of individuals, families, groups, and communities. There are two Nursing Science options: the Basic Student Option and the Registered Nurse Option.

**Program Student Learning Outcomes**

Students graduating with a Bachelor of Science in Nursing Science will be able to:

- Demonstrate critical thinking by making evidence-based nursing judgments through the use of intellectual, interpersonal, and technical competencies to promote safe and effective client-centered care.
- Implement caring behaviors in the practice of professional nursing using established standards, evidence based practice, and innovation to prevent illness and promote and restore health in order to meet the changing needs of diverse individuals, families, groups, and communities.
- Utilize principles of management and leadership to collaborate as a member of the interprofessional care team by using a spirit of inquiry to direct clinical nursing practice.
- Compare and contrast roles of the professional nurse in promoting optimal healthcare and policies locally nationally, and globally.
- Develop an individual plan for ongoing professional development and professional identity.

**Honors in Nursing**

Students majoring in Nursing Science are eligible to graduate with departmental honors by satisfying the following requirements:

1. Meet the requirements for Graduation with Honors as listed in Chapter 7.
2. Meet the requirements for a BS in Nursing Science.
3. Earn a grade point average of 3.50 or higher in courses in the School of Nursing (courses with NS prefix).
4. Complete the following:
   a. Obtain written support for the intent to graduate with honors from the faculty advisor.
   b. Notify the chair of the baccalaureate program and the Baccalaureate Curriculum Committee in writing of the intent to graduate with honors prior to enrolling in the first semester of senior year classes.
   c. Obtain approval to enroll in the honors electives from the baccalaureate chair and Baccalaureate Curriculum Committee prior to enrolling for first semester of senior year classes.
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 UAA at the baccalaureate level are admitted as pre-nursing majors. Admission as a pre-nursing major does not guarantee admission to the Nursing program. There are a limited number of seats available in each nursing course. Students must apply for admission to the Nursing major during the semester in which they are completing the final prerequisites for the first nursing courses. Preference will be given to residents of the State of Alaska as defined by the university’s policy on residency for tuition purposes. Applications must be submitted prior to October 1. The Baccalaureate Program will accept between 60 and 120 students each year. The School of Nursing strongly recommends that students submit their university application up to six months prior to the School of Nursing deadline to ensure complete processing of the application and transcript evaluation. The process for advancement to the major and the formal admission to the Nursing major are:

1. Accepted by UAA as pre-nursing major with transcript evaluations (if any) from Enrollment Services.
2. Attend a group advising session and follow-up advising sessions with a School of Nursing advisor. Call 907-786-4560 for pre-recorded information on group advising session.
3. Completion of specified prerequisite courses with a grade of C or better; specified prerequisite courses may not be repeated more than once.
   - BIOL A111 Human Anatomy and Physiology I 4
   - BIOL A112 Human Anatomy and Physiology II 4
   - CHEM A103/L Survey of Chemistry with Laboratory 4
   - CHEM A104/L Introduction to Organic Chemistry and Biochemistry with Laboratory 4
   - ENGL A111 Introduction to Composition 3
   - ENGL A213 Writing in the Social and Natural Sciences 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. (GER refers to UAA General Education Requirement.)

Choose one of the following three reasoning skills courses:
   - ENGL A120 Critical Thinking (3) 3
   - PHIL A101 Introduction to Logic (3) 3
   - PHIL A201 Introduction to Philosophy (3) 3
   - Oral communication GER 3
   - Humanities or fine arts or social science GER 3
   - PSY or SOC from GER social science list 3
4. An extracted minimum grade point average of 3.00 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.
5. Enrollment in or completion of: (A grade of C or higher is required in these courses.)
BIOL A240  Introductory Microbiology for Health Sciences  4
PSY A150  Lifespan Development  3
ANTH or ECON from social science GER list  3
Two humanities or fine arts or social science GERs  6

Either the reasoning skills requirement or PSY 150 Lifespan Development must be completed at the time of application to the baccalaureate major. Students must be enrolled in which ever of these requirements has not been completed.

6. Completion of the first 34 credits, as outlined in No. 3, and during enrollment in courses outlined in No. 5, the student meets with a nursing advisor to verify course completion and GPA and complete the application to the Nursing major. The student may call (907) 786-4550 to set up an appointment.

7. Completion of the pre-admission test.

8. School of Nursing Application File: The application file must be complete by the October 1 deadline.
   a. School of Nursing Application and Confidential Required Information Form on file in the school.
   b. Three letters of recommendation.
   c. A current Plan of Study signed by a School of Nursing advisor on file with the School of Nursing.
   d. Scores on pre-admission test.

9. Consideration of the application by the Admissions Committee:
   a. Formal admission to the nursing program is based on the student’s relative standing on the minimum requirements outlined above. October 1 is the deadline for consideration by the Admissions Committee.
   b. All applicants meeting the criteria described above will then be ranked according to the following 3 criteria for the admissions process:
      i. Extracted minimum grade point average
      ii. Extracted science GPA, which includes CHEM A103 and CHEM A104, and BIOL A111 and BIOL A112
      iii. Preadmission test scores

10. Achievement of a C or higher in the specified courses for the major that are in progress when admission is sought (See number 5.), and maintenance of a minimum 3.0 GPA until the semester of enrollment in beginning nursing courses (NS A204, NS A216, and NS A300).

**Academic Progress**

In order to progress within the clinical Nursing major, students must earn a satisfactory grade (C or higher in 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 A316L; 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 eight semesters and no more than one-semester delay between sequential clinical courses will be permitted without validation of continued competence and currency.

**Clinical Requirements**

All students who are admitted to clinical nursing courses are required to provide copies of documentation of health and CPR prior to beginning those courses. Requirements marked with an asterisk (*) are considered valid only if the expiration date does not occur prior to the end of the semester of current enrollment:

1. Evidence of:
   a. Immunizations for, or immunity to key conditions consistent with current clinical guidelines.
   b. Documentation of HIV testing annually (results not required).
2. Current Health Provider Certification in Cardiopulmonary Resuscitation (CPR) for infants, children and adults (information regarding acceptable courses may be obtained from the department).*
3. Results of a national level criminal background check.
4. Students enrolled in clinical courses must provide their own transportation to clinical assignments and are required to purchase uniforms and specialized equipment.
5. It is strongly recommended that students maintain personal medical insurance. The school assumes no responsibility for illnesses and injuries experienced by students in conjunction with their clinical experiences; students who are injured while completing clinical assignments are responsible for all associated medical costs.

**Graduation Requirements**

Students must complete the following graduation requirements:

**General University Requirements**

Complete the General University Requirements for All Baccalaureate Degrees listed at the beginning of this chapter.

**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.

**Major Requirements**

1. Complete all 44-45 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:
   *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  3
   *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
   **Reasoning Skills**
   ENGL A120  Critical Thinking (3)  3
   or
   PHIL A101  Introduction to Logic (3)  3
   or
   PHIL A201  Introduction to Philosophy (3)  3
   **Social Sciences GER**
   ANTH or ECON General Education Requirement  3
   PSY A150  Lifespan Development  3
   PSY or SOC General Education Requirement  3
   Additional Social Science GER  3
   STAT A252  Elementary Statistics (3)  3
   or
   STAT A307  Probability and Statistics (4)  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: Roles, Processes, and Trends  4
   NS A303  Foundations of Nursing II: Therapeutics  3
6. To apply for admission to the nursing major during the semester in which a student is not guaranteed admission to the nursing program. Registered Nurses must be admitted as pre-nursing majors. Admission as a pre-nursing major does not guarantee admission to baccalaureate study. Students in Nursing Science must successfully complete the same academic prerequisites that are required for the nursing major and who qualify for admission to baccalaureate study are eligible to take Nursing electives for which prerequisites have been met.

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 A205. The deadlines for RN admission are once a year on November 1 for the following summer. Formal admission to the nursing program is based on the registered nurse’s relative standing on the following minimum requirements:

1. Accepted by UAA as pre-nursing major with transcript evaluations from Enrollment Services.
2. Current licensure as a Registered Professional Nurse in the state of Alaska. Verification of licensure on file with the school.
3. A current Plane of Study signed by a nursing advisor and the RN student on file with the School of Nursing. The student may call (907) 786-4550 to set up an advising session.
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 been 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 specified prerequisite courses at the time of application to the major (44 credits):
   - BIOL A111 Human Anatomy and Physiology I
   - BIOL A112 Human Anatomy and Physiology II
   - BIOL A240 Introductory Microbiology for Health Sciences
   - CHEM A103/L Survey of Chemistry with Laboratory
   - ENGL A111 Introduction to Composition
   - ENGL A213 Writing in the Social and Natural Sciences
   - PSY A150 Lifespan Development
   - CHEM A104/L Introduction to Organic Chemistry and Biochemistry with Laboratory
   - PHIL A101 Introduction to Logic (3) or
   - PHIL A201 Introduction to Philosophy (3)
   - ANTH or ECON from social science GER list
   - Oral communication GER
   - Humanities or fine arts or social science GER
   - PSY or SOC from GER social science list
7. Achieve a C in the specified courses for the major that are in progress when admission is sought and maintain a minimum 2.00 grade point average until beginning nursing courses.
8. A School of Nursing application on file in the school.
9. Three letters of recommendation, two of which must be professional recommendations.

Registered Nurse students not formally admitted by UAA as baccalaureate seeking students in the nursing program or admitted as pre-nursing majors are eligible to take Nursing electives for which prerequisites have been met.

RN Clinical Requirements

See Clinical Requirements under the Basic Student Option.

RN Academic Progress

See Academic Progress under the Basic Student Option.

Graduation Requirements

Students must complete the following graduation requirements:

- General University Requirements
  - Complete the General University Requirements for All Baccalaureate Degrees listed at the beginning of this chapter.
- 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.
- Major Requirements
  - Support Courses: Complete support courses for the Nursing Science major (44-45 credits). All support courses must be completed with a grade of C or better prior to admission to 300-level clinical nursing courses:
    - BIOL A111 Human Anatomy and Physiology I
    - BIOL A112 Human Anatomy and Physiology II
    - BIOL A240 Introductory Microbiology for Health Sciences
    - CHEM A103/L Survey of Chemistry with Laboratory
    - CHEM A104/L Introduction to Organic Chemistry and Biochemistry with Laboratory
    - DN A203 Nutrition for the Health Sciences
    - ENGL A213 Writing in the Social and Natural Sciences
    - PHIL A302 Biomedical Ethics
  - Reasoning Skills*:
    - ENGL A120 Critical Thinking (3)
    - PHIL A101 Introduction to Logic (3)
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.

FACULTY

Barbara Berner, Director, biberner@uaa.alaska.edu
Maureen O’Malley, Associate Professor, Associate Director, momalley@uaa.alaska.edu
Rebecca Bouker, Term Assistant Professor, rbouker@alaska.edu
Bethany Buchanan, Term Assistant Professor, bbuchan1@uaa.alaska.edu

Martha Carver, Term Instructor, mlcarmer@uaa.alaska.edu
Bernice Carmon, Associate Professor, bcarmom@uaa.alaska.edu
Leanne Davis, Assistant Professor, lmdavis4@uaa.alaska.edu
Tina DeLapp, Professor Emerita, tdeapp@uaa.alaska.edu
Margaret Draskovich, Associate Professor, mdraskovich@uaa.alaska.edu
Elizabeth Dirschell, Term Assistant Professor, edmirsch@uaa.alaska.edu
Martha Fenger, Associate Professor, mfenger@uaa.alaska.edu
Michelle Gerhardt, Assistant Professor, mggerhardt@uaa.alaska.edu
Janet Gleason, Assistant Professor, jjgleason@kpc.alaska.edu
Pamela Grogan, Assistant Professor, pjgrogan@uaa.alaska.edu
Thomas Hendrix, Associate Professor, thehendr3@uaa.alaska.edu
Jill Janke, Professor/Graduate Program Chair, jjanke@uaa.alaska.edu
Helena Jermalovic, Assistant Professor, hjermalovic@uaa.alaska.edu
Cindy Jones, Term Assistant Professor, cjones2@uaa.alaska.edu
Colleen Kelley, Assistant Professor, cmkelley@uaa.alaska.edu
Lorna Kendrick, Associate Professor, lkendrick@uaa.alaska.edu
Dorothy Kinley, Term Instructor, dkkinley@uaa.alaska.edu
Rita Kittoe, Assistant Professor, rkittoe@uaa.alaska.edu
Carol Klamser, Associate Professor, cklamser@uaa.alaska.edu
Shirley Lafort, Associate Professor, slafort@alaska.edu
Patricia Lynes-Huyes, Term Assistant Professor, pylynes@uaa.alaska.edu
Christine Michel, Associate Professor, cmichel@uaa.alaska.edu
Justine Muench, Assistant Professor, jmmuench@uaa.alaska.edu
Marianne Murray, Assistant Professor, mmurray13@uaa.alaska.edu
Carol Nash, Associate Professor, canash@uaa.alaska.edu
Terri Olson, Associate Professor, tolson@uaa.alaska.edu
Sharon Peabody, Term Assistant Professor, speabody@uaa.alaska.edu
Nadine Parker, Assistant Professor, nparker@uaa.alaska.edu
Judy Petersen, Professor Emerita, jlpetersen@uaa.alaska.edu
Christy Pierce, Assistant Professor, cpierce@uaa.alaska.edu
Lois Platt, Term Assistant Professor, lplatt@uaa.alaska.edu
Elizabeth Predeger, Professor, epredeger@uaa.alaska.edu
Annette Rearden, Assistant Professor, aalurin@uaa.alaska.edu
Tori Russell, Assistant Professor, trussell@uaa.alaska.edu
Carol “Lynn” Semette, Assistant Professor, csemette@uaa.alaska.edu
Maria Siestrom, Term Associate Professor, msiestrom@uaa.alaska.edu
Rena Spieker, Associate Professor, ispieker@uaa.alaska.edu
Kathleen Stephenson, Associate Professor/AAS Program Chair, kstephenson@uaa.alaska.edu
Cynthia Strobach, Assistant Professor, csstroba@uaa.alaska.edu
Catherine Sullivan, Associate Professor/BS Program Chair, csullivan@uaa.alaska.edu
Dianne Tarrant, Associate Professor, dtarrant@uaa.alaska.edu
Dianne Toee, Associate Professor, dtoee@uaa.alaska.edu
Naomi Terrance, Assistant Professor, nterrance@uaa.alaska.edu
Sharl Toccano, Associate Professor, stoccano@uaa.alaska.edu
Annie Tremblay, Assistant Professor, altremblay@uaa.alaska.edu
Angela Trujillo, Assistant Professor, actrujillo@uaa.alaska.edu
Shirley Valek-Wilson, Associate Professor, svalekwilson@uaa.alaska.edu
Katherine Waldrop, Assistant Professor, kwaldrop@uaa.alaska.edu
Eileen Weatherby, Associate Professor, ewweatherby@uaa.alaska.edu
Mary Weiss, Assistant Professor, mweiss@uaa.alaska.edu
Carolyn Wohlers, Term Assistant Professor, cwohlers@uaa.alaska.edu
Jacque Woody, Assistant Professor, jwoody@uaa.alaska.edu

SCHOOL OF SOCIAL WORK

Gordon Hartlieb Hall (GHH), Room 106, (907) 786-6900
www.uaa.alaska.edu/socialwork

The educational purpose of the Bachelor of Social Work (BSW) program at the University of Alaska Anchorage is to prepare graduates for beginning professional social work practice. Preparation for professional practice builds on a broad-based liberal arts education accomplished through completion of 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 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 BSW licensing requirements for the state of Alaska.

**Bachelor of Social Work**

The mission of the UAA BSW program is to prepare generalist social workers who enhance human well-being and promote social and economic justice for people of all backgrounds, particularly those in Alaska.

Alaska’s unique and rich multicultural populations, geographic remoteness and frontier status allow the real potential for skilled social work professionals to make a profound impact on social and economic injustice in our state.

**Program Student Learning Outcomes**

Students graduating with a Bachelor of Social Work will be able to:

- Demonstrate professional use of self and apply critical thinking skills to professional generalist social work practice.
- Display use of professional standards, values, and ethics.
- Be sensitive to the needs of diverse and at-risk populations, and practice without discrimination.
- Understand the forms and mechanisms of oppression and discrimination and apply strategies of advocacy and social change to advance social and economic justice.
- Demonstrate knowledge of the history of the social work profession, its current structures, and issues.
- Apply the knowledge and skills of generalist social work practice learned change process with individuals, families, groups, organizations, and communities.
- Apply empirically-based theoretical frameworks and knowledge of the bio-psychosocial-spiritual variables that affect development, behavior, and interactions.
- Analyze, formulate, and influence social policies.
- Evaluate research studies and apply research findings to practice.
- Use communication skills effectively with consumer populations, colleagues, organizations, and communities.
- Effectively use supervision and consultation.
- Function within the structure of organizations and service delivery systems, and seek necessary organizational change.

**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 the following prior to entering practicum:

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
   - SWK A206 Introduction to Social Work
   - SWK A243 Cultural Diversity and Community Service Learning
   - SWK A330 Social Work Practice I
   - SWK A331 Social Work Practice II: Organizations and Communities
   - SWK A342 Human Behavior in the Social Environment
   - SWK A424 Social Work Research
   - SWK A481 Case Management in Social Work Practice
4. Cumulative grade point average (GPA) of 2.5 or above.

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.

Each applicant participates in an admission interview with faculty and community members to assess his or her academic and professional readiness to enter the Social Work program and participate in practicum. The School of Social Work will notify applicants of their admission status by December 20th of each year.

Admission to the Social Work program is based on 1) meeting the aforementioned requirements; 2) beginning competence in client-centered communication and professional skills as demonstrated in SWK A330; and 3) the professional judgment of Social Work faculty.

Most students do not have all required courses completed at the time of application. In this event, the student may be admitted to the BSW program conditionally, and will be required to complete outstanding courses with a grade of C or better prior to the fall semester in which they plan to enter practicum in the fall of their senior year. Students who cannot obtain a course grade of C or better in two (2) attempts will be denied admission.

Only students eligible to receive Alaska state licensure will be admitted to the BSW degree program. Please contact the School of Social Work for further information.

**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.
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 A498 Advanced Community-Based Research
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 MSW program. The application packet should be submitted to the MSW Application for Admission and a program application for admission to the MSW program. Students are responsible for completing a UAA Graduate Application for Admission and a program application for admission to the MSW program.

Students interested in waiving the foundation curriculum must apply for the regular review process. Admission to the full program will be granted by the UAA 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.

**Academic Progress**

Students in the Social Work program must earn a grade of C or better in the required Social Work courses and liberal arts foundation requirements (See Major Requirements below). 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 (21-22 credits):
   - ANTH A200 Natives of Alaska (3)
   - ANTH A202 Cultural Anthropology (3) or BA A151 Introduction to Business (3)
   - ECON A201 Principles of Macroeconomics (3) or ECON A202 Principles of Microeconomics (3)
   - BIOL A102 Introductory Biology (3) or BIOL A111 Human Anatomy and Physiology I (4)
   - BIOL A112 Human Anatomy and Physiology II (4)

   or
   - BIOL A115 Fundamentals of Biology I (4) or BIOL A116 Fundamentals of Biology II (4)
   - ENGL A120 Critical Thinking (3) or PHIL A101 Introduction to Logic (3)
   - PHIL A201 Introduction to Philosophy (3) or PHIL A301 Ethics (3)
   - PHIL A421 Philosophy of the Sciences (3)
   - PSY A150 Lifespan Development (3)
   - SOC A101 Introduction to Sociology (3)

2. Complete the following required core courses, with a grade of C or better (55 credits):
   - SWK/ HUMS 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 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 Practicum I (6)
   - SWK A495B Social Work Practicum II (6)
   - Upper division Social Work electives (9)

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/ HUMS 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**

Mary Dallas Allen, Associate Professor, mdallen@uaa.alaska.edu
Donna Aguina, Assistant Professor, dnuagina@uaa.alaska.edu
Tracey Burke, Associate Professor, tkburke@uaa.alaska.edu
Patrick Cunningham, Associate Professor, AFPMC@uaa.alaska.edu
Alexa Filamovicz, Clinical Assistant Professor, afilamovicz@uaa.alaska.edu
Eve Kopacz, Professor/MSW Field Coordinator, ekopacz@uaa.alaska.edu
Randi Magen, Professor, rmagen@uaa.alaska.edu
Chad Morse, Clinical Professor/MSW Program Coordinator, cmorse@uaa.alaska.edu
Elizabeth A. Sirles, Professor/Director, esirles@uaa.alaska.edu
Undergraduate Programs, Community & Technical College

Kathi Trawver, Associate Professor/BSW Program Coordinator, ktrawver@uaa.alaska.edu

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 UAA mission, CTC 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 academic support services provided by College Preparatory and Developmental Studies, the Learning Resource Center, Military Programs and the Chugiak-Eagle River Campus. These units support students in all colleges and in all majors. CTC provides training for personal and professional development through the Extended Studies and Workforce Development programs centered at the Chugiak-Eagle River Campus.

Faculty within the college are highly trained professionals, many with years of experience in the technical specialties related to their teaching areas. Program advisory committees help ensure that certificate and degree programs are closely linked to the workforce needs of the state economy. Graduates of CTC programs generally find immediate employment in their chosen field of study within Alaska.

CTC’s career and technical education leads to undergraduate and graduate degrees in over 20 program areas housed within the departments and divisions of Aviation Technology; Career and Technical Education; Computer Networking and Office Technologies; Construction and Design Technology; Culinary Arts, Hospitality, Dietetics and Nutrition; Health, Physical Education and Recreation; and Transportation and Power.

Advising
Prospective students should call the CTC academic advisor at (907) 786-6897 for more information on CTC programs.

Tech Prep Articulation
The objective of the Tech Prep Program is to prepare students for college and Career and Technical Education (CTE) fields by offering them contextualized and engaged learning experiences. Tech Prep is a partnership between UAA and other educational institutions that offers students the option of earning college credit concurrent with their secondary or technical training programs. These credits subsequently apply to a UAA certificate, credential, associate degree or baccalaureate degree, and allow students to seamlessly transition into the next phase of their education without duplication of coursework. For more information about this program, contact the College and Career Readiness Program at 907-786-6183, refer to the Tech Prep Program information in Chapter 9, or visit www.uaa.alaska.edu/techprep.

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 and Developmental Studies**

The College Preparatory and 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.

CPDS 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.

CPDS focuses on academic and professional ESL 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. Courses 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. CPDS math courses are found under the MATH prefix, and are identified with the “_B_” 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 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 (AVNC) 2811 Merrill Field Drive, Room 116, (907) 786-7266, AFROTC@uaa.alaska.edu www.uaa.alaska.edu/afrotc_

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 Wing 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 Wing and not have a medical condition that would preclude service in the Armed Forces.

To become an officer through Air Force ROTC, a student must, at a minimum, complete the two-year program (300- and 400-level courses plus leadership laboratory), a summer field training encampment, and earn a baccalaureate degree in any major from UAA. Upon graduation and commissioning, new lieutenants must serve four years in the Air Force. Those who successfully complete Air Force pilot training must serve 10 years after training.

In order to receive a minor in National Defense, Strategic Studies and Leadership: Air Force Emphasis, students must complete the declaration of a minor form on the UAA website (www.uaa.alaska.edu/records/graduation/declaration_minor_form_login.cfm).

Two hours of mandatory physical training (PT) are required each week. Times and location of PT sessions will be announced each term.

**Two-Year Program**

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.

   **AIRS A301**  US Air Force Leadership and Management I  3
   **AIRS A302**  US Air Force Leadership and Management II  3
   **AIRS A401**  National Security Affairs I  3
   **AIRS A402**  National Security Affairs II/Prep for Active Duty  3
   **AIRS A150**  US Air Force Leadership Laboratory (1)  4

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.

   **AIRS A201**  Evolution of Air and Space Power I  2
   **AIRS A202**  Evolution of Air and Space Power II  2
   **AIRS A301**  US Air Force Leadership and Management I  3
   **AIRS A302**  US Air Force Leadership and Management II  3
   **AIRS A401**  National Security Affairs I  3
   **AIRS A402**  National Security Affairs II/Prep for Active Duty  3
   **AIRS A150**  US Air Force Leadership Laboratory (1)  6

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.

   **AIRS A101**  Foundations of the US Air Force I  1
   **AIRS A102**  Foundations of the US Air Force II  1
   **AIRS A201**  Evolution of Air and Space Power I  2
   **AIRS A202**  Evolution of Air and Space Power II  2
   **AIRS A301**  US Air Force Leadership and Management I  3
   **AIRS A302**  US Air Force Leadership and Management II  3
   **AIRS A401**  National Security Affairs I  3
   **AIRS A402**  National Security Affairs II/Prep for Active Duty  3
   **AIRS A150**  US Air Force Leadership Laboratory (1)  8

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.
Minor, National Defense, Strategic Studies, and Leadership: Air Force Emphasis

Students majoring in another subject who wish to minor in National Defense, Strategic Studies and Leadership: Air Force Focus, must complete the following requirements. A minimum of 20 credits are required for the minor, 12 of which must be upper division. Students must earn at least 6 credits in residence in this field. They must also earn a UAA cumulative GPA of at least 3.0 (B). Students must complete the program’s upper division coursework in its entirety. Students must declare this minor utilizing the declaration of a minor form on the UAA website (www.uaa.alaska.edu/records/graduation/declaration_minor_form_login.cfm) no later than the deadline to submit an application for graduation.

Air Force Program

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May be taken during any term

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Scholarships and Incentive Payments

Air Force ROTC has numerous scholarship and incentive programs for high school seniors planning to enroll at UAA and for college students currently enrolled or planning to enroll at UAA. All students receiving a scholarship or incentive payment must join the Cadet Wing and be a full-time student (at least 12 semester credits for undergraduate or 9 semester credits for graduate students).

1. High school seniors can compete for Air Force ROTC scholarships that pay tuition, fees, and books at any university with an Air Force ROTC program. The scholarship includes a monthly stipend. Students can submit applications to 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 (minimum) in the US Air Force after commissioning.

3. Cadets may also compete for medical school appointments. Scholarships cover tuition, fees, and books for a cadet’s undergraduate and medical school programs. Air Force ROTC at UAA has more information on this highly competitive program.

FACULTY

Lt Col Glen Lehman, Professor/Chair, glehman2@uaa.alaska.edu
Major Jill McGraw, Assistant Professor, jmcgraw@uaa.alaska.edu
Major Steven Sharp, Assistant Professor, uaa.afrotc@uaa.alaska.edu

APPRENTICESHIP TECHNOLOGIES

University Center (UC), Room 130, (907) 786-6423
www.uaa.alaska.edu/cte/academics/apprenticeship

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 registered by the U.S. Department of Labor, Office of Apprenticeship, and hold journeyworker status in that occupation.

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.

Program Student Learning 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.

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 advisor 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 Introduction to Composition 3
   - ENGL A212 Technical Writing 3
   - MATH A105 Intermediate Algebra (or any MATH course for which MATH A105 is a prerequisite) (3)
   - STAT A252 Elementary Statistics (or any STAT course for which STAT A252 is a prerequisite) (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.

5. Technical credits from approved apprenticeship program. See Chapter 8. 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
Maria Angela Dirks, Assistant Professor, madirks@uaa.alaska.edu

ARCHITECTURAL AND ENGINEERING TECHNOLOGY
Division of Construction and Design Technology (CDT)
University Center (UC), Room 130, (907) 786-6465
www.uaa.alaska.edu/cdt/academics/AET

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 and 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 size, 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 Occupational Endorsement Certificate requires one to two semesters to complete.

AET Undergraduate Certificates require two to three semesters to complete.

The AET AAS degree requires four to five 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 courses 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 seven 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.
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Undergraduate Programs, Community & Technical College

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.

Program Student Learning 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

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) and one of the following: 3-4
   - AET A283 CADD Software Customization 3
2. 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 and 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.

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 Student Learning 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 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 3
   - ENGL A111 Introduction to Composition 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.

Undergraduate Certificate, Civil Drafting

Program Student Learning 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 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.

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, Civil Drafting

Program Student Learning 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 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 Introduction to Composition 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 Student Learning 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 A181 Intermediate CADD for Building Construction 4
   - AET A286 Design Project 4
   - ENGL A111 Introduction to Composition 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.
Associate of Applied Science, Architectural and Engineering Technology

Program Student Learning 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.

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):
   - AET A101 Fundamentals of CADD for Building Construction
   - AET A102 Methods of Building Construction
   - AET A111 Civil Drafting
   - AET A121 Architectural Drafting
   - AET A123 Codes and Standards
   - AET A131 Structural Drafting
   - AET A142 Mechanical and Electrical Technology
   - AET A143 Mechanical and Electrical Drafting
   - AET A181 Intermediate CADD for Building Construction
   - AET A213 Civil Technology
   - AET A231 Structural Technology
   - AET A286 Design Project
   - MATH A105 Intermediate Algebra*

2. Electives
   - AET A295 is strongly recommended.

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/cdt/academics/AET.

FACULTY
Brian Bennett, Assistant Professor, ABEB@uaa.alaska.edu
Joel Condon, Assistant Professor, jcondon1@uaa.alaska.edu
Donald Ketner, Chair, Assistant Professor, djkent@uaa.alaska.edu
J. Ellen McKay, Professor, AFJEM@uaa.alaska.edu

ARMY ROTC
Eugene Short Hall (ESH), Room 211, (907) 786-6094
www.uaa.alaska.edu/armyrotc

The Army Reserve Officers’ Training Corps (ROTC) Program is America’s primary officer training program. Army ROTC, in a cooperative effort by the United States Army and UAA, educates, trains, and prepares students to serve as officers in the Regular Army, Army Reserve, or Army National Guard. Army ROTC has two-, three-, and four-year programs that lead to a commission as a Second Lieutenant. Army ROTC is divided into a basic course of study for freshmen and sophomores and the advanced course of study for juniors and seniors. Programs and courses can be adjusted to meet specific needs of individual students who desire to enroll but are past their freshman year. Prior to completing Army ROTC, students may receive a minor in National Defense, Strategic Studies, and Leadership: Army Emphasis. The courses focus on military history, Army force structure, leadership, time and stress management, decision making through academic instruction, and operations in the contemporary operating environment. Non-contracted students may take the 100- and 200-level academic courses without incurring a military obligation. However, only contracted Cadets may take MILS A302, MILS A401, and MILS A402.

The leadership and physical training laboratory provides practical military training. Activities include staff rides to Army bases, physical fitness training, conducting drill and ceremony, and leadership exercises. To attend the leadership laboratory, UAA students must not have a medical condition that would preclude service in the Armed Forces.

To become an officer through Army ROTC, a student must, at a minimum, complete the two-year program (300- and 400-level courses plus leadership laboratory), the U.S. Army Leader Development and Assessment Course, and earn a baccalaureate degree in any major from UAA. Upon graduation and commissioning, new lieutenants must serve eight years in the regular Army, Army Reserves, and/or Army National Guard.

In order to receive a minor in National Defense, Strategic Studies, and Leadership: Army Emphasis, students must complete the declaration
of a minor form on the UAA website (www.uaa.alaska.edu/records/graduation/declaration_minor_form_login.cfm)

Three hours of mandatory Physical Training (PT) and a two-hour leadership lab are required each week. Times and location of PT sessions to be announced.

Two-Year Program
1. Available to UAA students with two years remaining until graduation: students complete the U.S. Army Leader’s Training Course, the U.S. Army Leader Development and Assessment Course, and the following courses (19 credits):
   - MILS A150 Army ROTC Leadership and Physical Training Laboratory (1)
   - MILS A301 Adaptive Team Leadership
   - MILS A302 Applied Team Leadership
   - MILS A401 Adaptive Leadership
   - MILS A402 Leadership in a Complex World
   - MILS A450 History of the United States Army

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 A301 Adaptive Team Leadership in the fall semester. MILS A450 may be taken at any time throughout the program.

Three-Year Program
1. Available to UAA students with three years remaining until graduation: students complete the U.S. Army Leader Development and Assessment Course and the following courses (27 credits):
   - MILS A150 Army ROTC Leadership and Physical Training Laboratory (1)
   - MILS A201 Foundations of Leadership
   - MILS A202 Foundations of Tactical Leadership
   - MILS A301 Adaptive Team Leadership
   - MILS A302 Applied Team Leadership
   - MILS A401 Adaptive Leadership
   - MILS A402 Leadership in a Complex World
   - MILS A450 History of the United States Army

2. Students take MILS A150 Army ROTC Leadership and Physical Training Laboratory each semester for a total of six semesters and 6 credits. Academic courses are taken in the order listed, beginning with MILS A201 Foundations of Leadership in the fall semester. MILS A450 may be taken at any time throughout the program.

Four-Year Program
1. Available to UAA students with four years remaining until graduation: students complete the U.S. Army Leader Development and Assessment Course and the following courses (31 credits):
   - MILS A101 Leadership and Personal Development
   - MILS A102 Introduction to Tactical Leadership
   - MILS A150 Army ROTC Leadership and Physical Training Laboratory (1)
   - MILS A201 Foundations of Leadership
   - MILS A202 Foundations of Tactical Leadership
   - MILS A301 Adaptive Team Leadership
   - MILS A302 Applied Team Leadership
   - MILS A401 Adaptive Leadership
   - MILS A402 Leadership in a Complex World
   - MILS A450 History of the United States Army

2. Students take MILS A150 Army ROTC Leadership and Physical Training Laboratory each semester for a total of eight semesters and 8 credits. Academic courses are taken in the order listed, beginning with MILS A201 Foundations of Leadership in the fall semester. MILS A450 may be taken at any time throughout the program.

Minor, National Defense, Strategic Studies, and Leadership: Army Emphasis

Contracted cadets majoring in another subject who wish to minor in National Defense, Strategic Studies, and Leadership: Army Emphasis must complete the following requirements. A minimum of 19 credits are required for the minor, 12 credits of which must be upper division. Students must earn at least 3 credits in residence in this field. They may also earn a UAA cumulative GPA of at least 3.00 (B). Students must declare this minor utilizing the declaration of a minor form on the UAA website (www.uaa.alaska.edu/records/graduation/declaration_minor_form.cfm) no later than the deadline to submit an application for graduation.

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</table>

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.

Army ROTC at UAA has several scholarship options for college students. These scholarships cover tuition, fees, and books for both undergraduate and graduate students. Scholarships also include a monthly stipend. Students compete for these scholarships during the academic term prior to activation. For example, a fall 100-level student can compete for a scholarship that would start in the spring of the student’s 100-level year.

2. All scholarships and incentives are subject to federally mandated age restrictions. 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 B within one year of commissioning. Students compete
nationally for their branch based on a combined score consisting of their GPA, on-campus evaluations, and Leader Development and Assessment Course evaluation. The United States Army has 16 branches with multiple careers in each one. Students receive the branch assignments during the 400-level year.

2. Students may also compete for medical and law school appointments. Scholarships cover tuition, fees, and books for a student’s undergraduate and medical school programs. Army ROTC at UAA has more information on this highly competitive program.

3. Second lieutenants incur an eight-year service commitment with the Army. They serve full time in the Army for four years and four years with the Individual Ready Reserve (IRR). Select Cadets may choose to serve part time in the Army Reserve or Army National Guard while pursuing a civilian career.

FACULTY
Lieutenant Colonel Adam Carson, Professor of Military Science/Chair, (907) 786-6096
Major Timothy M. Brorer, Assistant Professor of Military Science, (907) 786-6093
Sergeant First Class Kevin McGaha, Military Science Instructor, (907) 786-6092

AUTOMOTIVE AND DIESEL TECHNOLOGY
Auto & Diesel Technology Building (ADT), Room 207, (907) 786-1485
www.uaa.alaska.edu/transportation

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 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 Certificate, Automotive

Description and Program Student Learning Outcomes

Four occupational endorsement certificate programs are available:
- Automotive Electrical
- Automotive Brakes, Suspension and Alignment
- Automotive Power Trains
- 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
2. Specialized employability skills for maintenance and repair technicians.

Admission Requirements

See Occupational Endorsement Certificate admissions requirements in Chapter 7.

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
Students are able to:

- 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 proficiency in performing occupationally related tasks in a professional setting.

2. Integrate knowledge from diverse areas to develop effective diagnostic and repair strategies involving complex systems.

3. Demonstrate effective oral and written communication skills necessary for success in the workplace.

Admission Requirements

Satisfy the Undergraduate Certificate Admissions Requirements in Chapter 7.

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:

**First Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADT A102</td>
<td>3</td>
</tr>
<tr>
<td>ADT A121</td>
<td>3</td>
</tr>
<tr>
<td>ADT A122</td>
<td>3</td>
</tr>
<tr>
<td>ADT A131</td>
<td>3</td>
</tr>
<tr>
<td>ADT A140</td>
<td>3</td>
</tr>
<tr>
<td>ADT A202</td>
<td>4</td>
</tr>
<tr>
<td>ADT A222</td>
<td>3</td>
</tr>
<tr>
<td>ADT A295</td>
<td>3</td>
</tr>
</tbody>
</table>

**Second Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
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<tr>
<td>ADT A195</td>
<td>2</td>
</tr>
<tr>
<td>ADT A260</td>
<td>3</td>
</tr>
<tr>
<td>ADT A295</td>
<td>3</td>
</tr>
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</table>

**Third Semester**

<table>
<thead>
<tr>
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<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
<td>ADT A160</td>
<td>4</td>
</tr>
<tr>
<td>ADT A162</td>
<td>4</td>
</tr>
<tr>
<td>ADT A195</td>
<td>2</td>
</tr>
</tbody>
</table>

**Fourth Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADT A202</td>
<td>4</td>
</tr>
<tr>
<td>ADT A222</td>
<td>3</td>
</tr>
<tr>
<td>ADT A260</td>
<td>3</td>
</tr>
</tbody>
</table>

2. A total of 22 credits is required for the occupational endorsement certificate.

Undergraduate Certificate, Automotive Technology

Description and Program Student Learning 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:

- Demonstrate technical knowledge and skills necessary for success in the automotive maintenance and repair industry.

- Demonstrate academic proficiency necessary to pass national examinations.

- Demonstrate proficiency in performing occupationally related tasks in a professional setting.

- Integrate knowledge from diverse areas to develop effective diagnostic and repair strategies involving complex systems.

- Demonstrate effective oral and written communication skills necessary for success in the workplace.

Associate of Applied Science, Automotive Technology

The Associate of Applied Science in Automotive Technology is offered with three options: General Automotive, Ford ASSET and General Motors ASEP. 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 ASEP option must complete both ADT A260 and ADT A295.

Description and Program Student Learning 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:

- Demonstrate technical knowledge and skills necessary for success in the automotive maintenance and repair industry.
- Demonstrate academic proficiency necessary to pass national examinations.
- Demonstrate proficiency in performing occupationally related tasks in a professional setting.
- Integrate knowledge from diverse areas to develop effective diagnostic and repair strategies involving complex systems.
- Demonstrate effective oral and written communication skills necessary for success in the workplace.

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 ASEP Option
The GMASEP (Automotive Student Education Program) option for the Automotive Technology AAS degree is a joint venture with General Motors Company and its sponsoring General Motors dealerships. Admission to General Motors ASEP is only even-numbered years and has specific admission requirements. Please contact the General Motors ASEP advisor, the department or sponsoring dealership for details. Students enrolled in General Motors ASEP 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 microprocessors.
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:

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADT A102 Introduction to Automotive Technology</td>
<td>ADT A122 Engine Theory and Diagnosis</td>
</tr>
<tr>
<td>ADT A121 Basic Electrical Systems</td>
<td>ADT A160 Manual Drive Trains and Axles</td>
</tr>
<tr>
<td>ADT A131 Auto Electrical II</td>
<td>ADT A162 Suspension and Alignment</td>
</tr>
<tr>
<td>ADT A150 Brake Systems</td>
<td>ADT A195 Automotive Fracticutum I (1-6)</td>
</tr>
<tr>
<td>ADT A195 Automotive Fracticutum I (1-6)</td>
<td>One AAS General Course Requirement</td>
</tr>
<tr>
<td>One AAS General Course Requirement</td>
<td>3</td>
</tr>
</tbody>
</table>

Chapter 10 Page 204
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:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADT A121</td>
<td>Basic Electrical Systems</td>
<td>3</td>
</tr>
<tr>
<td>ADT A131</td>
<td>Auto Electrical II</td>
<td>3</td>
</tr>
<tr>
<td>ADT A151</td>
<td>Medium/Heavy-Duty Engine Repair</td>
<td>3</td>
</tr>
<tr>
<td>ADT A152</td>
<td>Heavy-Duty Suspension and Steering</td>
<td>4</td>
</tr>
<tr>
<td>ADT A153</td>
<td>Medium/Heavy-Duty Engine Lab</td>
<td>3</td>
</tr>
<tr>
<td>ADT A155</td>
<td>Heavy-Duty Brake Systems</td>
<td>4</td>
</tr>
<tr>
<td>ADT A156</td>
<td>Heavy-Duty Maintenance Inspection</td>
<td>6</td>
</tr>
<tr>
<td>ADT A195</td>
<td>Automotive Practicum I (1-6)</td>
<td>3</td>
</tr>
<tr>
<td>ADT A225</td>
<td>Auto Heating and A/C</td>
<td>3</td>
</tr>
<tr>
<td>ADT A227</td>
<td>Auto Electrical III</td>
<td>3</td>
</tr>
<tr>
<td>ADT A266</td>
<td>Heavy Duty Power Systems Lab</td>
<td>4</td>
</tr>
<tr>
<td>ADT A267</td>
<td>Heavy Duty Fuel Systems</td>
<td>4</td>
</tr>
<tr>
<td>ADT A268</td>
<td>Hydraulics and Pneumatics</td>
<td>4</td>
</tr>
<tr>
<td>ADT A269</td>
<td>Heavy Duty Drive Trains</td>
<td>4</td>
</tr>
</tbody>
</table>

2. A total of 51 credits is required for the Undergraduate Certificate.

Associate of Applied Science, Heavy Duty Transportation and Equipment

Description and Program Student Learning 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

Admission Requirements
Satisfy the requirements for Admission to Undergraduate Certificate Programs found in Chapter 7.

Students must complete the following admission requirements:

1. Submit UAA Undergraduate Application for Admission for the Heavy-Duty Transportation and Equipment Undergraduate Certificate.
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. 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.
   d. Demonstrate computer competency using one of the following methods:
   e. A course in computers (see faculty advisor for approved courses).
   f. Documented work experience verifying computer competency as approved by the faculty advisor.
   g. 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 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 66 credits is required for the AAS degree.

FACULTY
Craig Defendorf, Term Instructor, cadefendorf@uaa.alaska.edu
Jeffrey Libby, Term Instructor, jllibby@uaa.alaska.edu
Darrin Marshall, Instructor, dimarshall2@uaa.alaska.edu
Dennis Massingham, Assistant Professor, dmassingham@uaa.alaska.edu
Kelly Smith, Director, kjsmith@uaa.alaska.edu

AVIATION TECHNOLOGY
Aviation Complex (AVNC), 2811 Merrill Field Drive, (907) 786-7200
www.uaa.alaska.edu/aviation

The Aviation Technology Division (ATD) is a component of the University of Alaska Anchorage Community & Technical College and is located at the Aviation Technology Complex on Merrill Field Airport, approximately two miles north of the UAA main campus. The mission of the ATD is to enhance, promote and provide quality aviation education, research and service worldwide. Individuals employed in the aviation industry desiring to update skills and knowledge may take selected courses; these individuals must contact the ATD office about prerequisites and other lab or course requirements. The ATD supplies graduates for skilled and professional aviation-related positions through 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. Students acquire a comprehensive understanding of the interrelatedness of all elements of the air transportation system, as well as skill sets and competencies to enter and succeed in managing the unique operational and management requirements of airlines, airports, and general aviation support operations.

The Aviation Maintenance Technology (AMT) program is 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 Maintenance Technology.

The Professional Piloting program prepares graduates for professional 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 certified 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 Student Learning 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.

#### Special Considerations

UAA has no restrictions on age or physical condition of students. However, students desiring employment with the FAA should be aware of employment requirements:

1. Medical Certificate is required as depicted in FAR 65.49 and 67 Subpart C.
2. Thirty-year-old maximum age restriction for students anticipating employment in terminal or en route options.
3. For employment considerations with the FAA, students must receive a PASS score on the Air Traffic-Selection and Training (ATSAT) examination administered by the FAA. The examination provides a systematic process for continued enhancement of air traffic selection and training by testing candidates for recognition and cognitive skills required in the air traffic specialty and to identify the “composite controller.”

#### Advising

All students must meet with an academic advisor in the 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 242/L, ATC 243/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:
   
<table>
<thead>
<tr>
<th>Course</th>
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<th>Units</th>
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<tbody>
<tr>
<td>ATA A102</td>
<td>Introduction to Aviation Technology</td>
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<td>ATA A132</td>
<td>History of Aviation</td>
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</tr>
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<td>ATC A143</td>
<td>ATC Regulations</td>
<td>3</td>
</tr>
<tr>
<td>ATC A144</td>
<td>ATC Flight Procedures</td>
<td>3</td>
</tr>
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<td>ATC A147</td>
<td>Pilot/Controller Techniques</td>
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</tr>
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<td>ATC A241</td>
<td>Control Tower Operations</td>
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<td>ATC A241L</td>
<td>Control Tower Operations Lab</td>
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</tr>
<tr>
<td>ATC A242</td>
<td>ATC Terminal Radar Procedures</td>
<td>3</td>
</tr>
<tr>
<td>ATC A242L</td>
<td>ATC Terminal Radar Procedures Lab</td>
<td>1</td>
</tr>
<tr>
<td>ATC A243</td>
<td>ATC Enroute Procedures</td>
<td>3</td>
</tr>
<tr>
<td>ATC A243L</td>
<td>ATC Enroute Procedures Lab</td>
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</tr>
<tr>
<td>ATC A250</td>
<td>Comprehensive Air Traffic Control Overview</td>
<td>2</td>
</tr>
<tr>
<td>ATL A325</td>
<td>Tools for Weather Briefing</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>
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<th>Title</th>
<th>Units</th>
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<tr>
<td>ATA A134</td>
<td>Principles of Aviation Administration</td>
<td>3</td>
</tr>
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   One of the following:
   
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<th>Title</th>
<th>Units</th>
</tr>
</thead>
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<tr>
<td>ATA A233</td>
<td>Aviation Safety</td>
<td>3</td>
</tr>
<tr>
<td>ATP A231</td>
<td>Search, Survival, and Rescue</td>
<td>3</td>
</tr>
<tr>
<td>ATP A232</td>
<td>Advanced Aviation Navigation</td>
<td>3</td>
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</table>

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</tr>
<tr>
<td>MATH A107</td>
<td>College Algebra</td>
<td>4</td>
</tr>
<tr>
<td>MATH A108</td>
<td>Trigonometry</td>
<td>3</td>
</tr>
<tr>
<td>MATH A172</td>
<td>Applied Finite Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MATH A200</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH A272</td>
<td>Applied Calculus</td>
<td>3</td>
</tr>
</tbody>
</table>
Minor, Air Traffic Control

Students majoring in another discipline or pursuing an Aviation degree, who wish to minor in Air Traffic Control (ATC), must complete the following requirements. A total of 22 credits is required for the minor, 6 credits must be upper division. Students completing the ATC minor will be eligible for recommendation for hire as air traffic controllers under the Federal Aviation Administration (FAA) College Training Initiative (CTI) program. Completion of the ATC minor does not guarantee hire by the FAA.

**Special Considerations:**

UAA has no restrictions on age or physical condition of students. However, students desiring employment with the FAA should be aware of employment requirements:

1. Medical Certificate is required as depicted in FAR 65.49 and 67 Subpart C.
2. Thirty-year-old maximum age restriction for students anticipating employment in terminal or en route options.
3. For employment considerations with the FAA, students must receive a PASS score on the Air Traffic-Selection and Training (ATSAT) examination administered by the FAA. The examination provides a systematic process for continued enhancement of air traffic selection and training by testing candidates for recognition and cognitive skills required in the air traffic specialty and to identify the "composite controller."

**Advising**

All students must meet with an academic advisor in the ATD prior to beginning any program of study and are encouraged to meet each semester for the purpose of reviewing their academic progress and planning future courses. It is particularly important for students to meet with their advisor whenever academic difficulties arise. Degree check sheets are available in the ATD office.

**Federal Aviation Administration (FAA) Recommendation for Employment**

1. To be eligible for FAA employment, student must achieve a C or better in the following Air Traffic Control-specific courses:
   - ATC A143, ATC A144, ATC A147, ATC A241/L, ATC A242/L, ATC A243/L.

**Program Requirements for Academic Progression**

1. In order to advance to 200 level ATC classes (ATC 241/L, ATC 242/L, ATC 243/L) students must have a C or better in ATC A143, ATC A144, ATC A147.
2. Students may repeat ATC A143, ATC A144, and ATC A147 only once due to performance.
3. Students must complete the following courses.
   - Complete the following courses (18 credits):
     - ATC A143 ATC Regulations 3
     - ATC A144 ATC Flight Procedures (3) 3
     - ATP A116 Instrument Ground School (3)
     - ATC A147 Pilot/Controller Techniques 3
     - ATC A325 Tools for Weather Briefing 3
     - ATP A235 Elements of Weather 3
     - ATC A440 Facility Operation and Administration (3) 3

**Associate of Applied Science, Aviation Administration**

**Program Description and Student Learning 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.

**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
   - *BA A151 Introduction to Business 3
   - BA A231 Fundamentals of Supervision 3
   - *ECON A201 Principles of Macroeconomics 3
   - *PHIL A301 Ethics 3
   - One of the following: 3
Undergraduate Programs, Community & Technical College

University of Alaska Anchorage 2013-2014 Catalog
www.uaa.alaska.edu

CIS A105 Introduction to Personal Computers
CIS A110 Computer Concepts in Business (3)

*One of the following: 3-4
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 Elective Course 3

*Courses may be used to fulfill the Associate of Applied Science General Degree Requirements.

2. A total of 60-61 credits is required for the degree.
3. See the Aviation Technology Division advisor for appropriate sequence of courses.

Undergraduate Certificate, Aviation Maintenance Technology (AMT), Airframe

Program Description and Student Learning Outcomes
Aviation Maintenance Airframe Undergraduate Certificate 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, students will be able to:
1. Demonstrate proficient, entry-level aviation maintenance skills.
2. Demonstrate proficiency in airframe maintenance skills.
3. Demonstrate knowledge of aircraft structures and systems, and appropriate FAA regulations.
4. Demonstrate knowledge of industry information: current status, segments and opportunities.

Admission Requirements
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 www.uaa.alaska.edu/aviation.
3. Present evidence of a proficiency in mathematics at or exceeding the MATH A055 Elementary Algebra level. An appropriate score on a math placement test may be used.
4. Demonstrate English language proficiency through placement into PRPE A108 Introduction to College Writing (or higher), ACT English scores, SAT Critical Reading scores, or an appropriate score on the UAA-approved English placement exam. Generally, applicants eligible for entry into PRPE A108 or ENGL A109 have sufficient proficiency for entry into the AMT program.

Advising
All students must meet with an academic advisor in the Aviation Technology Division 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.

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. Complete the following required courses:
   - 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
   - AMT A181 Aircraft Fuel Systems 3
   - AMT A181L Aircraft Fuel Systems Lab 1
   - AMT A185 Aircraft Sheetmetal Structures 3
   - AMT A185L Aircraft Sheetmetal Structures Lab 2
   - AMT A186 Aircraft Non-Destructive Inspection Methods 3
   - AMT A272 Aircraft Electrical Hardware and Systems 3
   - AMT A273 Aircraft Fluid Power Systems 2
   - AMT A273L Aircraft Fluid Power Systems Lab 2
   - AMT A274 Aircraft Electronic Systems 5
   - AMT A274L Aircraft Electronic Systems Lab 1
   - 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

2. A total of 60 credits is required for the AMT Airframe Undergraduate Certificate.

Undergraduate Certificate, Aviation Maintenance Technology (AMT), Powerplant

Program Description and Student Learning Outcomes
The Aviation Maintenance Powerplant Undergraduate Certificate 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 proficiency in entry-level aviation maintenance skills.
2. Demonstrate proficiency in the required powerplant maintenance skills.
3. Demonstrate knowledge of aircraft powerplants, systems, and appropriate FAA regulations.
4. Demonstrate knowledge of industry information: current status, trends, segments and opportunities.

**Admission Requirements**

2. Apply for admission to UAA and to the AMT Powerplant 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 www.uaa.alaska.edu/aviation.
3. Present evidence of proficiency in mathematics at or exceeding the MATH A055 Elementary Algebra level. An appropriate score on a math placement test may be used.
4. Demonstrate English language proficiency through placement into PRPE A108 Introduction to College Writing or a higher level with an appropriate level on ACT English scores, SAT Verbal scores, or an English placement exam. Generally, applicants eligible for entry into PRPE A108 or ENGL A109 level have sufficient proficiency for entry into the AMT programs.

**Advising**

All students must meet with an academic advisor in the Aviation Technology Division prior to beginning any program of study and are encouraged to meet each semester for the purpose of reviewing their academic progress and planning future courses and schedules. It is particularly important for students to meet with their advisor whenever academic difficulties arise. Degree check sheets are available in the ATD office. See the ATD advisor for appropriate sequence of courses.

Successful progress through the AMT program requires that all students have algebra proficiency and English proficiency. Preparatory mathematics and English courses should be taken prior to entry into the AMT program. Under certain circumstances preparatory courses may be taken during the first semester with some AMT courses. The AMT program courses are sequential and the student is cautioned that taking courses out of sequence will extend the program beyond its normal length. Typically, AMT courses have prerequisites, and advisor approval is required prior to registration for all AMT courses.

**General University Requirements**

Complete the General University Requirements for Undergraduate Certificates at the beginning of this chapter.

**Major Requirements**

1. Complete the following required courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
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<td>AMT A170</td>
<td>Aircraft Ground Operations and Safety</td>
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<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 A174</td>
<td>Fundamentals of Aircraft Electronics</td>
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<td>AMT A174L</td>
<td>Fundamentals of Aircraft Electronics Lab</td>
<td>2</td>
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<td>AMT A175</td>
<td>Drawing and Precision Measurement</td>
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<tr>
<td>AMT A176</td>
<td>Aircraft Materials and Processes I</td>
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</tr>
<tr>
<td>AMT A177</td>
<td>Reciprocating Engine Theory</td>
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<tr>
<td>AMT A178</td>
<td>Turbine Engine Theory</td>
<td>2</td>
</tr>
<tr>
<td>AMT A181</td>
<td>Aircraft Fuel Systems</td>
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<td>Aircraft Fuel Systems Lab</td>
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<tr>
<td>AMT A186</td>
<td>Aircraft Non-Destructive Inspection Methods</td>
<td>3</td>
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<td>AMT A187</td>
<td>Aircraft Reciprocating Engine Overhaul</td>
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<td>AMT A272</td>
<td>Aircraft Electrical Hardware and Systems</td>
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<tr>
<td>AMT A279</td>
<td>Aircraft Turbine Engine Repair and Overhaul</td>
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<td>AMT A282</td>
<td>Aircraft Propeller Systems</td>
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<td>Reciprocating Engine Installation and Operations</td>
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<td>AMT A289</td>
<td>Turbine Engine Installation and Operations</td>
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<td>AMT A289L</td>
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**Associate of Applied Science, Aviation Maintenance Technology**

**Program Description and Student Learning 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.
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 www.uaa.alaska.edu/aviation.

**Advising**

All students must meet with an ATD academic advisor prior to beginning any program of study and are encouraged to meet each semester for the purpose of reviewing their academic progress and planning future courses. It is particularly important for students to meet with their advisor whenever academic difficulties arise. Degree check sheets are available in the 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 ATD 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 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 and Systems 3
   - AMT A274 Aircraft Electronic Systems 5
   - AMT A274L Aircraft Electronic 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

3. A total of 75 credits is required for the degree.

Associate of Applied Science, Professional Piloting

Program Description and Student Learning 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.

Special Considerations
The following applies for those students desiring to pursue a professional piloting degree:

1. Flight training costs are not included in university tuition and fees. Students must meet with the aviation academic advisor to obtain departmental approval to register for all flight courses. Flight training costs are based on hourly rates established for each aircraft type flown. Students will be provided with current hourly flight costs and program cost estimates when they meet with the department’s academic advisor.
2. Students must pass an FAA Class II medical examination before beginning any flight training.
3. U.S. citizens must present verification of U.S. citizenship before beginning any flight or airplane simulator training. The following three methods are acceptable: an unexpired U.S. passport, an original or raised seal official copy of birth certificate, or an original or raised seal official copy of Certificate of Naturalization. Non-U.S. citizens must register and receive approval from the Transportation Security Administration before beginning any flight or simulator training. Please contact the Aviation Technology Division (ATD) office for information.
4. Once formally admitted to the AAS degree in Professional Piloting program or the BS degree in Aviation Technology program or registered for Aviation classes at UAA, all subsequent required flight training must be completed in residence at UAA. Enrolled students who receive flight training outside UAA under specific curricula will not receive credit for the corresponding UAA courses.
5. All students are required to complete a minimum of the FAA Instrument Airplane Pilot rating and the FAA Commercial Airplane Single-engine Land Pilot certificate while in residence at UAA.

6. Military pilots may petition to have appropriate curriculum requirements awarded based on FAA pilot certificates held on a case-by-case basis.

**Advising**

All students must meet with an ATD academic advisor prior to beginning any program of study and are encouraged to meet each semester for the purpose of reviewing their academic progress and planning future courses. It is particularly important for students to meet with their advisor whenever academic difficulties arise. Degree check sheets are available in the ATD Office, and students may also access Degree Works for verification of degree requirements.

See the Aviation Technology Division advisor for appropriate sequence of courses.

**Academic Progress Requirements**

1. In order to progress within the AAS Professional Piloting program, students must register for a flying course within three semesters of admittance. Students who have not registered for a flying course by this time will be removed from the program.

2. Once enrolled in any flight training course, students are expected to complete the course requirements within twelve months from the date of registration. 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 A133** Aviation Law and Regulations 3
   - **ATA A134** Principles of Aviation Administration 3
   - **ATA A233** Aviation Safety 3
   - **ATA A337** Airline Operations 3
   - **ATP A100** Private Pilot Ground School 3
   - **ATP A101** Pre-Professional Flying** 2
   - **ATP A116** Instrument Ground School 3
   - **ATP A126** Instrument Flying 2
   - **ATP A200** Commercial Ground School 3
   - **ATP A218** Commercial Flying II** 1.5
   - **ATP A219** Commercial Flying III** 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)* 3
   - or
   - **PHIL A201** Introduction to Philosophy (3)*
   - or
   - **PHIL A301** Ethics (3)*
   - **Natural Science Selective Course with Lab** 4
   - **MATH A105** Intermediate Algebra (3)* 3-4
   - or
   - **MATH A107** College Algebra (4)*
   - or any MATH course for which MATH A107 is a prerequisite.

   *Courses may be used to fulfill the Associate of Applied Science General Course Requirements.

   **All flying courses require special documentation and departmental approval before registration.

   *A total of 61 credits is required for the degree.

---

**Bachelor of Science, Aviation Technology**

**Program Description**

The Bachelor of Science 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, Air 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 the Baccalaureate Degree Admission Requirements in Chapter 7.
2. Satisfy additional admission requirements for emphasis areas of Air Traffic Control, Aviation Management, and Professional Piloting described below.
3. Satisfy any certification requirements established by applicable government agencies described in emphasis areas of Air Traffic Control, Aviation Management, and Professional Piloting outlined below.
4. Document placement into the MATH A107 or MATH A172 entry level or higher. For testing schedule, contact Advising and Testing at (907) 786-4500.
5. Document placement into the ENGL A111 entry level or higher. For testing schedule, contact Advising and Testing at (907) 786-4500.

**Advising**

All students must meet with an Aviation Technology Division (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, and students may also access UAA Degree Works for verification of degree requirements.

See the Aviation Technology Division (ATD) advisor for appropriate sequence of courses. A strong background in science, math, and reading skills is highly recommended.

**Academic Progress**

1. A minimum grade of C in each Aviation Technology course is required to graduate with this degree.
2. Once enrolled in any flight training course at UAA, students are required to complete the course requirements within twelve months from the date of registration. Failure to do so will be considered unsatisfactory progress and will result in a failing (F) grade.

**Degree Requirements**

1. Complete the General University Requirements for All Baccalaureate Degrees listed at the beginning of this chapter.
2. Complete the General Education Requirements (GER) for Baccalaureate Degrees at the beginning of this chapter.
3. Complete required Emphasis Courses and Major Degree Requirements.

**Major Requirements**

1. Complete the following required core courses (54-55 credits):
### Aviation Management Emphasis

**Emphasis Description and Program Student Learning 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 provides 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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course 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>
<tr>
<td>ATA A132</td>
<td>History of Aviation</td>
<td>3</td>
</tr>
<tr>
<td>ATA A134</td>
<td>Principles of Aviation Administration</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>
</tr>
<tr>
<td>ATA A337</td>
<td>Airline Operations</td>
<td>3</td>
</tr>
<tr>
<td>ATA A431</td>
<td>Aircraft Accident Investigation</td>
<td>3</td>
</tr>
<tr>
<td>BA A151</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BA A343</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>ECON A202</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
</tbody>
</table>

*Courses may be used to fulfill the Bachelor of Science, General Education Requirements.*

2. Choose a minimum of 12 credits of advisor-approved electives, 3 of which must be upper division. The following are recommended elective support courses (refer to the current UAA catalog for prerequisites):

<table>
<thead>
<tr>
<th>Course Code</th>
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<tr>
<td>ATA A132</td>
<td>History of Aviation</td>
<td>3</td>
</tr>
<tr>
<td>ATA A143</td>
<td>ATC Regulations</td>
<td>3</td>
</tr>
<tr>
<td>ATA A144</td>
<td>ATC Flight Procedures</td>
<td>3</td>
</tr>
<tr>
<td>ATA A147</td>
<td>Pilot/Controller Techniques</td>
<td>3</td>
</tr>
<tr>
<td>ATA A241</td>
<td>Control Tower Operations</td>
<td>3</td>
</tr>
<tr>
<td>ATA A241L</td>
<td>Control Tower Operations Lab</td>
<td>1</td>
</tr>
<tr>
<td>ATA A242</td>
<td>ATC Terminal Radar Procedures</td>
<td>3</td>
</tr>
<tr>
<td>ATA A242L</td>
<td>ATC Terminal Radar Procedures Lab</td>
<td>1</td>
</tr>
<tr>
<td>ATA A243</td>
<td>ATC Enroute Procedures</td>
<td>3</td>
</tr>
<tr>
<td>ATA A243L</td>
<td>ATC Enroute Procedures Lab</td>
<td>1</td>
</tr>
<tr>
<td>ATA A250</td>
<td>Comprehensive Air Traffic Control Overview</td>
<td>2</td>
</tr>
<tr>
<td>ATA A325</td>
<td>Tools for Weather Briefing</td>
<td>3</td>
</tr>
<tr>
<td>ATA A355</td>
<td>Integrated Radar Techniques</td>
<td>3</td>
</tr>
<tr>
<td>ATA A440</td>
<td>Facility Operation and Administration</td>
<td>3</td>
</tr>
</tbody>
</table>

### Air Traffic Control (ATC) Emphasis

**Emphasis Description and Program Student Learning 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. The Federal Aviation Administration Recommendation for Employment and Special Considerations contained in the Associate of Applied Science, Air Traffic Control 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 affects 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 (36 credits):

<table>
<thead>
<tr>
<th>Course Code</th>
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<td>ATA A243</td>
<td>ATC Enroute Procedures</td>
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<tr>
<td>ATA A250</td>
<td>Comprehensive Air Traffic Control Overview</td>
<td>2</td>
</tr>
<tr>
<td>ATA A325</td>
<td>Tools for Weather Briefing</td>
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</tr>
<tr>
<td>ATA A355</td>
<td>Integrated Radar Techniques</td>
<td>3</td>
</tr>
<tr>
<td>ATA A440</td>
<td>Facility Operation and Administration</td>
<td>3</td>
</tr>
</tbody>
</table>
2. Choose a minimum of 12 credits of advisor-approved electives, 9 of which must be upper division. The following are Recommended Elective Support Courses (refer to the current UAA Catalog for prerequisites): 12
   - ATA A490 Advanced Topics in Aviation Technology (1-6)
   - ATC A325 Tools for Weather Briefing (3)
   - BA A381 Consumer Behavior (3)
   - BA A447 International Marketing (3)
   - BA A460 Marketing Management (3)
   - CIS A280 Managerial Communications (3)
   - CIS A326 Information Age Literacy (3)
   - CIS A376 Management Information Systems (3)
   - ENGL A312 Advanced Technical Writing (3)
   - ENGL A313 Professional Writing (3)
   - PER A100 Fitness for Life (2)
   - PER Elective See Catalog for Listing (1-2)
   - (Maximum of two PER elective credits allowed)
   - PSY A380 Psychology of Stress and Coping (3)

3. A minimum of 121-122 credits is required for the Air Traffic Control emphasis, of which a minimum of 42 credits must be upper division.

### Professional Piloting Emphasis

**Emphasis Description and Program Student Learning 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 and management. The Special Considerations and Academic Progress Requirements contained in the Associate of Applied Science, Professional Piloting also apply to this emphasis area. 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.
5. Demonstrate a broad knowledge of the aviation industry.

**Special Considerations**

The following applies for those students desiring to pursue a Professional Piloting emphasis:

1. Flight Training costs are not included in university tuition and fees. Students must meet with the aviation academic advisor to obtain departmental approval to register for all flight courses. Flight training costs are based on hourly rates established for each aircraft type flown. Students will be provided with current hourly flight costs and program cost estimates when they meet with the department's academic advisor.
2. Students must pass an FAA Class II medical examination before beginning any flight training.
3. U.S. citizens must present verification of U.S. citizenship before beginning any flight or airplane simulator training. The following three methods are acceptable: an unexpired U.S. passport, an original or raised seal official copy of birth certificate, or an original or raised seal official copy of Certificate of Naturalization. Non-U.S. citizens must register and receive approval from the Transportation Security Agency before beginning any flight or simulator training. Please contact the Aviation Technology Division (ATD) office for information.
4. Once formally admitted to the AAS degree in Professional Piloting program or the BS degree in Aviation Technology program or registered for Aviation classes at UAA, all subsequent required flight training must be completed in residence at UAA. Enrolled students who receive flight training outside UAA under specific curricula will not receive credit for the corresponding UAA courses.
5. All students are required to complete a minimum of the FAA Instrument Airplane Pilot rating, the FAA Commercial Airplane Single-engine Land Pilot certificate, and the FAA Multi-engine Land Rating while in residence at UAA.
6. Military pilots may petition to have appropriate curriculum requirements awarded based on FAA pilot certificates held on a case-by-case basis.

### Required Emphasis Courses

1. Complete the following required emphasis courses (38 credits):
   - ACCT A201 Principles of Financial Accounting 3
   - ATA A337 Airline Operations 3
   - ATA A431 Aircraft Accident Investigation 3
   - ATC A325 Tools for Weather Briefing 3
   - ATP A101 Pre-Professional Flying 2
   - ATP A116 Instrument Ground School 3
   - ATP A126 Instrument Flying 2
   - ATP A200 Commercial Ground School 3
   - ATP A218 Commercial Flying I 1.5
   - ATP A219 Commercial Flying II 1.5
   - ATP A220 Commercial Flying III 2
   - ATP A232 Advanced Aviation Navigation 3
   - ATP A305 Airplane Multiengine Land Rating** 2
   - ATP A320 Flight Dynamics 3
   - ATP A332 Transport Aircraft Systems 3

2. Choose a minimum of 6 credits of advisor approved electives, 2-3 of which must be upper division. The following are Recommended Elective Support Courses (refer to current UAA catalog for prerequisites):
   - ATA A134 Principles of Aviation Administration (3)
   - ATA A335 Airport Operations (3)
   - ATA A336 Air Service Operations (3)
   - ATA A490 Advanced Topics in Aviation Technology (1-6)
   - ATP A104 Flying Alaska Bush (3)
   - ATP A231 Search, Survival, and Rescue (3)
   - ATP A300 CFI Ground School (3)
   - ATP A301 CFI Flying (2)**
   - ATP A405 Additional CFI Rating (2)**
   - PER A100 Fitness for Life (2)
   - PER Elective See Catalog for Listing (1-2)*
   - PSY A380 Psychology of Stress and Coping (3)

*Must be combined with PER A100

**All flying courses require special documentation and departmental approval before registration.

3. A minimum of 120-121 credits is required for the professional piloting emphasis, 43 of which must be upper division.

### Minor, Aviation Technology

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:

- AMT A171 Basic Aerodynamics (3)
- AMT A172 Aircraft Publications, Regulations, and Records (3)
- AMT A177 Reciprocating Engine Theory (2)
- AMT A178 Turbine Engine Theory (2)
- AMT A185 Aircraft Sheetmetal Structures (3)
- AMT A185L Aircraft Sheetmetal Structures Lab (2)
- AMT A285 Aircraft Bonded Structures (4)
- AMT A285L Aircraft Bonded Structures Lab (1)
B. Communication and General Requirements

1. Oral Communication Requirements: 3
   COMM A111 Fundamentals of Oral Communication (3)
   or
   COMM A235 Small Group Communication (3)
   or
   COMM A241 Public Speaking (3)

2. Written Communication Requirements: 6
   ENGL A111 Introduction to Composition (3)
   ENGL A212 Technical Writing (3)

3. General Requirements:
   - Math Courses: 7
     MATH A105* Intermediate Algebra (3)
     MATH A107* College Algebra (4)
   - Physical Science Courses: 4
     PHYS A115/L Physical Science I (4)
     PHYS A123/L Basic Physics I (4)
   - Natural Science Courses: 4
     PHYS A124/L Basic Physics II (4)
     CHEM A103/L Survey of Chemistry (4)
     CHEM A105/L General Chemistry I (4)
   *Or any MATH course for which MATH A105 or MATH A107 is a prerequisite.

C. Major Requirements

1. Complete the following required courses:
   - CIS A110 Computer Concepts in Business 3
   - CNT A170 CCNA 1 Network Fundamentals 4
   - ET A101 Basic Electronics: DC Circuits 4
   - ET A102 Basic Electronics: AC Circuits 4
   - ET A126 Digital Electronics 4
   - ET A175 Technical Introduction to Computing Systems 3
   - ET A240 Computer Systems Interfacing 3
   - ET A241 Digital Control Systems 3

2. Complete 3-4 credits from the following: 3-4
   - CS A109 Computer Programming: (Languages Vary) (3)
   - CS A110 Java Programming (3)
   - CS A111 Visual Basic.NET Programming (3)
   - CSCE A201 Computer Programming I (4)

3. Applied Technology Electives 3-5
   - Computer Science, Computer Network Tech, or Electronics

4. Electives 1-4

5. A total of 60 credits is required for the degree.

FACULTY
Rich Kochis, Assistant Professor, IFRLK@uaa.alaska.edu
Allen Houtz, Professor, IFADH@uaa.alaska.edu

COMPUTER ELECTRONICS

Kenai Peninsula College (KPC)

156 College Road, 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 KPC. 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.

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.

FACULTY
John Abernathy, Term Assistant Professor, jtabernathyii2@uaa.alaska.edu
Michael Buckland, Assistant Professor, Mpbuckland@uaa.alaska.edu
Rocky Capozzi, Director/Term Associate Professor, Rcapozzi@uaa.alaska.edu
Dave Cusick, Term Assistant Professor, Dcusick@uaa.alaska.edu
James Derry, Term Assistant Professor, Jsderry@uaa.alaska.edu
Lou Nagy, Professor, Lnagy@uaa.alaska.edu
Mark Madden, Professor, Memadden@uaa.alaska.edu
Lou Nagy, Professor, Lnagy@uaa.alaska.edu
Randy Roberts, Associate Professor, Rroberts2@uaa.alaska.edu
John Wight, Associate Professor, Jiwight@uaa.alaska.edu
Chapter 10

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**COMPUTER INFORMATION AND OFFICE SYSTEMS**

*Anchorage - University Center (UC), Room 130, (907) 786-6426*

www.uaa.alaska.edu/cnot/Academics/cios

*Kenai - Ward Building, Room 204, (907) 262-0355, (877) 262-0330*

www.kpc.alaska.edu/cios

*Kodiak - Campus Center, Room 123D, (907) 486-1212*

www.koc.alaska.edu

*Matanuska-Susitna - FSM 108, (907) 745-9345*

http://matsu.alaska.edu

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 the 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 program offers the following OECs:

- **Office Foundations**
- **Bookkeeping Support**
- **Medical Office Support**
- **Corporate Specified Skills**
- **Office Digital Media**
- **Office Support**
- **Technical Support**

**Admission Requirements**


**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.

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**Occupational Endorsement Certificate, Office Foundations**

Provides foundational skills required for entry into the administrative office professional field.

**Program Student Learning 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 1
   - CIOS A113 Operating Systems: MS Windows 1
   - CIOS A130A Word Processing I: MS Word 1
   - CIOS A135A Spreadsheets I: MS Excel 1
   - CIOS A146 Internet Concepts and Applications 2
   - CIOS A161A Proofreading 2
   - CNT A165 Customer Service Fundamentals 1

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.

**Program Student Learning 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.

Program Student Learning 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)
   - CIOS A135A: Spreadsheets I: MS Excel (1)
   - CIOS A140A: Databases I: MS Access (1)
   - CIOS A146: Internet Concepts and Applications (2)
   - CIOS A150A: Presentations: MS PowerPoint (2)
   - CIOS A152: Digital Imaging Concepts and Applications: Photoshop (3)
   - CIOS A153B: Website Design: Dreamweaver (3)
   - CIOS A164: Filing (1)
   - CIOS A190: Selected topics in Office Technology (1-3)
   - CIOS A230A: Word Processing II: MS Word (2)
   - CIOS A235A: Spreadsheets II: MS Excel (2)
   - CIOS A240A: Databases II: MS Access (2)
   - CIOS A251: Desktop Publishing Concepts and Applications: InDesign (3)
   - CIOS A259: Preparing Electronic Documents: Adobe Acrobat (1)
   - CIOS A264A: Records Management (2)
   - Other courses approved by the advisor

2. Choose 3 to 9 credits from the following communication skills set: 3-9
   - CIOS A161: Proofreading (2)
   - CIOS A190: Selected topics in Office Technology (1-3)
   - CIOS A260A: Business Communications (3)
   - Other courses approved by the advisor

3. Choose 3 to 11 credits from the following soft skills set: 3-11
   - CIOS A165: Office Procedures (3)
   - CIOS A190: Selected topics in Office Technology (1-3)
   - CIOS A261A: Interpersonal Skills in Organizations (3)
   - CIOS A262A: Professional Development (3)
   - CIOS A265: Office Management (3)
   - Other courses approved by the advisor

A total of 9 to 29 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.

Program Student Learning 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 prior to admission to this program.

2. Complete 1 credit from the following: 1
   - CIOS A101B: Keyboarding B: Business Documents I (1)
   - CIOS A101C: Keyboarding C: Business Documents II (1)

3. Complete the following 11 credits: 3
   - 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: 3
   - Recommended Courses:
     - BIOL A100: Human Biology (3)
     - CIOS A208: Medical Transcription (3)
     - MA A104: Essentials of Human Disease (3)
     - MA A140: Medical Transcription I (2-3)
     - MA A220: Coding for the Medical Office (3)

A total of 15 credits is required for this OEC.

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.

Program Student Learning 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: 1
   - 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)
2. Upon completion of this OEC, students will demonstrate:

Program Student Learning Outcomes

1. Intermediate skills that utilize advanced features of word processing, spreadsheet, and database software.
2. The ability to develop digital presentations and documents using a variety of media.

Requirements

1. Must complete the 9-credit Office Foundations OEC prior to admission to this program.
2. Complete the following required courses:
   - CIOS A101B Keyboarding B: Business Documents I
   - CIOS A101C Keyboarding C: Business Documents II
   - CIOS A115 10-Key for Business Calculations
   - CIOS A125A Electronic Communications: MS Outlook
   - CIOS A140A Databases I: MS Access
   - CIOS A150A Presentations: MS PowerPoint
   - CIOS A164 Filing
   - CIOS A165 Office Procedures
   - CIOS A259 Preparing Electronic Documents: Adobe Acrobat

3. A total of 13 credits is required for this OEC.

Occupational Endorsement Certificate, Office Support

Builds on the Office Foundations OEC with additional skills an administrative assistant would typically use in an office setting.

Program Student Learning Outcomes

Upon completion of this OEC, students will demonstrate:

1. Keystroke skills of 35 net words per minute minimum.
2. Entry level skills in managing data using a variety of media.
3. The ability to develop digital presentations and documents using a variety of media.

Requirements

1. Must complete the 9-credit Office Foundations OEC prior to admission to this program.
2. Complete the following required courses:
   - CIOS A101B Keyboarding B: Business Documents I
   - CIOS A101C Keyboarding C: Business Documents II
   - CIOS A115 10-Key for Business Calculations
   - CIOS A125A Electronic Communications: MS Outlook
   - CIOS A140A Databases I: MS Access
   - CIOS A150A Presentations: MS PowerPoint
   - CIOS A164 Filing
   - CIOS A165 Office Procedures
   - CIOS A259 Preparing Electronic Documents: Adobe Acrobat

3. 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.

Program Student Learning Outcomes

Students graduating with an Associate of Applied Science in Computer Information and Office Systems will be able to demonstrate:

1. Keyboarding skills of 40 net words per minute minimum.
2. Intermediate skills that utilize advanced features of word processing, spreadsheet, and database software.
3. Oral and written communication skills that meet business standards.
4. Application of critical thinking skills to make effective decisions and solve problems.
5. Professional behavior and interpersonal skills.

Admission Requirements

See Associate of Applied Science admissions in Chapter 7.

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
   - CIOS A230A Word Processing II: MS Word
   - CIOS A235A Spreadsheets II: MS Excel
   - CIOS A240A Databases II: MS Access
   - CIOS A262A Professional Development
   - CIOS A264A Records Management
   - CIOS A265 Office Management

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)
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.

Advising
Students should consult the CNT faculty for assistance with curriculum planning toward certifications.

Academic Progress
Students must earn a satisfactory grade (C or higher) in all courses required for the certificate.

General University Requirements
See General University Requirements for Occupational Endorsement Certificates at the beginning of this chapter.

Major Requirements
1. Complete the following required courses with a grade of C or better:
   - CNT A160: CCNA 1 Introduction to Networking 4
   - CNT A170: CCNA 2 Network Fundamentals 4
   - CNT A180: CCNA 3 Switching and Protocols 4
   - CNT A261: CCNA 4 CCNA Certificate 4
   - CNT A270: CCNA 5 Internetworking and Wireless 4
   - CNT A271: CCNA 6 CCNA 6 4
   - CNT A272: CCNA 7 CCNA 7 4
2. A total of 16 credits is required for the occupational endorsement certificate.

Undergraduate Certificate, Computer and Networking Technology

Program Description and Student Learning 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.

Advising
Students should consult the CNT faculty for assistance with curriculum planning toward certifications.

Academic Progress
Students must earn a satisfactory grade (C or higher) in all Computer and Networking Technology courses required for the certificate.

General University Requirements
See General University Requirements for Undergraduate Certificates at the beginning of this chapter.
### Major Requirements

1. Complete the following required courses with a grade of C or better (27 credits):
   - CNT A162  PC Architecture and Building  3
   - CNT A165  Customer Service Fundamentals  1
   - CNT A170  CCNA 1 Network Fundamentals  4
   - CNT A180  PC Peripherals, Storage and A+ Certification  4
   - CNT A183  Local Area Networks  3
   - CNT A261  CCNA 2 Router Fundamentals and Protocols  4
   - CNT A270  CCNA 3 Switching and Wireless  4
   - CNT A271  CCNA 4 WAN Access  4

2. Complete a minimum of 5 credits from the following courses with a grade of C or better:
   - CNT A240  Industry PC Configuration Essentials (2)
   - CNT A241  Administering and Supporting Industry Network Infrastructure (3)
   - CNT A264  Introduction to Information Security (3)
   - CNT A280  Server Operating Systems (3)
   - CNT A290  Selected Topics in Information Technology (1-4)

3. Complete a minimum of 3 credits from the following courses:
   - CIOS A101A  Keyboarding A: Basic Keyboarding (1)
   - CIOS A113  Operating Systems: MS Windows (1)
   - CIOS A130A  Word Processing I: MS Word (1)
   - CIOS A135A  Spreadsheets I: MS Excel (1)
   - CIOS A140A  Databases I: MS Access (1)
   - CIOS A146  Internet Concepts and Applications (2)
   - CIOS 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 (1-4)

4. Complete 3 credits from the following courses:
   - PRPE A108  Introduction to College Writing (3)
   - ENGL A109  Introduction to Writing in Academic Contexts (3)

   **Note:** English A111 is required for the AAS degree.

5. A minimum of 38 credits are required for the certificate.

### Associate of Applied Science, Computer and Networking Technology

#### Description and Program Student Learning Outcomes

This associate degree prepares students to install, configure, administer, 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. 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.
10. The ability to think critically and solve problems.

### Admission Requirements

See Admission Requirements to Undergraduate Certificate and Associate Degree Programs in Chapter 7.

### Academic Progress

Students must earn a satisfactory grade (C or higher or P) in all Computer and Networking Technology courses required for the degree.

### 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 with a grade of C or better (35 credits):
   - CNT A162  PC Architecture and Building  3
   - CNT A165  Customer Service Fundamentals  1
   - CNT A170  CCNA 1 Network Fundamentals  4
   - CNT A180  PC Peripherals, Storage and A+ Certification  4
   - CNT A183  Local Area Networks  3
   - CNT A240  Industry PC Configuration Essentials  2
   - CNT A261  CCNA 2 Router Fundamentals and Protocols  4
   - CNT A264  Introduction to Information Security  3
   - CNT A270  CCNA 3 Switching and Wireless  4
   - CNT A271  CCNA 4 WAN Access  4
   - CNT A280  Server Operating Systems  3

2. Complete a minimum of 12 credits from the following courses with a grade of C, P or better:
   - CNT A241  Administering and Supporting Industry Network Infrastructure (3)
   - CNT A242  Industry Network Directory Configuration (3)
   - CNT A262  Computer Technical Support (2)
   - CNT A276  Individual Technical Project (1-3)
   - CNT A282  Industry Workplace Experience (1-3)
   - CNT A290  Selected Topics in Information Technology (1-4)
   - CNT A390  Selected Topics in Computer and Networking Technology (1-4)

3. Complete a minimum of 3 credits from the following courses:
   - CIOS A101A  Keyboarding A: Basic Keyboarding (1)
   - CIOS A113  Operating Systems: MS Windows (1)
   - CIOS A130A  Word Processing I: MS Word (1)
   - CIOS A135A  Spreadsheets I: MS Excel (1)
   - CIOS A140A  Databases I: MS Access (1)
   - CIOS A146  Internet Concepts and Applications (2)
   - CIOS A150A  Presentations: MS PowerPoint (2)
   - CIS A105  Introduction to Personal Computers and Applications Software (3)
   - CIS A110  Computer Concepts in Business (3)
   - CNT A183  Local Area Networks  3
An Associate of Applied Science in Computer Systems Technology (CST) program is offered through Matanuska-Susitna College and Kodiak College. The program encompasses vendor-neutral and theoretical concepts and practices; it also includes both Windows Server operating systems and Cisco routing and switching technology. Five or more full-time semesters are required to complete the degree program.

The CST degree offers students business, communication, teamwork, and technical skills and IT concepts needed to enter the workforce as entry-level technicians or administrators. It also provides a foundation for advanced studies in technology.

Program Student Learning Outcomes
Upon program completion, CST graduates will be able to demonstrate:

1. the ability to manage an IT-related project by professionally and ethically utilizing business principles, communication skills and teamwork;
2. competence in IT workplace service skills through customer service, troubleshooting and implementation of security;
3. an understanding of IT concepts and technical skills, installing and configuring operating systems, and using utility software;
4. knowledge of computer hardware and peripherals; and
5. knowledge of network infrastructure, network workgroups and domain administration.

Associate of Applied Science, Computer Systems Technology

Admission Requirements
Satisfy the Admission to Certificate and Associate Degree Programs Requirements in Chapter 7.

Academic Progress
In order to receive an Associate of Applied Science in Computer Systems Technology, students must achieve a grade of C or higher in all major course requirements.

Students registering for the CST degree are required to take the recent Computer Skills Placement (CSP) test. Students with a score of 80 percent in the categories of Basic Concepts, File Management, Word Processing, Spreadsheet, and a score of 65 in the category of Information and Communication will be admitted into the CST program. Students with lower scores in any of these categories will need to take the required prerequisite course CIS A105 Introduction to Personal Computers and Application Software and pass with a grade of B or better, or CIS A110 Computer Concepts in Business and pass with a grade of C or better.

**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**
Complete the following required courses:

1. Workforce Skills (12-13 credits):
   - BA A151 Introduction to Business* 3
   - BA A231 Fundamentals of Supervision 3
   - ENGL A212 Technical Writing* 3
   - MATH A105 Intermediate Algebra (3)† 3-4
   - MATH A107 College Algebra (4)† 0 or
   - MATH A172 Applied Finite Mathematics (3)† 0
   *BA 151, ENGL A212, and MATH A105, MATH A107, MATH A172 may also be used to satisfy General Course Requirements.
   † or any MATH course for which MATH A105, MATH A107 or MATH A172 is a prerequisite.

2. Computer Knowledge and Project Skills (18-19 credits):
   - CNT A160 PC Operating Systems 3
   - CNT A165 Customer Service Fundamentals 1
   - CNT A168 Computer User Support and Help Desk 3
   - CNT A180 PC Peripherals, Storage and A+ Certification (4) 3-4
   - CNT A210 PC Technician Fundamentals (3) 0 or
   - CNT A183 Local Area Networks (3) 3 or
   - CNT A212 Network Technician Fundamentals (3) 0 or
   - CNT A270 Network Operating System Management (3) 2 or
   - CNT A275 Information Technology Project Management (2) 0
   - CNT A276 Individual Technical Project (1-3) 3 or
   - CNT A282 Industry Workplace Experience (1-3) 0

3. Industry Server Operating System Environment (11 credits):
   - CNT A240 Industry PC Configuration Essentials 2
   - CNT A241 Administering and Supporting Industry Network Infrastructure 3
   - CNT A242 Industry Network Directory Configuration 3
   - CNT A243 Industry Application Infrastructure 3

4. Network Router and Switching (16 credits):
   - CNT A170 CCNA 1 Network Fundamentals 4
   - CNT A261 CCNA 2 Router Fundamentals and Protocols 4
   - CNT A270 CCNA 3 Switching and Wireless 4
   - CNT A271 CCNA 4 WAN Access 4

5. Complete 6 credits from the following courses:
   - CNT A264 Introduction to Information Security (3) 0
   - CNT A290 Selected Topics in Information Technology (1-4)**
   - CNT A390 Selected Topics in Computer and Networking Technology (1-4)**
   **CNT A290 and CNT A390 may be taken twice with a change in subtitle.

6. A total of 69 or more credits is required for the degree.

**FACULTY**
Harry Banks, Instructor, hbanks@matsu.alaska.edu
Alan Fugleberg, Program Coordinator, afugleberg@kodiak.alaska.edu


CONSTRUCTION MANAGEMENT

University Center (UC), Room 130, (907) 786-6465
www.uaa.alaska.edu/cdt

The Construction Management (CM) program provides comprehensive preparation and education to meet the growing need for highly trained and educated construction management professionals. Construction managers plan, direct, and are responsible for managerial oversight of construction projects. They are responsible for coordinating and managing people, materials, and equipment; budgets, schedules, and contracts; and for the safety of employees and the general public. Construction managers work closely with architects, engineers, owners, and 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 the contract and monitor work progress while ensuring compliance with the project design. Construction managers work in all sectors of the construction industry, for both public and private owners, on projects that range from residential projects to skyscrapers and from rural roads to major highways and bridges. The construction manager’s duties are varied, challenging, and rewarding.

The 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. CM graduates understand basic business principles and possess broad knowledge of the technical and operational aspects of the construction industry. Graduates are able to function both in the construction office and on the job site.

The wide diversity in the construction management profession creates a similar diversity of employment opportunities for graduates. Associate degree graduates are prepared for entry-level positions in varying construction management roles for contractors in both home office and project office/field situations. Bachelor’s degree graduates are prepared for a wide variety of professional-level employment opportunities in construction companies, construction management consulting firms, and in the offices of government and project owner agencies. The Associate of Applied Science in Construction Management degree requires four to five semesters to complete. The Bachelor of Science in Construction Management degree requires eight to nine semesters to complete.

Accreditation

The Associate of Applied Science, Construction Management degree and the Bachelor of Science, Construction Management degree are accredited by the American Council for Construction Education (ACCE).

Advising

Students are strongly 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.

Construction Management students should meet with their academic advisor each semester for the purpose of reviewing their academic progress and planning future courses. It is particularly important for students to meet with their advisor whenever academic difficulties arise. Please call (907) 786-6465 to arrange an appointment with an academic advisor.

Preparation

Students seeking a degree in Construction Management should prepare for entrance into the program by completing the following high school courses:

Mathematics

Algebra II (skill level as demonstrated by ACT, SAT, or UAA-approved placement test to qualify for enrollment in MATH A105 Intermediate Algebra).

English

Composition (skill level as demonstrated by ACT, SAT, or UAA placement test to qualify for enrollment in ENGL A111 Introduction to Composition).

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 Student Learning Outcomes

Graduates will be able to:

- Explain 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.
- Demonstrate basic knowledge of contract administration procedures and the communication methods used in their implementation.
- Define the methods, materials, and techniques used in the design and construction of buildings and civil works.
- Interpret construction documents to predict project costs, plan construction operations, develop project schedules and assign resources.
- Interpret and apply building codes in construction processes.
- Demonstrate 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.
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 (20-21 credits):

1. Support courses:
   - ACCT A201 Principles of Financial Accounting 3
   - BA/JUST A241 Business Law I 3
   - *ENGL A212 Technical Writing 3
   - GEO A181 Construction Surveying 3
   - *MATH A107 College Algebra (4) 6-7
   - *MATH A108 Trigonometry (3) or
   - *MATH A109 Precalculus (6)
   - *PHYS A123 Basic Physics I (3) and
   - *PHYS A123/L Basic Physics I Laboratory (1) or
   - *GEOL A111 Physical Geology (4)

   *Note: Required support courses may also be used to satisfy General Course Requirements.
Major Requirements
1. Complete the following required courses (40 credits):
   - AET/CM A101 Fundamentals of CADD for Building Construction 4
   - AET/CM A102 Methods of Building Construction 3
   - AET/CM A123 Codes and Standards 3
   - AET/CM A142 Mechanical and Electrical Technology 4
   - AET/CM A231 Structural Technology 4
   - CM A163 Building Construction Cost Estimating 3
   - CM A201 Construction Project Management I 3
   - CM A202 Project Planning and Scheduling 3
   - CM A205 Construction Safety 3
   - CM A213 Construction Civil Technology 4
   - CM A263 Civil Construction Cost Estimating 3
2. Complete one of the following courses 3
   - CM A295 Construction Management Internship (3) or
   - CM A495 Advanced Construction Management Internship (3)
3. A total of 66-67 credits is required for the degree.

Bachelor of Science, Construction Management

Program Student Learning 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.
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.

Program Note
All BSCM majors are required to sit for the 8-hour, comprehensive American Institute of Constructors, Associate Constructor (Level 1) Exam as part of CM A450 Construction Management Professional Practice. CM A450 should be taken during the last or second-to-last semester before graduation.

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 (43-44 credits):
   - ACCT A201 Principles of Financial Accounting 3
   - ACCT A202 Principles of Managerial Accounting 3
   - BA A300 Organizational Theory and Behavior 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) or
   - CE A403 Arctic Engineering (3)
   - GEO A181 Construction Surveying 1
2. Complete one of the following courses: 3
   - *PHIL A301 Ethics (3) or
   - *PHIL A305 Professional Ethics (3)
3. Complete two of the following science courses with a laboratory class: 8
   - *CHEM A105 General Chemistry I (3) and
   - CHEM A105L General Chemistry I Laboratory (1) or
   - *GEOL A111 Physical Geology (4) or
   - *PHYS A123 Basic Physics I (3) and
   - *PHYS A123L Basic Physics I Laboratory (1)
4. Complete one additional science course at or above the *100-level in CHEM, ENVI, GEOL, or PHYS with laboratory class. 4
5. 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 (64 credits):
   - AET/CM A101 Fundamentals of CADD for Building Construction 4
   - AET/CM A102 Methods of Building Construction 3
   - AET/CM A123 Codes and Standards 3
   - AET/CM A142 Mechanical and Electrical Technology 4
   - AET/CM A231 Structural Technology 4
   - CM A163 Building Construction Cost Estimating 3
   - CM A201 Construction Project Management I 3
   - CM A202 Project Planning and Scheduling 3
   - CM A205 Construction Safety 3
   - CM A213 Construction Civil Technology 4
   - CM A263 Civil Construction Cost Estimating 3
   - CM A295 Construction Management Internship 3
   - CM A495 Advanced Construction Management Internship 3
   
   *Tier 3 General Education Requirement, integrative capstone.
The following programs are available:
in active collaboration and partnership with the DOC.
other states. These corrections certificate programs have been developed
competitive with non-Alaskans for corrections jobs within Alaska and in
occupational training for current DOC employees. Graduates will be
new applicants for entry-level positions in corrections and provide
personnel without powers to arrest or carry firearms). They prepare
with statutory power of arrest or those who are honorably retired law
of criminal behavior. The programs are appropriate for sworn (those
in oral and written communication, and an introduction to theories
Instruction includes criminal and restorative justice systems, courses
background required for success in entry-level corrections positions.
The KPC corrections certificate programs provide the academic
secure, rewarding positions with excellent benefits and retirement.
technicians may transition to officer positions. These positions lead to
Department of Corrections (DOC). With experience, criminal justice
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, 156 College Road, Soldotna, AK 99669, (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.

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 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 A15A Spreadsheets I: MS Excel 1
   ENGL A111 Introduction to Composition 3
   HUMS A101 Introduction to Human Services 3
   HUMS A122 Substance Abuse as a Contemporary
   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
156 College Road, Soldotna, AK 99669, (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 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 Student Learning Outcomes**

The specific education outcomes of this program are to produce graduates who are able to:

1. Describe the criminal justice system as a whole and the organization of criminal justice institutions.
2. Demonstrate proficiency in probation, parole and correctional institutional methods.
3. Coordinate with human services and other public service entities.
4. Manipulate spreadsheets and compute formulas with basic proficiency.
5. Communicate effectively in oral and written technical English appropriate for public service.
7. Describe adult corrections institutions, community-based programs and restorative justice.
8. Explain relevant human services issues (human behavior, substance abuse) and problem-solving methods.
9. Possess competitive entry-level skills for employment and promotion in the field of corrections.

**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.

**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 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. 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:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL A212</td>
<td>Technical Writing (3)</td>
<td></td>
</tr>
<tr>
<td>ENGL A213</td>
<td>Writing in the Social and Natural Sciences (3)</td>
<td></td>
</tr>
<tr>
<td>ENGL A214</td>
<td>Persuasive Writing (3)</td>
<td></td>
</tr>
</tbody>
</table>

3. Complete two of the following courses in written communication with a minimum grade of C:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL A111</td>
<td>Introduction to Composition (3)</td>
<td></td>
</tr>
</tbody>
</table>

4. Complete one of the following two courses, with a minimum grade of C:  
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM A237</td>
<td>Interpersonal Communication (3)</td>
<td></td>
</tr>
<tr>
<td>HUMS A153</td>
<td>Human Relations (3)</td>
<td></td>
</tr>
</tbody>
</table>

5. A total of 31 credits is required for this certificate.

**FACULTY**

Ruben Foster, Instructor, PFRAF@uaa.alaska.edu  
Randy Rosencrans, Instructor, IFRGR@uaa.alaska.edu

**CULINARY ARTS**

Lucy Cuddy Hall (CUDY), Room 126, (907) 786-1487  
www.uaa.alaska.edu/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).

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 five semesters of full-time study to complete (12-15 credits per semester). With additional culinary electives, students may focus their studies in culinary/bakery, management, or hospitality. Through a study abroad agreement, students have the option of studying abroad for one semester at the prestigious Italian Culinary Institute of Florence (APICUS).

The bachelor’s degree generally takes four to five years of study to complete. 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 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 delivery. Please note that students may have to pay nonresident tuition for out-of-state study if they do not apply for National Student Exchange (NSE).

The capstone experience for the bachelor’s degree is a 600-hour 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.

**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 Student Learning Outcomes**

Graduates 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
Satisfy the Admission to Associate’s Degree Programs Requirements in Chapter 7.

Advising
Call the Culinary Arts department at (907) 786-1487 for an appointment with a faculty advisor to plan a personal program of study.

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:

- 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)

Note: ENGL A111 and MATH A055 with a minimum grade of C are prerequisites and must be completed before enrolling in the above Culinary Arts courses. Appropriate SAT, ACT or UAA-approved Math Placement Test scores may be used in lieu of MATH A055. Also, each of the above Culinary Arts courses must be completed with a grade of C or higher before student can enroll in Major Requirement Courses.

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: 24 credits
   - CA A103 Culinary Skill Development Laboratory (4)
   - CA A111 Bakery Skill Development Laboratory (4)
   - CA A201 A la Carte Kitchen (4)
   - CA A202 Advanced Bakery (4)
   - CA A223 Catering Management (2)
   - CA A224 Hospitality Service (3)
   - CA A230 Foodservice Management (3)
2. Complete a minimum of 9 credits from the Elective Area
   - ACCT A101 Principals of Financial Accounting I (3)
   - ACCT A102 Principals of Financial Accounting II (3)
   - ART A105 Beginning Drawing (3)
   - ART A160 Art Appreciation (3)
   - ART A224 Beginning Photography (3)
   - BA A151 Introduction to Business (3)
   - BA A166 Small Business Management (3)
   - BA/JUST A241 Business Law I (3)
   - CA A114 Beverages Management (3)
   - CA A225 Hospitality Concept Design (3)
   - CA A295 Foodservice Internship (3)
   - DN A151 Nutrition Through the Life Cycle (3)

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 Student Learning Outcomes
Graduates 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
Complete the Admission to Baccalaureate Programs Requirements in Chapter 7.

Advising
Call the Culinary Arts and Hospitality Department at (907) 786-1487 for an appointment with a faculty advisor to plan a personal program of study.

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.
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 three emphasis study core options listed below.

Major Requirements
1. Culinary Core
   - Complete all of the following courses (27 credits):
     - CA A101 Hospitality Industry: Careers, Trends, and Practices (2)
     - CA A103 Culinary Skill Development Laboratory (4)
     - CA A104 Sanitation (2)
     - CA A107 Cost Control (3)
     - CA A110 Quantity Food Purchasing (2)

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2. **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

*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.*

3. 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 require two semesters to complete.

Students who wish to attend NAU or UNLV are highly encouraged to apply for National Student Exchange as this greatly minimizes the amount of out-of-state tuition paid. Students must have a 2.50 minimum GPA to meet NSE eligibility requirements.

*Special note: It is possible to complete NAU or UNLV coursework via distance delivery. This requires special coordination with the UAA program academic advisor.*

I. **Northern Arizona University (NAU) Hospitality Core (24 credits)**

*Majors must coordinate NAU plan of study with program academic advisor. Coursework must be at the 300/400 level in the area of Hotel/Restaurant Management, Catering/Convention Management, Sustainable Tourism, or Outdoor Wilderness Recreation Tourism.*

II. **University of Nevada Las Vegas (UNLV) Hospitality Core (24 credits)**

*Majors must coordinate UNLV plan of study with program academic advisor. Coursework must be at the 300/400 level in the area of Hotel/Restaurant Management, Catering/Convention Management, Sustainable Tourism, or Outdoor Wilderness Recreation Tourism.*

Additionally, complete four elective courses at the 300/400 level in the area of Hotel/Restaurant Management, Catering/Convention Management, Tourism Management, Sustainable Tourism, or Outdoor Wilderness Recreation Tourism.

III. **University of Alaska Anchorage Nutrition Core (27 credits):**

a. Complete the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DN A151</td>
<td>Nutrition Through the Life Cycle</td>
<td>3</td>
</tr>
<tr>
<td>DN A203</td>
<td>Nutrition for the Health Sciences</td>
<td>3</td>
</tr>
<tr>
<td>DN A255</td>
<td>Concepts of Healthy Food</td>
<td>3</td>
</tr>
<tr>
<td>DN A315</td>
<td>World Food Patterns</td>
<td>3</td>
</tr>
<tr>
<td>DN A350</td>
<td>Foodservice Systems and Quantity Foods</td>
<td>3</td>
</tr>
<tr>
<td>DN A355</td>
<td>Weight Management and Eating Disorders</td>
<td>3</td>
</tr>
<tr>
<td>DN A407</td>
<td>Preventative and Therapeutic Nutrition</td>
<td>3</td>
</tr>
</tbody>
</table>

b. Complete the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA Elective (300 level or higher)</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

*Note: Much of the Nutrition Core can be completed online through UAA.*

4. **Internship Requirement**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA A495</td>
<td>Hospitality Internship</td>
<td>6</td>
</tr>
</tbody>
</table>

5. With the NAU/UNLV emphasis areas a minimum of 121 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. With the UAA/Nutrition Emphasis a minimum of 124 credits is required for the degree of which 42 must be upper division.

**FACULTY**

- Timothy Doebler, Associate Professor/Director, tdoebler@uaa.alaska.edu
- Anne Bridges, Professor, abridges2@uaa.alaska.edu
- Carrie King, Term Associate Professor, cdking@uaa.alaska.edu
- Amy Green, Associate Professor, amgreen5@uaa.alaska.edu
- Kendra Sticka, Term Assistant Professor, kdsticka@uaa.alaska.edu
- Amanda Walch, Term Assistant Professor, awalch@uaa.alaska.edu
- Vern Wolfram, Assistant Professor, vwolfram@uaa.alaska.edu
- Naomi Everett, Assistant Professor, neverrett@uaa.alaska.edu

**Dietetics and Nutrition**

*R. Cuddy Hall (CUDY), Room 126, (907) 786-1276*

*www.uaa.alaska.edu/culinary*

The Culinary Arts, Hospitality, Dietetics and Nutrition Division seeks to meet the growing needs of the dietetics and nutrition industry by training entry-level registered dietitians and community nutrition and nutrition science professionals. Four undergraduate academic areas of study are offered including a Bachelor of Science in Dietetics, Bachelor of Science in Nutrition with Community Nutrition emphasis, Bachelor of Science in Nutrition with Nutrition Science emphasis, and a minor in Nutrition.

**Bachelor of Science in Dietetics**

Provides the first step to meeting the eligibility requirements to take the national Registered Dietitian (RD) exam. RDs are health care professionals who provide Medical Nutrition Therapy and consultative service in health care and wellness settings. In order to complete the eligibility requirements for the RD exam, students must complete the coursework for a bachelor’s degree, in a program accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND), in addition to completing a 1200 hour ACEND accredited dietetic internship.

**Bachelor of Science in Nutrition**

- **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 or Dietetics the opportunity to minor in Nutrition.

Dietetics and Nutrition also offers a Graduate Certificate: Dietetic Internship. Please see Chapter 12 for more information.

**Bachelor of Science, Dietetics**

The Bachelor of Science in Dietetics provides individuals the didactic requirements needed to complete a Dietetic Internship and then be eligible to take the Registered Dietitian (RD) exam. The Bachelor
of Science in Dietetics mission statement is to guide the future of dietetics in Alaska by preparing students for supervised practice. To be successful in their field, RDs need a strong science foundation along with courses in management, clinical and community nutrition, food science, communication, counseling, therapeutic nutrition and nutrition for the lifespan. This degree has been designed in accordance with the 2008 Eligibility Requirements and Accreditation Standards from the Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics. There is a competitive application process for admissions to the Bachelor of Science in Dietetics. Please contact the Culinary Arts, Hospitality / Dietetics and Nutrition Division for application information.

Program Student Learning Outcomes
At the completion of this program, students will be able to:

1. Assess the nutritional needs of individuals, populations and diverse cultures, including infants, children, adolescents, adults, pregnant/lactating females and the elderly.
2. Utilize the nutrition care process to make decisions, identify nutrition-related problems and determine and evaluate nutrition interventions, including medical nutrition therapy, disease prevention and health promotion.
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. Develop an educational session or program/educational strategy for a target population.
6. Demonstrate counseling techniques to facilitate behavior change.

The Dietetics and Nutrition (DN) coursework in residence at UAA (see Major Requirements on the UAA Dietetics Program website).

Admission Requirements
Students who apply to the baccalaureate Dietetics major and who qualify for admissions to the Bachelor of Science Degree Programs (see Chapter 7) are admitted first as pre-dietetics majors. To be admitted to the pre-dietetics major, students must:

1. Complete ENGL A111 or ENGL A1W with a grade of C or better
2. Complete MATH A105 or higher level math course with a grade of C or better
3. Complete at least 3 credits of college chemistry (may be CHEM A055) with a grade of C or better
4. Complete at least 12 credits of college course-work
5. Maintain a cumulative GPA of at least 2.5
6. Attend a group advising session for pre-dietetics majors

Admissions as a pre-dietetics major does not guarantee admissions to the Dietetics program. There is limited capacity in the program. Students may apply for admissions to the full Dietetics major (Didactic Program in Dietetics or DPD) in the spring semester in which they are completing the final prerequisites for the full major (see number 4 below). The application deadline for the DPD is February 15 of each year. The application form and full requirements can be found on the UAA Dietetics Program website. Applicants transferring credit from another institution should apply to UAA no later than November 1 prior to spring application to the Dietetics program to allow sufficient time for application processing and transcript evaluation. Spring enrollment in another institution may postpone transcript evaluation and therefore affect program acceptance.

The requirements for application to the full Dietetics major are:
1. Satisfy the Admission to Baccalaureate Programs Requirements in Chapter 7.
2. Schedule an advising session with a Dietetics and Nutrition program advisor regarding application and program admission requirements prior to application. For an advising appointment, call 786-1276.
3. Submit a DPD admissions application (found on the Dietetics Program website).
4. Complete the following courses with a minimum grade of C and an overall GPA of 3.0: BIOL, CHEM, and DN courses (or a higher level course in similar subject matter as approved by the DPD director) must have been completed within the past 10 years: BIOL A111 Human Anatomy and Physiology I (4) BIOL A112 Human Anatomy and Physiology II (4) BIOL A115 Fundamentals of Biology I (4) BIOL A240 Introductory Microbiology for Health Sciences (4) CHEM A105/L General Chemistry I with Laboratory (4) CHEM A106/L General Chemistry II with Laboratory (4) DN A100 The Profession of Dietetics (1) DN A203 Nutrition for Health Sciences (3) Humanities GER (6) (language is recommended) MATH A107 College Algebra (3-6) or higher level math course Oral Communication GER (3) or SOC A101 Introduction to Sociology (3) Written Communication GER (6)

*Conditional acceptance to the program can be granted if the students are in the process of taking any of the prerequisite courses during the spring semester. Students will need to provide official proof of course completion with a minimum grade of C prior to starting the program.

Students admitted to the full Dietetics major (DPD) are granted conditional acceptance to the UAA Dietetic Internship (see Chapter 12 for internship details and requirements).

Academic Progress
In order to progress within the DPD, students must earn C or higher in each required course and maintain a GPA of 3.0 or higher in all required courses.

Advising
1. Contact the Culinary Arts, Hospitality, Dietetics and Nutrition Division by calling (907) 786-1276 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 Dietetics degree program are required to participate in a Dietetics advising session a minimum of one time per year.

Degree Requirements
1. Complete the General University Requirements for All 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.
4. Meet the following GPA requirements:
a. A minimum overall GPA of 3.0 in support courses and major requirements.
b. A grade of C or higher must be earned in all courses that count toward the major.
c. A minimum cumulative GPA of 2.50.

Support Courses
Complete the following courses, some of which may be used to satisfy the General Education Requirement (51 credits):

BIOL A111 Human Anatomy and Physiology I 4
BIOL A112 Human Anatomy and Physiology II 4
BIOL A115 Fundamentals of Biology I 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 Oral Communication GER course 3
ECON A201 Principles of Macroeconomics 3
ENGL A111 Introduction to Composition (3) 3
or
ENGL A1W Written Communication GER (3) 3
ENGL A212 Technical Writing (3) 3
or
ENGL A213 Writing in the Social and Natural Sciences (3) 3
Fine Arts GER 3
Humanties GER (language recommended) 6
MATH A107 College Algebra 4
or any course for which MATH A107 is a prerequisite
PSY A111 General Psychology (3) 3
or
SOC A101 Introduction to Sociology (3) 3
STAT A252 Elementary Statistics 3

Major Requirements
1. Complete the following required courses (61 credits):
   ACCT A101 Principles of Financial Accounting 3
   BIOL A240 Introductory Microbiology for Health Sciences 4
   CHEM A321 Organic Chemistry I 3
   *CHEM A441 Principles of Biochemistry I 3
   DN A100 The Profession of Dietetics 1
   DN A151 Nutrition through the Life Cycle 3
   DN A155 Survey of Alaska Native Nutrition 3
   DN A203 Nutrition for Health Sciences 3
   DN A255 Concepts of Healthy Food 3
   DN A260 Food Science 3
   DN A301 Nutrition Assessment 3
   DN A312 Nutrition Communication and Counseling 3
   DN A315 World Food Patterns 3
   DN A350 Foodservice Systems and Quantity Foods 3
   DN A401 Medical Nutrition Therapy I 3
   DN A402 Medical Nutrition Therapy II 3
   *DN A415 Community Nutrition 3
   DN A430 Research Methods in Nutrition and Dietetics 3
   DN A450 Dietetic Management 3
   DN A475 Advanced Nutrition 3
   DN A492 Senior Seminar in Dietetics 2
*Integrative Capstone Course

2. Electives (8 credits)
3. A minimum of 120 credits is required for the Dietetics degree, of which a minimum of 42 credits must be upper division.

Bachelor of Science, Nutrition
The Bachelor of Science in Nutrition prepares individuals for professional positions within the nutrition industry. The mission statement of the Bachelor of Science 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. 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 mainly online courses to facilitate access to the BS in Nutrition degree statewide.

Admission Requirements
1. Satisfy the Admission to Baccalaureate Degree Programs Requirements in Chapter 7.
2. Meet with the Dietetics and Nutrition program advisor regarding application and program admission requirements prior to application. For an advising appointment call 786-1276.

Academic Progress
In order to progress within the baccalaureate Nutrition program, students must earn a C or higher in each required course and maintain a GPA of 2.5 or higher in required courses.

Advising
1. Call the Culinary Arts, Hospitality, Dietetics and Nutrition Department at (907) 786-1276 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 advising sessions a minimum of one time per year.

Community Nutrition Emphasis

Emphasis Description
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.

Expenses beyond tuition generally include, but are not limited to, activity fees and food/supplies for some DN courses.

Program Student Learning Outcomes
At the completion of this program students will be able to:
1. Assist with the implementation of nutrition interventions for individuals, populations and diverse cultures, including infants, children, adolescents, adults, pregnant/lactating females and the elderly.
2. Apply therapeutic nutrition recommendations 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.
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. Provide nutrition education to individuals and groups.
Degree Requirements

1. Complete the General University Requirements for All 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.
4. Meet the following GPA requirements:
   a. A minimum overall GPA of 2.50 in support courses and major requirements.
   b. A grade of C or higher must be earned in all courses that count toward the major.
   c. A minimum cumulative GPA of 2.50.

Support Courses

Complete the following courses, some of which may be used to satisfy the General Education Requirements (43 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL A102</td>
<td>Introductory Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL A103</td>
<td>Introductory Biology Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CHEM A103</td>
<td>Survey of Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM A103L</td>
<td>Survey of Chemistry Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CHEM A104</td>
<td>Introduction to Organic Chemistry and Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM A104L</td>
<td>Introduction to Organic Chemistry</td>
<td>1</td>
</tr>
<tr>
<td>COMM course</td>
<td>Oral Communication GER course</td>
<td>3</td>
</tr>
<tr>
<td>ECON A201</td>
<td>Principles of Macroeconomics (3)</td>
<td>3</td>
</tr>
<tr>
<td>ECON A202</td>
<td>Principles of Microeconomics (3)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A111</td>
<td>Introduction to Composition (3)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A11W</td>
<td>Written Communication GER (3)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A212</td>
<td>Technical Writing (3)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A213</td>
<td>Writing in the Social and Natural Sciences (3)</td>
<td>3</td>
</tr>
<tr>
<td>Fine Arts GER</td>
<td>Humanities GER (language recommended)</td>
<td>6</td>
</tr>
<tr>
<td>MATH A107</td>
<td>College Algebra (4)</td>
<td>4</td>
</tr>
<tr>
<td>or any course for which MATH A107 is a prerequisite</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY A111</td>
<td>General Psychology (3)</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>Introduction to Sociology (3)</td>
<td>3</td>
</tr>
<tr>
<td>STAT A252</td>
<td>Elementary Statistics</td>
<td>3</td>
</tr>
</tbody>
</table>

Major Requirements

1. Complete the following required courses (46 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL A100</td>
<td>Human Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL A240</td>
<td>Introductory Microbiology for Health Sciences</td>
<td>4</td>
</tr>
<tr>
<td>COMM</td>
<td>Two additional oral communication courses</td>
<td>6</td>
</tr>
<tr>
<td>DN A151</td>
<td>Nutrition Through the Life Cycle</td>
<td>3</td>
</tr>
<tr>
<td>DN A155</td>
<td>Survey of Alaska Native Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>DN A203</td>
<td>Nutrition for Health Sciences</td>
<td>3</td>
</tr>
<tr>
<td>DN A255</td>
<td>Concepts of Healthy Food</td>
<td>3</td>
</tr>
<tr>
<td>DN A301</td>
<td>Nutrition Assessment</td>
<td>3</td>
</tr>
<tr>
<td>DN A312</td>
<td>Nutrition Communication and Counseling</td>
<td>3</td>
</tr>
<tr>
<td>DN A315</td>
<td>World Food Patterns</td>
<td>3</td>
</tr>
<tr>
<td>DN A355</td>
<td>Weight Management and Eating Disorders</td>
<td>3</td>
</tr>
<tr>
<td>DN A407</td>
<td>Preventive and Therapeutic Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>DN A415*</td>
<td>Community Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>DN A430</td>
<td>Research Methods in Nutrition and Dietetics</td>
<td>3</td>
</tr>
</tbody>
</table>

*Integrative Capstone Course

2. Electives (31 credits): 21 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.

Nutrition Science Emphasis

Emphasis Description

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 maintain regular contact with a pre-med advisor.

Expenses beyond tuition generally include, but are not limited to, activity fees and food/supplies for some DN courses.

Program Student Learning Outcomes

At the completion of this program students will be able to:

1. Assist with the implementation of nutrition interventions for individuals, populations and diverse cultures, including infants, children, adolescents, adults, pregnant/lactating females and the elderly.
2. Apply therapeutic nutrition recommendations 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.
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. Provide nutrition education to individuals and groups.

Degree Requirements

1. Complete the General University Requirements for All 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.
4. Meet the following GPA requirements:
   a. A minimum overall GPA of 3.0 in support courses and major requirements.
   b. A grade of C or higher must be earned in all courses that count toward the major.
   c. A minimum cumulative GPA of 2.50.

Support Courses

1. Complete the following courses, some of which may be used to satisfy the General Education Requirements (61-62 credits):

<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>BIOL A115</td>
<td>Fundamentals of Biology I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL A116</td>
<td>Fundamentals of Biology II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM A105</td>
<td>General Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM A105L</td>
<td>General Chemistry I Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CHEM A106</td>
<td>General Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM A106L</td>
<td>General Chemistry II Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>COMM course</td>
<td>Oral Communication GER course</td>
<td>3</td>
</tr>
<tr>
<td>ECON A201</td>
<td>Principles of Macroeconomics (3)</td>
<td>3</td>
</tr>
<tr>
<td>ECON A202</td>
<td>Principles of Microeconomics (3)</td>
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<tr>
<td>ENGL A111</td>
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</tr>
<tr>
<td>ENGL A11W</td>
<td>Written Communication GER (3)</td>
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</tr>
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<td>ENGL A212</td>
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<td>Humanities GER (language recommended)</td>
<td>6</td>
</tr>
<tr>
<td>MATH A107</td>
<td>College Algebra (4)</td>
<td>4</td>
</tr>
<tr>
<td>or any course for which MATH A107 is a prerequisite</td>
<td></td>
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</tr>
</tbody>
</table>

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Humanities GER (language recommended) 6
MATH A107 College Algebra (4) 6-7
and
MATH A108 Trigonometry (3) or
MATH A109 Precalculus (6)
MATH A200 Calculus I 4
PSY A111 General Psychology (3) or
SOC A101 Introduction to Sociology (3)
STAT A252 Elementary Statistics 3

**Major Requirements**

1. Complete the following required courses (48 credits):

   - BIOL A240 Introductory Microbiology for Health Sciences 4
   - BIOL A242 Fundamentals of Cell Biology 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 A151 Nutrition Through the Life Cycle 3
   - DN A203 Nutrition for Health Sciences 3
   - DN A301 Nutrition Assessment 3
   - DN A315 World Food Patterns 3
   - DN A355 Weight Management and Eating Disorders 3
   - DN A407 Preventive and Therapeutic Nutrition 3
   - DN A430 Research Methods in Nutrition and Dietetics 3
   - DN A475 Advanced Nutrition 3
   - *Integrative Capstone Course

2. Electives (10-11 credits): 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 Nutrition Science emphasis, of which a minimum of 42 credits must be upper division.

**Minor, Nutrition**

Students majoring in another discipline who wish to minor in Nutrition must complete the following requirements. A minor in Nutrition will act as a supplement to other fields of study and the application of knowledge to target populations and systems. A minor requires 18 credits; 6 credits must be upper division.

**Required Core (6 credits)**

- DN A151 Nutrition Through the Life Cycle 3
- DN A203 Nutrition for Health Sciences 3

**Required Upper Division Courses (6 credits)**

Select 6 credits from the following:

- DN A315 World Food Patterns (3)
- DN A355 Weight Management and Eating Disorders (3)
- DN A407 Preventive and Therapeutic Nutrition (3)

**Selectives**

Select 6 credits from the following:

- DN A151 Nutrition Through the Life Cycle (3)
- DN A155 Survey of Alaska Native Nutrition (3)
- DN A215 Sports Nutrition (3)
- DN A255 Concepts of Healthy Food (3)
- DN A260 Food Science (3)

*Note: Other courses may be counted toward the minor with written approval of an advisor in the Culinary Arts, Hospitality, Dietetics and Nutrition Division (i.e. CA A490 Current Topics in Food and Hospitality and DN A490 Current Topics in Dietetics and Nutrition).*

**FACULTY**

Anne Bridges, Professor, abridges2@uaa.alaska.edu

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**HEALTH, PHYSICAL EDUCATION AND RECREATION**

**Eugene Short Hall (ESH), Room 125, (907) 786-4083**

Eugene Short Hall (ESH), Room 125, (907) 786-4083

The Department of Health, Physical Education and 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 outdoor recreation as well as minors and occupational endorsement certificates within the discipline.

In addition, the department offers a variety of courses for students from other fields who wish to learn new physical skills and/or develop personal wellness.

**Enrolling in Health, Physical Education and Recreation Courses**

**Acknowledgement of Risk, Release of Liability and Medical Questionnaire Form:** During the first class session, students will receive information about the course. A verbal description will be provided about the inherent risks associated with specific areas and activities. Students may be asked to complete 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 courses. 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) who fail(s) to demonstrate adherence to policy that may pose a safety risk to themselves or others.

Any financial reimbursements related to such withdrawals are subject to standard university refund policies.

**Outdoor/Adventure Courses:** The Department of Health, Physical Education and 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.

Timothy Doebler, Associate Professor/Director, tdoebler@uaa.alaska.edu
Carrie King, Term Associate Professor, cking@uaa.alaska.edu
Kendra Sticka, Term Assistant Professor, kdsticka@uaa.alaska.edu
Amanda Walch, Term Assistant Professor, awalch@uaa.alaska.edu
1. Physical Fitness Level

Many 100-level courses have been designed for the student with an average level of fitness and health; e.g., a student would be expected to comfortably travel five miles over easy terrain. If a higher than average fitness level is required, a special note will identify the necessary level of fitness.

   a. Good fitness is defined as above average fitness relative to a typical, healthy adult. Courses that require good fitness will involve a moderate degree of physical activity, may involve travel over challenging terrain, may involve carrying a pack weighing up to 50 pounds, 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. Expedition courses include difficult to extremely difficult terrain on uneven and steep ground with rapidly increasing elevation while carrying a backpack that may weigh 50 pounds or more in less than ideal weather. A student who is physically or mentally unprepared to withstand an intense amount of exercise with challenging conditions should not enroll in the course.

2. Venue and Terrain Difficulty

Students will hike and travel in a variety of environments in outdoor/adventure courses. The following breakdown provides an overview of terrain difficulty.

   a. Easy terrain can be negotiated by novices. Traveling is usually done on well-maintained trail systems; can include hiking, skiing or snowshoeing; elevation gains/losses generally under 500 feet per mile; and stream crossings of calf deep or less. Off-trail touring includes traveling on firm ground over gentle terrain.

   b. Moderate terrain requires good physical fitness. Traveling is usually done on rugged trails or off trail. The hiking often includes inclines/declines of 500 to 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 crossings up to knee deep.

   c. Difficult terrain requires excellent physical fitness. Traveling is usually done off trail and can include uneven, challenging ground; lack of firm footing; steep tundra, rock or scree; wet, snowy or icy slopes, and thigh- to waist-deep river crossings. Specialized gear may be required for travel.

   d. Extremely difficult terrain requires excellent physical fitness. Traveling is done off trail and participants must be prepared to endure all of the features listed under “difficult terrain” for long hours and potentially multiple days. Specialized gear is usually required for travel.

3. Student Health Insurance

Students enrolling in many outdoor/adventure activity courses are provided with basic health insurance coverage during the field sessions only. This policy is intended to supplement personal policies and does not include the cost of emergency evacuation.

**Occupational Endorsement Certificate, Fitness Leadership**

The Fitness Leadership Occupational Endorsement Certificate provides students the opportunity to acquire the knowledge and skills necessary to develop a career in the ever-changing fitness industry. An array of career possibilities is available to individuals who successfully complete this program in group fitness instruction or personal training.

This comprehensive program provides students with 90 hours of leadership training in exercise theory and practice and 60 hours of training in their chosen fitness specialty or emphasis area: Group Fitness Leader or Personal Trainer. All classes combine current fitness research and training techniques with practical, hands-on teaching experience. This program follows the guidelines established by the American Council on Exercise (ACE) and the American College of Sports Medicine (ACSM).

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 Progress**

A minimum grade of B or better in each required course.

**Occupational Endorsement Requirements**

1. Complete the following required courses (7 credits):

   - DN A101 Principles of Nutrition (3)
   - DN A203 Nutrition for Health Sciences (3)
   - PEP A112 First Aid and CPR for Professionals
   - PEP A115 Fitness Leadership/Group Fitness and Personal Training

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
     - Choose PER activity course related to specialty

   - **Personal Trainer**
     - PEP A117 Techniques in Personal Training
     - PER A118 Beginning Weight Training

3. A total of 10 credits is required for this certificate.

**Occupational Endorsement Certificate, Outdoor Leadership**

The Outdoor Leadership (OL) Occupational Endorsement Certificate (OEC) is designed to provide quality education and training to individuals interested in working in the outdoor recreation industry. The OL OEC provides students the opportunity to acquire the foundational knowledge, skills, and abilities necessary for an entry level position in the ever-changing recreation and tourism industry. An array of career possibilities is available to individuals who successfully complete this program. Students can enter into the field of outdoor/ adventure education, guiding, activity/recreation therapy, or as a recreation specialist. There are positions in the government, non-profit, ecotourism, education, health care, and for-profit sectors of industry.

This comprehensive program provides students with 19 credits of training in technical outdoor skills, judgment, decision making, leadership, and risk assessment and hazard evaluation. Nine credits comprise the core curriculum. The student can then choose an emphasis area in water-based or land-based outdoor leadership. Classes combine current recreation research and instructional techniques with practical, hands-on teaching experience with extended field application. The field-based courses allow for practical skill application that reinforces technical knowledge, skills, abilities, and refinement of leadership skills.

**Admission Requirements**

Satisfy the UAA Admissions Requirements for Occupational Endorsement Certificates found in Chapter 7.
Academic Progress
A minimum grade of B or better in each required course.

Occupational Endorsement Requirements
1. Complete the following required courses (9 credits):
   - PEP A262 Foundations of Outdoor Recreation 3
   - PEP A365 Adventure Leadership Theory and Practice 3
   - PER A169 Four-Season Backpacking 3
2. Complete the required courses within one of the following two emphasis areas (10 credits):
   - **Water-Based Leadership Emphasis (10 credits):**
     - PEP A467D Water-Based Outdoor Leadership 2
     - PER A150 Water Safety and Rescue 1
     - PER A151 Beginning Canoeing 1
     - PER A152 Beginning River Rafting 1
     - PER A153 Beginning Sea Kayaking 1
     - PER A252 Intermediate River Rafting 2
     - PER A253 Intermediate Sea Kayaking 2
   - **Land-based Leadership Emphasis (10 credits):**
     - PEP A467C Land-Based Outdoor Leadership 2
     - PER A146 Beginning Rock Climbing 1
     - PER A147 Beginning Ice Climbing 1
     - PER A164 Skiing Alaska's Backcountry 2
     - PER A165 Avalanche Hazard Recognition and Evaluation 1
     - PER A181 Crevasse Rescue Techniques 1
     - PER A287 Expedition Backpacking 2
   - **Other requirements for Water-based:** Pass a swimming test and possess current Wilderness First Responder Certification from a recognized institution at time of completion.
   - **Other requirements for Land-based:** Possess a current Wilderness First Responder Certification from a recognized institution at time of completion.
3. A total of 19 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 Outdoor Leadership and Administration.

The Health and Fitness Leadership emphasis and the Outdoor Leadership and Administration emphases prepare students for professional positions in rapidly growing fields. Each emphasis focuses on developing leadership expertise as well as the knowledge, physical skills, and technical competencies to prepare graduates for the job market. The Health and Fitness Leadership emphasis readies students for employment in hospital-based health education and fitness programs, community or public health/fitness programs, private health clubs and fitness facilities, corporate fitness/wellness programs, military fitness centers, as personal trainers, or helps them prepare for further education in physical therapy. The Outdoor Leadership and Administration emphasis readies graduates for employment with youth or recreational programs, adventure tourism, guide services, camps, schools, or a host of experiential education opportunities.

Program Student Learning Outcomes
Graduates of the Bachelor of Science in Physical Education will have demonstrated:
- Knowledge of physical education concepts as well as concepts related to a specific area of emphasis.
- Competency in many activity forms and proficiency in a few.
- Ability to apply established national standards in the field(s).
- Proficiency in entry-level discipline specific administrative skills.
- Proficiency in general and discipline-specific technologies.
- Effective leadership skills, including the abilities to: 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) communicate effectively.

Admission Requirements
1. Complete the Baccalaureate Degree Programs Admission Requirements in Chapter 7.
2. Completion of BIOL A111 and PEP A181 with a grade of C or better.
3. Meet with a Health, Physical Education and Recreation advisor regarding program requirements, and development of a program of study.
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, or
   - 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
A grade of C or better in all emphasis-specific courses and an overall GPA of 2.75 are required to enroll in the internship. A grade of B or better is required in the internship (PEP A495/PEP A496).

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:

- BIOL A111 Human Anatomy and Physiology I 4
- BIOL A112 Human Anatomy and Physiology II 4
- DN A203 Nutrition for Health Sciences (3) 3
- DN A215 Sports Nutrition (3) 3
- HS A220 Core Concepts in the Health Sciences 3
- PSY A111 General Psychology (3) 3
- PSY A150 Lifespan Development (3)

Major Requirements
1. Complete the following core courses (39 credits):
   - PEP A181 Introduction to Health, Physical Education and Recreation 3
   - PEP A182 Technology in Health, Physical Education and Recreation 1
   - PEP A183 Wellness Principles 1
   - PEP A184 Fundamental Motor Skills 1
Complete two from:

- 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)

2. Complete one of the following emphasis areas:

**Health and Fitness Leadership (43 credits)**

- BA A151 Introduction to Business 3
- PEP A251 Prevention and Care of Activity Related Injuries 3
- PEP A454 Exercise Testing and Prescription 4
- PEP A455 Cardiac Rehabilitation and Special Populations 4
- PEP A456 Contemporary Personal Health Issues 3
- PEP A495 Internship in Health and Fitness Leadership 6

**Exercise Management Option (20 credits)**

- BA A231 Fundamentals of Supervision 3
- BA A260 Marketing Practices 3
- HS/NS A433 Health Education: Theory and Practice (3) or
- PEP A490 Special Topics in Health, Physical Education and Recreation (3) 3
- PEP A453 Health Promotion 3
- Electives 8

**Exercise and Rehabilitation Sciences Option (20 credits)**

- PEP A346 Lower Body Injury Assessment Skills 3
- PEP A347 Upper Body Injury Assessment Skills 3
- Science and Rehabilitation Core 14

Complete courses from at least two of the following prefixes in consultation with the faculty advisor:

- BIOL, CHEM, DN, PEP, PHYS, PSY

**Outdoor Leadership and Administration (43 credits)**

- BA A151 Introduction to Business 3
- ENVI A303 Environmental Ethics 3
- PEP A262 Foundations of Outdoor Recreation 3
- PEP A264 Recreation Program Planning and Evaluation 3
- PEP A363 Natural History Interpretation and Environmental Education 3
- PEP A365 Adventure Leadership Theory and Practice 3
- PEP A464 Outdoor Recreation Administration 3
- PEP A467C Land-Based Outdoor Leadership 2
- PEP A467D Water-Based Outdoor Leadership 2
- PER A496 Internship in Outdoor Leadership 6
- PER A169 Four-Season Backcountry 3
- Electives 3

Choose a minimum of 6 credits from the following:

- PER A146 Beginning Rock Climbing (1)
- PER A147 Beginning Ice Climbing (1)
- PER A148 Beginning Indoor Sport Climbing (1)

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**PER A150** Water Safety and Rescue (1)
**PER A151** Beginning Canoeing (1)
**PER A152** Beginning River Rafting (1)
**PER A153** Beginning Sea Kayaking (1)
**PER A164** Skiing Alaska’s Backcountry (2)
**PER A165** Avalanche Hazard Recognition and Evaluation (1)
**PER A181** Crevasse Rescue Techniques (1)
**PER A252** Intermediate River Rafting (2)
**PER A253** Intermediate Sea Kayaking (2)

**Other requirements:** Pass a swim test and possess Current Wilderness First Responder Certification from a recognized institution at time of completion.

3. A minimum of 120 credits is required for the degree of which 42 credits must be upper division.

### Recommended Course Sequence

See a Health, Physical Education and Recreation advisor for information on a recommended course sequence.

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**Minor, Athletic Training**

Students who wish to minor in Athletic Training must complete the following requirements. A minimum of 23 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 (23 credits):

   - DN A203 Nutrition for Health Sciences (3) 3
   - DN A215 Sports Nutrition (3) 3
   - MA A101 Medical Terminology 3
   - PEP A251 Prevention and Care of Activity-Related Injuries 3
   - PEP A346 Lower Body Injury Assessment Skills 3
   - PEP A347 Upper Body Injury Assessment Skills 3
   - PEP A382 Kinesiology and Biomechanics 4
   - PEP A385 Physiology of Exercise 4

**Minor, Coaching**

Students who wish to minor in Coaching must complete the following requirements. A minimum 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
   - 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

2. Choose one of the following:

   - PEP A233 Coaching Track and Field and Running (2)
   - PEP A234 Coaching Wrestling (2)
   - PEP A235 Coaching Swimming and Diving (2)
   - PEP A236 Coaching Skiing (2)
   - PEP A237 Coaching Figure Skating (2)
   - PEP A238 Coaching Gymnastics (2)
   - PEP A239 Coaching Baseball/Softball (2)
   - PEP A240 Coaching Football (2)
   - PEP A241 Coaching Basketball (2)
Minor, Health and Fitness Leadership*

Students who wish to minor in Health and 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 Human Anatomy and Physiology I 4
   - BIOL A112 Human Anatomy and Physiology II 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 A453 Health Promotion 3

2. Choose one of the following options: 3-4
   - 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
     - PER A118 Beginning 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 and Fitness Leadership emphasis.

Minor, Outdoor Leadership*

Students who wish to minor in Outdoor Leadership must complete the following requirements. A minimum of 22 credits, including 7 upper division credits, is required for the minor. Prerequisites for these courses must also be satisfied. Requires a grade of B or better in PEP A467C or PEP A467D.

1. Complete the following core courses (16 credits)
   - PEP A262 Foundations of Outdoor Recreation 3
   - PEP A264 Recreation Program Planning and Evaluation 3
   - PEP A365 Adventure Leadership Theory and Practice 3
   - PEP A467C Land-Based Outdoor Leadership 2
   - PEP A467D Water-Based Outdoor Leadership 2
   - PER A169 Four-Season Backpacking 3

2. Choose a minimum of three (3) credits from the following: 3
   - PER A150 Water Safety and Rescue (1)
   - PER A151 Beginning Canoeing (1)
   - PER A152 Beginning River Rafting (1)
   - PER A153 Beginning Sea Kayaking (1)
   - PER A252 Intermediate River Rafting (2)
   - PER A253 Intermediate Sea Kayaking (2)

3. Choose a minimum of three (3) credits from the following: 3
   - PER A146 Beginning Rock Climbing (1)
   - PER A147 Beginning Ice Climbing (1)
   - PER A148 Beginning Indoor Sport Climbing I (1)
   - PER A164 Skiing Alaska’s Backcountry (2)

PER A181 Crevasse Rescue Techniques (1)

4. A minimum of 22 credits is required for this minor.

Other requirements: Pass a swimming test and possess current certification in First Aid and CPR

*Not available to Physical Education majors with Outdoor Leadership and Administration emphasis

Minor, Physical Education *

Students who wish to minor in Physical Education must complete the following requirements. A total of 30 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):
   - BIOL A111 Human Anatomy and Physiology I 4
   - BIOL A112 Human Anatomy and Physiology II 4
   - PEP A181 Introduction to Health, Physical Education and Recreation 3
   - PEP A182 Technology in Health, Physical Education and Recreation 1
   - PEP A183 Wellness Principles 1
   - PEP A184 Fundamental Motor Skills 1
   - PEP A280 Leadership in Health, Physical Education and Recreation 3
   - PEP A281 Leadership in Activities for Diverse Populations 2
   - PEP A382 Kinesiology and Biomechanics 4
   - PEP A383 Movement Theory and Motor Development 3

2. Choose two of the following: 4
   - PEP A282 Leadership in Initiative 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
Sandra Carroll-Cobb, Director/Associate Professor, AFSC@uaa.alaska.edu
Michael Chriss, Assistant Professor, AFMC1@uaa.alaska.edu
Timothy Miller, Assistant Professor, ANTM2@uaa.alaska.edu

INDUSTRIAL PROCESS INSTRUMENTATION

Kenai Peninsula College (KPC)
156 College Road, 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.

www.uaa.alaska.edu
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.
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 Introduction to Composition 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) or
   - CHEM A103/L Survey of Chemistry (4) or
   - CHEM A105/L General Chemistry I (4)

Major Requirements
- ET A101 Basic Electronics: DC Circuits 4
- ET A102 Basic Electronics: AC Circuits 4
- ET A126 Digital Electronics 4
- ET A175 Technical Introduction to Computing Systems 3
- ET A240 Computer Systems Interfacing 3
- ET A241 Digital Control Systems 3
- ET A246 Electronic Industrial Instrumentation 3
- PETR 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
- PETR A130 Process Technology I: Equipment 4
- PETR A140 Industrial Process Instrumentation I 3
- PETR A144 Industrial Process Instrumentation II 3

Technical Electives — Complete one of the following: 3-4
- CNT A170 CCNA 1 Network Fundamentals (4)
- CS A109 Computer Programming (Languages Vary) (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.

FACULTY
- Henry Haney, Assistant Professor, IFWH@uaa.alaska.edu
- Allen Houz, Professor, IFADH@uaa.alaska.edu
- Rich Kochis, Assistant Professor, IFRLK@uaa.alaska.edu

MASSAGE THERAPY

Admission to the certificate program is currently suspended. Contact the department for further information.

MECHANICAL TECHNOLOGY

Kenai Peninsula College (KPC), Kenai River Campus
156 College Road, Soldotna, AK 99669, (907) 262-0300, (877) 262-0330
www.kpc.alaska.edu

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;
6. 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.

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 (or any course for which MATH A105 is the prerequisite) 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 Circuits 4
   - MECH A115 Gasoline Engine Rebuilding 3
   - MECH A201 Advanced Machine Shop 4
   - WELD A108 Wire Welding 4
   - WELD A109 TIG Welding 4

3. A total of 32 credits is required for this certificate.

FACULTY
Drew O'Brien, Assistant Professor, IFDO@uaa.alaska.edu
Fritz Miller, Associate Professor, IFFWM@uaa.alaska.edu

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. See above for contact information.

Program Student Learning 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.
2. Submit the KPC undergraduate application.

Advising
Meet with a faculty advisor to complete advising interview checklist. Students should contact the OSH advisor prior to registering for Occupational Safety and Health courses. Students should contact the OSH administrative office at (907) 786-6421 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 Required Support Courses and the Major Requirements listed below.

Required Support Courses
1. Complete one of the following oral communication courses: 3
   - COMM A111 Fundamentals of Oral Communication
   - COMM A235 Small Group Communication
   - COMM A237 Interpersonal Communication
   - COMM A241 Public Speaking

2. Complete two of the following written communication courses: 6
   - ENGL A111 Introduction to Composition
   - ENGL A212 Technical Writing
   - ENGL A213 Writing in the Social and Natural Sciences
   - ENGL A214 Persuasive Writing

3. Complete the following mathematics requirement: 3
   - MATH A105 Intermediate Algebra (or any MATH course for which MATH A105 is in the prerequisite chain)

4. Complete one of the following biology courses: 3-4
   - BIOL A100 Human Biology
   - BIOL A102 Introductory Biology
   - BIOL A111 Human Anatomy and Physiology I
   - BIOL A115 Fundamentals of Biology I

5. Complete one of the following physical science courses: 3
   - PHYS A115 Physical Science
   - PHYS A123 Basic Physics

6. Complete the following required courses:
Major Requirements

1. Complete the following required courses:
   - OSH A101 Introduction to Occupational Safety and Health 3
   - OSH A108 Injury Prevention and Risk Management 4
   - OSH A111 Training Needs and Methods 3
   - OSH A112 Introduction to Occupational Epidemiology 3
   - OSH A120 Safety Program Management and Recordkeeping 3
   - OSH A180 Introduction to Industrial Hygiene 4
   - OSH A201 Workplace Injury and Incident Evaluations 4
   - OSH A211 Safety Program Assessment, Development and Implementation 4
   - OSH A230 Principles of Ergonomics 3
   - OSH A240 Workplace Monitoring: Instrumentation and Calibration 3
   - OSH A250 Hazardous Materials Operations 3
   - TECH A295 Technical Internship 3

   An advisor approved elective may be substituted for TECH A295 Technical Internship.

2. A total of 62-63 credits is required for the degree.

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

Matanuska-Susitna College (MSC)
8295 East College Drive (P.O. Box 2889), Palmer, AK 99645
Contact Kathy Griffin (907) 746-9329
matsu.alaska.edu/office/student-services/degree-programs/paramedical-technology

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

Program Student Learning Outcomes

The national DOT curriculum for paramedic training covers 14 learning outcomes and the MSC program follows that curriculum. The students and the program are assessed by an external review team (the National Registry) on each of those specific curriculum points.

National Highway Safety Traffic Association Curriculum Outcomes:

- Preparatory — Integrates comprehensive knowledge of EMS systems, safety/well-being of the paramedic, and medical/legal and ethical issues, which is intended to improve the health of EMS personnel, patients, and the community.
- Anatomy and Physiology — Integrates a complex depth and comprehensive breadth of knowledge of the anatomy and physiology of all human systems.
- Medical Terminology — Integrates comprehensive anatomical and medical terminology and abbreviations into the written and oral communication with colleagues and other health care professionals.
- Pathophysiology — Integrates comprehensive knowledge of pathophysiology of major human systems.
- Life Span Development — Integrates comprehensive knowledge of life span development.
- Public Health — Applies fundamental knowledge of principles of public health and epidemiology including public health emergencies, health promotion, and illness and injury prevention.
- Pharmacology — Integrates comprehensive knowledge of pharmacology to formulate a treatment plan intended to mitigate emergencies and improve the overall health of the patient.
- Airway Management, Respiration and Artificial Ventilation — Integrates complex knowledge of anatomy, physiology, and pathophysiology into the assessment to develop and implement a treatment plan with the goal of assuring a patent airway, adequate mechanical ventilation, and respiration for patients of all ages.
- Patient Assessment — Integrates scene and patient assessment findings with knowledge of epidemiology and pathophysiology to form a field impression. This includes developing a list of differential diagnoses through clinical reasoning to modify the assessment and formulate a treatment plan.
- Medicine — Integrates assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for a patient with a medical complaint.
- Shock and Resuscitation — Integrates comprehensive knowledge of causes and pathophysiology into the management of cardiac arrest and peri-arrest states. Integrates a comprehensive knowledge of the causes and pathophysiology into the management of shock, respiratory failure or arrest with an emphasis on early intervention to prevent arrest.
- Trauma — Integrates assessment findings with principles of epidemiology and pathophysiology to formulate a field impression to implement a comprehensive treatment/disposition plan for an acutely injured patient.
- Special Patient Population — Integrates assessment findings with principles of pathophysiology and knowledge of psychosocial needs to formulate a field impression and implement a comprehensive treatment/disposition plan for patients with special needs.
- EMS Operations — Knowledge of operational roles and responsibilities to ensure safe patient, public, and personnel safety.

| CHEM A103 | Survey of Chemistry | 3 |
| CHEM A103L | Survey of Chemistry Laboratory | 1 |

Note: Required support courses may also be used to satisfy the General Course Requirements.
Admission Requirements

Kenai Peninsula College/Matanuska-Susitna 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) 262-0378 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-I 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 and 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 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 Curriculm.
2. Evidence of:
   a. Immunity to measles, rubella and mumps confirmed by titer;
   b. Immunity to hepatitis A and hepatitis B, confirmed by titer (first semester clinical students may be in the process of completing the immunization series; for those students, documentation of immunity by titer is required prior to entry into PMED A295 course);
   c. Immunity to chicken pox documented by history, titer or current immunization;
   d. Diphtheria/tetanus vaccination within the past 10 years (with booster required at the time of expiration);
   e. Freedom from active tuberculosis, documented annually by negative PPD skin test or by health examination by a nurse practitioner, physician, or physician’s assistant;
   f. Documentation of HIV testing annually (results not required to be submitted to KPC/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)
Undergraduate Programs, Community & Technical College

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), kagriffin2@matsu.alaska.edu
Paul Perry, Coordinator/Assistant Professor (KPC), IFPEP@uaa.alaska.edu

PETROLEUM TECHNOLOGY
Kenai Peninsula College (KPC), Kenai River Campus
156 College Road, 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 found in Chapter 7.

Complete the following requirements:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRPE A108</td>
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<tr>
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<td>PRT A101</td>
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<td>PRT A130</td>
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<td>PRT A144</td>
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<td>PRT A160</td>
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<td>PRT A230</td>
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<td>PRT A231</td>
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<td>ET A101 (or any ET course)</td>
<td>4</td>
</tr>
<tr>
<td>ET A126</td>
<td>3</td>
</tr>
</tbody>
</table>

A total of 33 credits is required for the certificate.

FACULTY
Henry Haney, Assistant Professor, IFHW@uaa.alaska.edu
Allen Houze, Professor, IFADH@uaa.alaska.edu
Rich Kochis Assistant Professor, IFRLK@uaa.alaska.edu

PROCESS TECHNOLOGY

Kenai Peninsula College (KPC), KRC (Kenai River Campus)
156 College Road, Soldotna, Alaska 99669, (907) 262-0300, (877) 262-0330
www.kpc.alaska.edu

Anchorage Extension Site (AES)
University Center (UC), Room 118, 3901 Old Seward Highway
Anchorage, AK 99503, (907) 786-6413

Advising for this program is only available from the Process Technology faculty at Kenai Peninsula College. For the Kenai River Campus, please call (907) 262-0344 or (877) 262-0330 for more information. For the KPC Anchorage Extension Site, call 786-6413.

The Associate of Applied Science degree in Process Technology is coordinated by Kenai Peninsula College and is delivered collaboratively through UAA and UAF.

This degree is designed to provide education/training that will enable individuals to obtain employment in the industries that use and control mechanical, physical or chemical processes to produce a final product. In Alaska this includes the process industries of oil and gas production, chemical manufacturing, petroleum refining: power generation and utilities, water and wastewater treatment, and seafood and other food processing.

Associate of Applied Science, Process Technology

The Process Technology program is offered only at Kenai Peninsula College KRC (Kenai River Campus) and AES (Anchorage Extension site).

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.
2. Placement at the MATH 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)  
   - COMM A111 Fundamentals of Oral Communication (3)
   - COMM A235 Small Group Communication (3)
   - COMM A237 Interpersonal Communication (3)
   - COMM A241 Public Speaking (3)
   - or
   - Elective (3)

2. **Written Communication Skills**
   - ENGL A111 Introduction to Composition (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)
   - or
   - Elective (3)

3. **Support Courses Math**
   - MATH A105* Intermediate Algebra (3)
   - MATH A107* College Algebra (4)
   - or
   - Elective (4)
   *Or any MATH course for which MATH A105 or MATH A107 is a prerequisite.

4. **Computer Literacy:**
   - CIS A105 Introduction to Personal Computers and Application Software (3)
   - or
   - CIS A110 Computer Concepts in Business (3)

5. **Natural Sciences**
   - 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 Process Safety, Health and Environmental Awareness 3
   - PRT A130 Process Technology I: Equipment 4
   - PRT A140 Industrial Process Instrumentation I 3
   - PRT A144 Industrial Process Instrumentation II 3
   - PRT A230 Process Technology II: Systems 4
   - PRT A231 Process Technology III: Operations 4
   - PRT A250 Process Troubleshooting 3
   - PRT A255 Quality Concepts for the Process Industry 1

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 and 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 Houze, Professor, IFADH@uaa.alaska.edu
Henry Haney, Assistant Professor, IFHWH@uaa.alaska.edu
Jeff Laube, Assistant Professor, IFJDL@uaa.alaska.edu
Jake Main, Assistant Professor, IFWJM1@uaa.alaska.edu

**REFRIGERATION AND HEATING TECHNOLOGY**

Matanuska-Susitna College
8295 East College Drive (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 Refrigeration and Heating 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 and leading to industry recognized certifications are administered as part of this program. If possible, additional training may take place on the job to provide a student with work-related experience.

Program Student Learning Outcomes
Students graduating with a degree or certificate in the Refrigeration and Heating Technology Program will be able to:

- Apply the fundamental laws of physics related to the Heating, Ventilation, Air Conditioning, and Refrigeration (HVAC/R) industry.
- Use mathematical skills required to succeed in HVAC/R trades.
- Understand and describe the function of individual components that make up HVAC/R systems.
- Work safely with tools, torches, electricity, refrigerants, heating fuels, and other equipment and material associated with HVAC/R work.
- Follow work practices that are environmentally responsible.
- Obtain employment as an entry level HVAC/R technician and be able to advance professionally.
- Work effectively with customers, employers, and co-workers.
- Systematically troubleshoot HVAC/R systems.
- Apply municipal, state, and national mechanical codes to decisions involving the design, installation, operation, and maintenance of HVAC/R systems.

Occupational Endorsement
Certificates
Admissions
Satisfy the Admissions Requirements for Occupational Endorsement Certificates in Chapter 7.

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 Refrigeration and Heating occupational endorsement certificate must complete the following core requirements.

Occupational Endorsement Certificate
Core Requirements – 12 Credits

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Credits</th>
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<tr>
<td>RH A103</td>
<td>Technical Mathematics for Industrial Trades</td>
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<tr>
<td>RH A105</td>
<td>Electrical Circuits for Refrigeration and Heating</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 and 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 4
   - RH A201 Commercial and Ammonia Refrigeration 4
3. A total of 24 credits is required for the certificate.

Recommended Course Sequence
See an advisor for information on the recommended course sequence.

Undergraduate Certificate, Refrigeration and Heating Technology

Admission
Satisfy the Requirements for Admission to Undergraduate Certificate and Associate’s Degree Programs in Chapter 7.

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 and Heating II 3
   - RH A132 Troubleshooting for HVAC/R Systems 3
   - RH A201 Commercial and Ammonia Refrigeration 4
   - RH A203 HVAC/R Basic Controls 3
   - RH A225 Heating Fundamentals and Forced Air Heat 4
   - RH A226 Commercial HVAC/R Systems 4
   - RH A228 Advanced Hydronic Heat Systems 4
   - RH A229 HVAC/R Control Systems 3
   - RH A232 HVAC/R Sheet Metal 3

4. A total of 51 credits is required for the certificate.

**Recommended Course Sequence**

See an advisor for information on the recommended course sequence.

**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.

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 RH 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
- 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

A total of 66 credits is required for the degree.

**RETAIL MANAGEMENT**

**Undergraduate Certificate, Retail Management**

The Retail Management program is offered at the UAA Chugiak/Eagle River Campus.

Offered through CERC in collaboration with the UAA College of Business and Public Policy (CBPP) and jointly through the University of Alaska Fairbanks (UAF) Community & Technical College (CTC), serves the entire university by providing general education courses, continuing education, and workforce development and training. Connecting academic programs with community and industry needs for the mutual benefit of the university and state, CERC also develops and offers, in coordination with other UAA colleges, academic and non-academic programs to meet acknowledged education demands.

**Program Student Learning Outcomes**

The specific education outcomes of this program are to produce graduates who are able to do the following:

See an advisor for information on the recommended course sequence.

**FACULTY**

Jack Cypher, Assistant Professor, jlcipher@matsu.alaska.edu
Dan Mielke, Assistant Professor, dnmielke@matsu.alaska.edu

**UAA Chugiak/Eagle River Campus (CERC)**

10928 Eagle River Rd #115, Eagle River, AK 99577 (907) 786-7600

www.uaa.alaska.edu/eagleriver
1. Demonstrate proficiency in the use of computers and computer applications in a retail environment.

2. Employ oral communication concepts, including critical listening skills, in one-on-one and small group interactions.

3. Use critical thinking skills.

4. Relate appropriate human and public relations approaches to and in written, oral, and non-verbal communications.

5. Demonstrate mathematical competence in solving fundamental business problems, including the use of algebraic formulas.

6. Define common terms used in bookkeeping and accounting through a working knowledge of accounting principles.

7. Identify and describe management functions including planning, organizing, staffing, directing, and controlling resources and processes through development of a personal management philosophy.

8. Identify different leadership and management models and styles to ensure appropriate responses in different situations.

9. Describe human resources management principles and methods involved in recruitment, selection, placement, and training of employees.

10. Define marketing and the core concepts that drive purchasing decisions including needs, wants, demands, products, and markets.

11. Identify and describe retail management and merchandising techniques.

**Admission Requirements**

Students must satisfy the “Admission to Undergraduate Certificate and Associate Degree Programs” requirements as identified in the Academic Standards and Regulations, Chapter 7.

**Advising**

Students are encouraged to contact CERC 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. For students outside of the UAA service areas, if a UAA course is not offered via distance, UAF and UAS courses for all content areas (except for Retail Management and Merchandising) are available and meet program requirements. Advisors are available to provide the appropriate UAF and UAS course transfer options.

**Preparation**

Students must meet all UAA requirements to enroll in courses. UAA offers preparatory courses for students needing to improve 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 UAA course catalog. Contact CERC as noted above for further information.

**Undergraduate Certificate Requirements**

1. Complete the General University Requirements for Undergraduate Certificates. These requirements are discussed at the beginning of this chapter.

2. In the ten listed content areas, complete the following required courses in any combination (30 credits). Any UAF courses listed that are variable credit must be completed as 3 credits.

   - Microcomputer Applications: Complete one of the following courses:
     - CIS A105 Introduction to Personal Computers and Application Software (3)

   The following UAF course may also be transferred to meet requirements for this content area:

   - CIOS F150 Computer Business Applications (3)

   **Oral Communications:** Complete one of the following courses:
     - COMM A111* Fundamentals of Oral Communication (3)
     - CIOS A261A Interpersonal Skills in Organizations (3)
     - COMM A237* Interpersonal Communication (3)

   The following UAF course(s) may also be transferred to meet requirements for this content area:
     - COMM F131X Fundamentals of Oral Communication: Group Context (3)
     - COMM F141X Fundamentals of Oral Communication: Public Context (3)
     - COMM F180 Introduction to Human Communication (3)

   **Business Communication (Written):** Complete one of the following courses:
     - CIOS A160 Business English (3)
     - ENGL A111* Introduction to Composition (3)

   The following UAF course(s) may also be transferred to meet requirements for this content area:
     - ENGL F111X Introduction to Academic Writing (3)
     - ABUS F170 Business English (3)
     - ABUS F271 Business Communications (3)

   **Business Mathematics:** Complete one of the following courses:
     - CIOS A116 Business Calculations (3)
     - MATH A105* Intermediate Algebra (3)

   The following UAF course may also be transferred to meet requirements for this content area:
     - ABUS F155 Business Math (3)

   **Accounting/Bookkeeping:** Complete one of the following courses:
     - ACCT A101 Principles of Financial Accounting I (3)
     - ACCT A120 Bookkeeping for Business I (3)

   The following UAF course may also be transferred to meet requirements for this content area:
     - ABUS F101 Principles of Accounting I (3)

   **Introduction to Management:** Complete one of the following courses:
     - BA A231 Fundamentals of Supervision (3)

   The following UAF course may also be transferred to meet requirements for this content area:
     - ABUS F179 Fundamentals of Supervision (3)

   **Leadership/Human Relations in Business:** Complete one of the following courses:
     - HUMS 153/PSY A153 Human Relations (3)
     - HUMS A155 Human Relations in the Workplace (3)

   The following UAF course may also be transferred to meet requirements for this content area:
     - ABUS F154 Human Relations (3)

   **Human Resources Management:** Complete the following course:
     - ABUS F231 Introduction to Personnel (3)

   The following UAF course must be transferred to meet requirements for this content area:
     - BA A260 Marketing Practices (3)

   **Marketing/Marketing Management:** Complete one of the following courses:
     - ABUS F260 Marketing Practices (3)

   **Retail Management and Merchandising:** Complete the following course:
     - BA A266 Retailing Management (3)

3. A total of 30 credits is required for this certificate.
The Sustainable Energy program is offered through Matanuska-Susitna College.

**Occupational Endorsement Certificate, Sustainable Energy**

The Sustainable Energy Occupational Endorsement Certificate program provides education and training in energy efficiency and renewable energy and addresses many contemporary energy issues. The program provides the fundamental concepts, basic academic preparation, and skills necessary for students to pursue either employment or further training as sustainable energy technicians in the energy, construction, utility, and maintenance industries. It can also serve as a stepping stone into science-, engineering-, and architecture-related certificate, associate, or baccalaureate programs.

Students are introduced to the physical principles of various energy conservation and renewable energy technologies. Coursework incorporates the appropriate skills and knowledge necessary for students to become effective employees. Students will also be able to apply course content to personal projects, such as home retrofits and off-grid cabins.

**Program Student Learning Outcomes**

Upon completion of the occupational endorsement certificate, students will demonstrate:

- Knowledge of energy efficiency and sustainable energy resources and technologies
- Introductory understanding of basic physics and power management as applied to energy efficiency and sustainable energy
- Entry-level skills for energy efficiency/renewable energy project development and management

**Admission Requirements**


**Advising**

Students are urged to meet with a faculty advisor prior to enrollment in Sustainable Energy classes.

**Academic Progress**

In order to receive the Sustainable Energy Occupational Endorsement Certificate, students must achieve a grade of C or better in all courses required for the occupational endorsement certificate.

**Graduation Requirements**

The Sustainable Energy Occupation Endorsement Certificate requires a minimum of 16 credits. The program is structured as 9 credits of foundation knowledge and a minimum of 7 credits of electives that allow students (in consultation with their advisor) to specialize in several emphasis areas related to sustainable energy, or to customize their program.

**Core Requirements (9 credits)**

- RE A100 Introduction to Sustainable Energy 3
- RE A203 Sustainable Energy Project Development 3
- MATH A105 Intermediate Algebra 3

**Electives (minimum of 7 credits)**

- RE A102 Applied Physics for Sustainable Energy (3)
- RE A110 Introduction to Solar Photovoltaic Systems (1)
- RE A120 Introduction to Solar Thermal Hot Water Systems (1)
- RE A130 Introduction to Small Wind Systems (1)
- RE A140 Home Energy Basics (1)
- RE A210 Cold Climate Construction (3)
- RH A105 Electrical Circuits for Refrigeration and Heating I (3)
- RH A211 Customer Relations and Job Etiquette (1)

**FACULTY**

- Cynthia Rogers, Assistant Professor and Program Coordinator, cynthia.rogers@uaa.alaska.edu
- Andy Anger, Associate Professor, apanger@alaska.edu
- Melissa Brown, Associate Professor, mcbrown@alaska.edu
- Charlie Dexter, Professor, cdexter@alaska.edu
- Jeri Rubin, Professor, afjgr@uaa.alaska.edu
- Mark Masteller, Assistant Professor, mamasteller@matsu.alaska.edu

**TECHNOLOGY**

**University Center, (UC) 130, (907) 786-6423**

**www.uaa.alaska.edu/cte/academics/st**

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.

**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
### Undergraduate Certificate, Construction Technology

Students develop technical skills in AutoCADD, 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

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>CIS A105</td>
<td>Introduction to Personal Computers and Application Software</td>
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<td>CM A101</td>
<td>Fundamentals of CADD for Building Construction</td>
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<tr>
<td>CM A102</td>
<td>Methods of Building Construction</td>
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<tr>
<td>CM A123</td>
<td>Codes and Standards</td>
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<td>CM A201</td>
<td>Construction Project Management I</td>
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<td>CM A205</td>
<td>Construction Safety</td>
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<td>CM A231</td>
<td>Structural Technology</td>
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<tr>
<td>HUMS A153</td>
<td>Human Relations (3)</td>
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<tr>
<td>or</td>
<td>HUMS A155 Human Relations in the Workplace (3)</td>
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<td>MATH A101</td>
<td>Technical Math (3)</td>
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<td>or</td>
<td>MATH A105 Intermediate Algebra (3)</td>
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<tr>
<td>OSH A101</td>
<td>Introduction to Occupational Safety and Health</td>
<td>3</td>
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<tr>
<td>PRPE A108</td>
<td>Introduction to College Writing</td>
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<td>TECH A295</td>
<td>Technical Internship</td>
<td>1</td>
</tr>
</tbody>
</table>

* Or any MATH course for which MATH A101 or MATH A105 is a prerequisite.

### 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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS A105</td>
<td>Introduction to Personal Computers and Application Software</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A111</td>
<td>Introduction to Composition</td>
<td>3</td>
</tr>
<tr>
<td>MATH A105</td>
<td>Intermediate Algebra</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 A108</td>
<td>Injury Prevention and Risk Management</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>

### 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.

### 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 Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM A111</td>
<td>Fundamentals of Oral Communication (3)</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMM A235</td>
<td>Small Group Communication (3)</td>
<td></td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMM A237</td>
<td>Interpersonal Communication (3)</td>
<td></td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMM A241</td>
<td>Public Speaking (3)</td>
<td></td>
</tr>
<tr>
<td>ENGL A111</td>
<td>Introduction to Composition</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 (or any MATH course for which MATH A105 is a prerequisite)</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Science, select from:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</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) (4)</td>
<td>4</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM A105/L</td>
<td>General Chemistry with Laboratory (for</td>
<td></td>
</tr>
</tbody>
</table>
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.

**Occupational Safety and Health (24 Credits)**

**Program Student Learning 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 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.

**Welding (25 Credits)**

**Program Student Learning 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 processes 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.

**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.

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 Student Learning 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)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethics (*PHIL A301 recommended)</td>
<td>3</td>
</tr>
<tr>
<td>*ENGL A312 Advanced Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>*MATH A107 College Algebra (4) or *MATH A172 Applied Finite Mathematics (3) BA A273 Introduction to Statistics for Business and Economics (3)</td>
<td>3-4</td>
</tr>
<tr>
<td>*STAT A252 Elementary Statistics (3) or *STAT A253 Applied Statistics for the Sciences (4)</td>
<td>Note: Courses marked with an (*) fulfill UAA GERs.</td>
</tr>
</tbody>
</table>

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, ENVL, GEOG, GEOL, and/or PHYS.

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
   - TECH A443 Quality Leadership 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.

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 Student Learning Outcomes

The BST Business Emphasis offers students a focused program of study drawing required courses from Economics and Accounting and incorporating selected 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)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethics (*PHIL A301 recommended)</td>
<td>3</td>
</tr>
<tr>
<td>*ECON A201 Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>*ECON A202 Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>*ENGL A312 Advanced Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>*MATH A107 College Algebra (4) or *MATH A172 Applied Finite Mathematics (3) BA A273 Introduction to Statistics for Business and Economics (3)</td>
<td>3-4</td>
</tr>
<tr>
<td>*STAT A252 Elementary Statistics (3) or *STAT A253 Applied Statistics for the Sciences (4)</td>
<td>Note: Courses marked with an (*) fulfill UAA GERs.</td>
</tr>
</tbody>
</table>

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
   - TECH A443 Quality Leadership 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, madirks@uaa.alaska.edu
Mel Kalkowski, Term Assistant Professor, ANMLK@uaa.alaska.edu

VETERINARY ASSISTING

Matanuska-Susitna College
8295 East College Drive (P.O. Box 2889)
Palmer, AK 99645 (907) 745-9774
http://matsu.alaska.edu/office/student-services/degree-programs/veterinary-assistant/

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.

Program Student Learning Outcomes

Upon completion of the occupational endorsement certificate, students will demonstrate:

- Knowledge of veterinary practice administration
- Basic ability to handle and restrain large and small animals
- Understanding of basic medical terminology
- Introductory understanding of animal anatomy and physiology
- Entry level skills for laboratory procedures
- Effective customer service and communication skills.

Admission Requirements

See Admission Requirements to Occupational Endorsement Certificates in Chapter 7.

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 A112 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, klcarpenter@matsu.alaska.edu

WELDING AND NONDESTRUCTIVE TESTING TECHNOLOGY

Anchorage
Gordon Hartlieb Hall (GHH), Room 111, (907) 786-6475
www.uaa.alaska.edu/transportation

Kenai Peninsula College
Kenai River Campus, 156 College Road, Soldotna, AK 99669, (907) 262-0344, (877) 262-0330
www.kpc.alaska.edu

The Welding and Nondestructive Testing Technology program prepares students for employment in welding and/or nondestructive examination as entry-level technicians. A variety of career opportunities are available to welding technicians and nondestructive examination technicians. Both of these fields are utilized in construction, manufacturing, and transportation industries throughout the world.

The UAA Welding and Nondestructive Testing (NDT) program offers an Associate of Applied Science (AAS) 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.

University of Alaska Anchorage 2013-2014 Catalog
www.uaa.alaska.edu
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.

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 toward 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, 156 College Road, Soldotna, AK 99669, (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.

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.

Program Student Learning Outcomes
Students graduating with an Undergraduate Certificate in Welding Technology will be able to:

- Demonstrate competence in the oxy-acetylene cutting process
- Demonstrate competence in the preparation of steel plate certified groove welds
- Demonstrate competence in the welding of steel-plate all position groove welds
- Demonstrate competence in the oxy-acetylene cutting process of steel pipe (both with freehand and machine cutting)
- Demonstrate competence in the preparation of steel pipe to be welded with the stick-electrode process for common sizes of pipe used in industry
- Demonstrate competence in the welding of steel pipe per Procedure KPC-I for testing and welds common schedules and sizes of pipe used in industry
- Complete structural and pipe certification national testing standards

General University Requirements
Complete the General University and the General Course Requirements for certificates located at the beginning of this chapter.

Certificate Requirements
1. Complete the following requirements:
   - MATH A105 Intermediate Algebra (or any MATH course for which MATH A105 is a prerequisite) 3
   - PRPE A108 Introduction to College Writing (3) 3
   - or
   - ENGL A111 Introduction to Composition (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

Associate of Applied Science, Welding and Nondestructive Testing Technology
Prepares students with technical and administrative skills required for a career in metal fabrication and inspection environments.

Program Student Learning Outcomes
Upon completion of this AAS Degree, students will demonstrate:
1. Entry-level technical skills in welding and nondestructive examination.
2. Technical knowledge of the interrelationship between metallurgy, 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 oral and written communication with other employees, customers, and management.
5. Application of mathematical formulas as applied in the welding, inspection, and nondestructive testing field.

Admission Requirements
See the Associate’s Degree Admissions Requirements in Chapter 7.
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 toward the AAS degree.

Major Requirements
1. Complete the following required courses (59-60 credits):
   - ENGL A111 Introduction to Composition 3
   - ENGL A212 Technical Writing 3
   - MATH A105 Intermediate Algebra (or any MATH course for which MATH A105 is a prerequisite) 3
   - Additional AAS General Education Requirements 6
   - PHYS A101 Physics for Poets (3) 3-4
   - or PHYS A115/L Physical Science with Laboratory (4)
   - or PHYS A123 Basic Physics I (3)
   - WELD A112 Shielded Metal Arc Welding (SMAW) 4
   - WELD A157 Technical Drawings for Welders 3
   - WELD A161 Gas Metal Arc Welding (GMAW) 4
   - WELD A162 Flux Cored Welding (FCAW) 4
   - WELD A174 Gas Tungsten Arc Welding (GTAW) 4
   - WELD A261 Ultrasonic Testing 4
   - WELD A262 General Nondestructive Testing 3
   - WELD A263 Radiographic Testing Safety 2
   - WELD A264 Radiographic Testing 4
   - WELD A281 Welding Inspection and Code Review 4
   - WELD A287 Welding Metallurgy Applications 5
2. Complete at least one of the following courses: 3-4
   - 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 62-64 credits is required for the degree.

FACULTY
Fritz Miller, Kenai, Associate Professor, IFFWM@uaa.alaska.edu
Eli van Ringelenstein, Anchorage, Term Instructor, evanringelenstein@uaa.alaska.edu
Shawn Taplin, Assistant Professor, staplin@uaa.alaska.edu
Joseph Trekell, Anchorage, Term Instructor, jmtrekell@uaa.alaska.edu

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.

Students may choose from the following undergraduate programs:

- A four-year program leading to a Bachelor of Science in Civil Engineering;
- A four-year program leading to a Bachelor of Arts or a Bachelor of Science in Computer Science;
- A four-year program leading to a Bachelor of Science in Engineering, with a concentration in Computer Systems Engineering, Electrical Engineering or Mechanical Engineering;
- A four-year program leading to a Bachelor of Science in Geomatics;
- A two-year program leading to an Associate of Applied Science in Geomatics;

Accreditation
The following programs are accredited by the Engineering Accreditation Commission of ABET, www.abet.org:

- Bachelor of Science, Civil Engineering
- Bachelor of Science in Engineering, Computer Systems Engineering
- Bachelor of Science in Engineering, Electrical Engineering
- Bachelor of Science, Geomatics
- Bachelor of Science in Engineering, Mechanical Engineering

Civil Engineering
The Civil Engineering Department offers a Bachelor of Science in Civil Engineering (BSCE) to prepare students for the profession. Knowledge of mathematical and physical sciences gained by study, experience and practice is applied with judgment to develop ways to utilize materials and forces of nature for the progressive well-being of humanity. Students are prepared for improving and protecting the environment; providing facilities for community living, industry and transportation; and providing structures for the use of humanity. The Civil Engineering Department also offers a minor in Civil Engineering.

Computer Science
The Computer Science and Engineering Department offers a Bachelor of Arts (BA) and a Bachelor of Science (BS) in Computer Science (CS). Students learn the fundamental principles of computer science and important issues in computing so they may pursue advanced degrees or enter the workplace as productive, competent software development or information technology professionals. Graduates learn the necessary skills to solve a wide range of real-world problems using a variety of computing technologies and platforms and are prepared for a variety of professional opportunities involving computer technology. The Computer Science and Engineering Department also offers a minor in Computer Science.

Engineering
The Computer Science and Engineering Department, the Electrical Engineering Department, and the Mechanical Engineering Department offer a Bachelor of Science in Engineering, with concentrations in Computer Systems Engineering, Electrical Engineering or Mechanical Engineering.
Computer Systems Engineering
The Computer Science and Engineering Department offers a Bachelor of Science in Engineering, Computer Systems Engineering (BSE CSE). Graduates of the program have a solid foundation in the fundamental concepts of computer hardware and software design, electrical engineering, mathematics, and physics, and can apply these skills to solve real-world problems. Graduates are in a position to take advantage of a wide variety of professional opportunities available to computer systems engineers in industries, including computer software, computer hardware, telecommunications, electronics, consulting, health care, aviation, energy, national defense, robotics and a broad spectrum of financial institutions. The Computer Science and Engineering Department also offers a minor in Computer Systems Engineering.

Electrical Engineering
The Electrical Engineering Department offers a Bachelor of Science in Engineering, Electrical Engineering (BSE EE). Graduates of the program have a solid foundation in mathematics, physics and chemistry as well as computer programming fundamentals, circuit theory, signals analysis, electromagnetics, instrumentation and control theory. Upper-level students have the opportunity to select advanced engineering electives in computer design and interfacing, digital signal processing, antenna theory, power distribution and others. Graduates are in a position to take advantage of a wide variety of professional opportunities, including those that serve the infrastructure and energy needs of Alaskan communities, and are well prepared for an engineering career in a technologically changing world and for graduate programs in electrical engineering and related areas. The Electrical Engineering Department also offers a minor in Electrical Engineering.

Mechanical Engineering
The Mechanical Engineering Department offers a Bachelor of Science in Engineering, Mechanical Engineering (BSE ME). Graduates of the program have a solid foundation in mathematics, physics and chemistry as well as engineering mechanics, materials science, thermodynamics and heat transfer. That foundation serves as the basis for interdisciplinary design, teamwork, and for lifelong learning. Upper-level students have the opportunity to select from advanced electives in fatigue and fracture; vibrations; renewable energy systems; composite materials; heating, ventilating, air-conditioning and refrigeration (HVAC&R); and others. Graduates are in a position to take advantage of a wide variety of professional opportunities, including those that serve the infrastructure and energy needs of Alaskan communities, and are well prepared for an engineering career in a technologically changing world and for graduate programs in mechanical engineering and related areas. The Mechanical Engineering Department also offers a minor in General Engineering and a minor in Mechanical Engineering. The minor in General Engineering is designed for students who are majoring in a non-engineering baccalaureate degree.

Geomatics
The Department of Geomatics offers a two-year Associate of Applied Science in Geomatics, a four-year Bachelor of Science in Geomatics, a minor in Geographic Information Systems (GIS), and an Undergraduate Certificate in Geographic Information Systems (GIS). Geomatics embraces the traditional disciplines of land surveying, mapping, geodesy, photogrammetry and hydrography, together with the newer disciplines of remote sensing, digital photogrammetry, and spatial or geographic information systems (GIS). Geomaticians help design, map and manage the natural and the man-made resources of the earth. Their skills and efforts are important in project development and environmental protection. They gather, analyze and manipulate data; map results; and help design new developments. The disciplines used in geomatics are based on advancing technologies and use an integrated approach to the acquisition, analysis, storage, distribution, management and application of spatially referenced data.

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.

One-Year (1+3) Engineering Program with UAS
The University of Alaska Southeast in Juneau offers a 1+3 engineering program. Juneau students earn a Pre-Engineering Certificate while completing the first-year of an engineering degree at UAA. The programs at UAA and UAS are coordinated so that students may transfer to UAA with no loss of credit. For more information, please contact the UAA School of Engineering at (907) 786-1900

CIVIL ENGINEERING
Engineering Building (ENG), Room 201, (907) 786-1900
www.uaa.alaska.edu/schoolofengineering

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 development planning. Civil Engineering students are introduced to principles of mathematics, chemistry and physics during their first two years of study. The third year of study is largely devoted to courses in applied extensions of the basic sciences to form the foundation for more advanced engineering analysis and design. Students draw upon previous learning in their senior year to focus their studies on sophisticated analyses and creative designs. Throughout the four-year engineering program students take courses in communication, humanities, social sciences and fine arts to improve their communication skills and to become more aware of their roles and responsibilities in modern society. The UAA Civil Engineering program emphasizes northern region design considerations and provides specialized training appropriate for an engineering career in Alaska and other cold regions of the world.

Civil Engineering Department Mission
The mission of the Civil Engineering Department, through its undergraduate and graduate education programs, its professional development programs, its research, and its service, is to advance the civil engineering profession in Alaska and elsewhere for building a sustainable civilization with utmost respect for the well-being of its peoples and the environment.

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.

Program Objectives
The curriculum of the UAA CE program is designed to produce graduates who, within five years of graduation, will:
1. Practice with “responsible charge” in the civil engineering sub-disciplines of water resources, geotechnical, structural, transportation, and environmental engineering; with emphasis on cold region issues. “Responsible charge” is as defined by the Alaska Professional Engineering licensing regulations.

2. Make contributions in project planning, preparation, implementation, design, and presentation in a team environment in sub-discipline areas.

3. Demonstrate and update their competency via professional registration, continuing education, graduate study, and professional service to their communities.

4. Exemplify the ethical standards of the profession.

**Program Student Learning Outcomes**

In keeping with the above 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.

**Preparation**

While in high school, students can prepare for entering and succeeding in the university engineering program. In order to be the best prepared, students should complete the following high school courses with grades of C or better:

- **Algebra**: 2 years
- **Chemistry**: 1 year
- **English**: 3 years
- **Physics**: 1 year
- **Trigonometry**: 1/2 year

Students successfully completing the above courses will be prepared to enroll in the first year of courses that count toward the engineering degree. Students without the above preparatory courses will need to take equivalent university courses before taking some of the first-year courses that count toward the engineering degree. Students are encouraged to work with their faculty advisors for developing a course plan.

**Admission Requirements**

Complete the Admission to Baccalaureate Degree Program requirements described in Chapter 7.

Admission to the Bachelor of Science in Engineering program is to one of two levels: Pre-Engineering or Engineering. Students admitted to either of the two levels are considered to be degree-seeking civil engineering students.

**Pre-Engineering Level**

Applicants for admission who have completed only the general Baccalaureate Programs requirements in Chapter 7 are admitted to the Civil Engineering program at the Pre-Engineering level.

**Civil Engineering Level**

Applicants for admission who, in addition to the general Baccalaureate Programs requirements, have completed the high school Preparation courses listed above (or their university equivalents) with grades of C or better will be admitted to the Civil Engineering program at the Civil Engineering level.

**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 level. 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 the Civil Engineering level.

**Advising**

All undergraduate students, as a part of the mandatory advising plan of the department, must meet with their faculty advisor at least once in an academic year to review their academic progress, future course plan and to advance within the program. 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 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 below 2.00 will be placed on 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 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 (GER) for all baccalaureate degrees listed at the beginning of this chapter.

C. Civil Engineering Requirements

1. Complete the following courses with a minimum GPA of 2.00. Courses with an asterisk (*) must be completed with a minimum grade of C (102 credits):

   - CE A152: Introduction to Civil Engineering 1
   - CE A334*: Properties of Materials 3
   - CE A344: Water Resources Engineering 3
   - CE A403: Arctic Engineering 3
   - CE A405: Transportation Engineering I 3
   - CE A406: Transportation Engineering II 3
   - CE A422: Foundation Engineering 3
   - CE A431*: Structural Analysis 4
   - CE A432: Steel Design (3) 3
   - CE A433: Reinforced Concrete Design (3)
   - CE A435*: Soil Mechanics 3
   - CE A437*: Project Planning 1
   - CE A438: Design of Civil Engineering Systems 3
   - CE A441*: Fundamentals of Environmental Engineering and Applied Environmental Science 3
   - CE A442: Environmental Systems Design 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
   - ENGL A212: Technical Writing 3
   - ENGR A151*: Introduction to Engineering 1
   - ENGR A161*: Engineering Practices II 3
   - ES A103: Engineering Graphics 3
   - ES A209*: Engineering Statics 3
   - ES A210*: Engineering Dynamics 3
   - ES A302*: Engineering Data Analysis 3
   - ES A331*: Mechanics of Materials 3
   - ES A341*: Fluid Mechanics 3
   - ES A341L: Fluid Mechanics Laboratory 1
   - ESM A450*: Economic Analysis and Operations 3
   - GEO A155*: Fundamentals of Surveying 3
   - MATH A200*: Calculus I 4
   - MATH A201*: Calculus II 4
   - MATH A202*: Calculus III 4
   - MATH A302*: Ordinary Differential Equations 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

2. A basic science elective (minimum 3 credits) must be taken from the following list:

   - BIOL A115: Fundamentals of Biology I (4)
   - BIOL/GEOL A178: Fundamentals of Oceanography (3)
   - BIOL A271: Principles of Ecology (4)
   - GEOL A111: Physical Geology (4)
   - GEOL A115: Environmental Geology (3)

3. Complete six credits of technical elective courses from the following list. Graduate courses may not be applied to both a baccalaureate and master’s degree.

   - CE A334*: Properties of Materials (3)
   - CE A344*: Water Resources Engineering (3)
   - CE A405*: Transportation Engineering I (3)
   - CE A422*: Foundation Engineering (3)
   - CE A425: Highway Engineering (3)
   - CE A431*: Structural Analysis (4)
   - CE A432*: Steel Design (3)
   - CE A433*: Reinforced Concrete Design (3)
   - CE A435*: Soil Mechanics (3)
   - CE A441*: Fundamentals of Environmental Engineering and Applied Environmental Science (3)
   - CE A442: Environmental Systems Design (3)

Note: Students are encouraged to take 6 credits from a single subdiscipline.

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Environmental Engineering

- AEST A601: Aquatic Process Chemistry (3)
- CE A445: Chemical and Physical Water and Wastewater Treatment Processes (3)
- CE A446: Biological Treatment Processes (3)
- CE A447: Advanced Unit Processes (3)

Water Resources Engineering

- CE A462: Surface Water Dynamics (3)
- CE A475: Design of Ports and Harbors (3)
- CE A476: Coastal Engineering (3)
- CE A479: Sediment Transport and Coastal Processes (3)
- CE A663: Ground Water Dynamics (3)
- CE A674: Waves, Tides, and Ocean Processes for Engineers (3)

Transportation Engineering

- CE A423: Traffic Engineering (3)
- CE A424: Pavement Design (3)
- CE A425: Highway Engineering (3)
- CE A426: Traffic Modeling and Simulation (3)

Geotechnical Engineering

- CE A414: Soil Strength and Slope Stability (3)
- CE A611: Geotechnical Earthquake Engineering (3)
- CE A612: Advanced Foundation Design (3)

Structural Engineering

- CE A432: Steel Design (3)
- 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 requirements described above.

- CE A451: Advanced Structural Analysis (3)
- CE A452: Advanced Steel Design (3)
- CE A454: Timber Design (3)
- CE A631: Structural Finite Elements (3)
- CE A639: Loads on Structures (3)

4. Note: A total of 132 credits is required for the degree, of which 42 credits must be upper division (300-, 400-, or 600-level).

Minor, Civil Engineering

Students majoring in a non-Civil Engineering baccalaureate degree can enroll in the minor in Civil Engineering. Students must satisfy all prerequisite requirements for the courses required for the minor. A minor in Civil Engineering consists of a minimum of 18 credits. At least 6 credits must be upper division. Students must earn a cumulative GPA of at least 2.00 in the minor. For general information about the minor requirements, see the Minors section at the beginning of this chapter.

Complete at least 18 credits from the following courses with a minimum GPA of 2.00. Courses with an asterisk (*) indicate a set of recommended courses for the minor:

- CE A334*: Properties of Materials (3)
- CE A405*: Transportation Engineering I (3)
- CE A422*: Foundation Engineering (3)
- CE A425: Highway Engineering (3)
- CE A431*: Structural Analysis (4)
- CE A432*: Steel Design (3)
- CE A433*: Reinforced Concrete Design (3)
- CE A435*: Soil Mechanics (3)
- CE A441*: Fundamentals of Environmental Engineering and Applied Environmental Science (3)
- CE A442: Environmental Systems Design (3)
FACULTY
Osama Abaza, Professor and Chair, oabaza@uaa.alaska.edu
Ghulam Bham, Assistant Professor, ggbham@uaa.alaska.edu
Aaron Dotson, Assistant Professor, addotson@uaa.alaska.edu
Utpal Dutta, Associate Professor, udutta2@uaa.alaska.edu
Scott Hamel, Assistant Professor, shamel@uaa.alaska.edu
Rob Lang, Professor, rjlang@uaa.alaska.edu
He Liu, Professor, hilu@uaa.alaska.edu
John Olafsson, Professor, jolafsson@uaa.alaska.edu
T. Bart Quimby, Professor/Associate Dean, tbquimby@uaa.alaska.edu
Thomas Ravens, Professor, tmravens@uaa.alaska.edu
Orson Smith, Professor, ops smith@uaa.alaska.edu
Zhaohui (Joey) Yang, Associate Professor, zyang2@uaa.alaska.edu
Hannele Zubeck, Professor, hkszubeck@uaa.alaska.edu

COMPUTER SCIENCE
Engineering Building (ENGR), Room 201, (907) 786-1900
www.uaa.alaska.edu/computerscienceandengineering

The Department of Computer Science and Engineering offers courses covering the major areas of computer science. These courses constitute the basis for an undergraduate major that prepares students for a variety of professional and technical careers in business, industry, and government, or for graduate work leading to advanced degrees. In addition, the department offers courses for students from other fields that will use computer science as a tool in their own areas.

The department offers two degrees in computer science: the Bachelor of Arts in Computer Science and the Bachelor of Science in Computer Science. The BA gives the student the opportunity to obtain a liberal arts background while the BS program gives the student the opportunity to pursue a sciences background. The BS is recommended for those seeking to pursue a graduate degree in computer science.

Both degrees prepare the student to pursue a professional career in the computing field and are based on the 2012-13 computing curriculum guidelines developed by the Accreditation Board for Engineering and Technology (ABET). The core of both degrees emphasizes a broad fundamental principles of computer science and teaches the student the necessary skills to develop solutions using current or future technology. The core topics include computer programming, systems organization, software engineering, databases and theory. Upon completion of the core topics, the student may select electives that explore specific areas of computer science, such as computer graphics, architecture or intelligent systems.

Accreditation
The Bachelor of Science in Computer Science program is accredited by the Computing Accreditation Commission of ABET, www.abet.org.

Program Objectives
The Computer Science program has adopted the following educational program objectives for the Bachelor of Arts and the Bachelor of Science degrees in Computer Science. Graduates with these degrees will achieve some or all of these objectives within five years of graduation:

1. Make contributions to the computing profession and apply computational solutions to solve real-world problems.
2. Successfully adapt to changes in the field of computer science.
3. Meet or exceed the expectations of their employers and professional mentors as computer science professionals and advance in their career.
4. Be admitted to and successfully complete advanced degree programs.
5. Contribute to the Alaska economy through their professional accomplishments in computing.

Program Student Learning Outcomes
Students graduating with a Bachelor of Arts in Computer Science or a Bachelor of Science in Computer Science will be able to:

- Apply knowledge of computing and mathematics appropriate to the discipline.
- Analyze a problem, and identify and define the computing requirements appropriate to its solution.
- Design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.
- Function effectively on teams to accomplish a common goal.
- Demonstrate an understanding of professional, ethical, legal, security and social issues and responsibilities.
- Communicate effectively with a range of audiences, including technical and non-technical audiences for business, end-user, client, and computing contexts.
- Analyze the local and global impact of computing on individuals, organizations, and society.
- Recognize the need for and an ability to engage in continuing professional development.
- Use current techniques, skills, and tools necessary for computing practice.
- Apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design choices.
- Apply design and development principles in the construction of software systems of varying complexity.

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.
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.

Bachelor of Arts, Computer Science

Admission Requirements
Complete the Admission to Baccalaureate Programs Requirements in Chapter 7.

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
1. Complete the following breadth courses in the liberal arts (27-29 credits):
   a. Cultural Heritages (12 credits)
      Comparative Cultures
      ANTH A250 The Rise of Civilization 3
      Western Culture
      HIST A101 Western Civilization I 3
      HIST A102 Western Civilization II 3
      American Culture
      HIST A131 History of United States I (3) 3
      HIST A132 History of United States II (3)
b. Arts and Letters (15-17 credits)

Introduction to Literature

ENGL A121 Introduction to Literature (3) 3
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)

Language/Humanities

Any two-semester sequence in one of the following humanities sequences or in a language other than English:

AKNS A101A Elementary Central Yup’ik Language I (4)
AKNS A101B Elementary Tingit Language I (4)
AKNS A101C Elementary Alaska Native Language I (4)
AKNS A102A Elementary Central Yup’ik Language II (4)
AKNS A102B Elementary Tingit Language II (4)
AKNS A102C Elementary Alaska Native Language II (4)
AKNS A102E Elementary Alutiiq Language I (4)
AKNS A102E Elementary Alutiiq Language II (4)
ART A261 History of Western Art I (3)
ART A262 History of Western Art II (3)
ENGL A201 Masterpieces of World Literature I (3)
ENGL A202 Masterpieces of World Literature II (3)
MUS A221 History of Music I (3)
MUS A222 History of Music II (3)
PHIL A211 History of Philosophy I (3)
PHIL A212 History of Philosophy II (3)
PHIL A313 Eastern Philosophy and Religion (3)
PHIL A314 Western Religions (3)
PS A332 History of Political Philosophy I: Classical (3)
PS A333 History of Political Philosophy II: Modern (3)
THR A311 Representative Plays I (3)
THR A312 Representative Plays II (3)
THR A411 History of the Theatre I (3)
THR A412 History of the Theatre II (3)

Ways of Knowing (3 credits)

ENGL A120 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)

Social Behavior (3 credits)

Double majors must choose a course not in their major.

ANTH A101 Introduction to Anthropology (3)
COMM A101 Introduction to Human Communication (3)
ECON A201 Principles of Macroeconomics (3)
JPC A101 Media and Society (3)

2. Complete the following core courses (42 credits):

CSCE A201 Computer Programming I (4)
CSCE A202 Object-Oriented Programming (3)
CSCE A211 Computer Programming II (4)
CSCE/EE A241 Computer Hardware Concepts (4)
CSCE A248 Computer Organization and Assembly Language Programming (3)
CSCE A311 Data Structures and Algorithms (3)
CSCE A320 Operating Systems (3)
CSCE A331 Programming Language Concepts (3)
CSCE A351 Automata, Algorithms, and Complexity (3)
CSCE A360 Database Systems (3)
CSCE A365 Computer Networks (3)
CSCE A401 Software Engineering (3)
CSCE A470 Computer Science and Engineering Capstone Project (3)

3. Complete the following required support courses (16-17 credits):

ENGL A312 Advanced Technical Writing (3)
ENGL A414 Research Writing (3)
MATH A200 Calculus I (4)
MATH A272 Applied Calculus (3)
MATH A231 Introduction to Discrete Mathematics (3)
PHIL A305 Professional Ethics (3)
STAT A253 Applied Statistics for the Sciences (4)
STAT A307 Probability and Statistics (4)

4. Complete an additional 12 upper division credits in Computer Science/Computer Systems Engineering (CSCE prefix), Mathematics (excluding MATH A420 and MATH A495), or Statistics. Nine of these credits must be in courses with a CSCE prefix. A maximum of 3 credits of CSCE A395, a maximum of 3 credits of CSCE A495, and a maximum of 6 credits of CSCE A498 may be applied to degree requirements.

5. A grade of C or higher must be received in all CSCE, MATH, and STAT courses required to satisfy the above program requirements.

6. All Computer Science majors must take a standardized test of knowledge of computer science approved by the CS faculty for the purpose of evaluating program effectiveness. There is no minimum score required for graduation. This test will normally be taken during the senior year.

7. Students are encouraged to develop their program with a Computer Science advisor.

8. 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.

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. Major Requirements

1. Complete the following breadth courses designed to equip students with the technical competencies needed in scientific disciplines (23-25 credits):
   a. Mathematics and Statistics (8 credits)
      MATH A200  Calculus I  4
      STAT A307  Probability and Statistics  4
   b. Language/Humanities (6-8 credits)
      Any two-semester sequence in French, German, Japanese, Russian or Spanish, or one of the following humanities sequences:
      ART A261  History of Western Art I (3)  6-8 and
      ART A262  History of Western Art II (3)
      ENGL A201  Masterpieces of World Literature I (3) and
      ENGL A202  Masterpieces of World Literature II (3)
      MUS A221  History of Music I (3) and
      MUS A222  History of Music II (3)
      PHIL A211  History of Philosophy I (3) and
      PHIL A212  History of Philosophy II (3)
      PHIL A313  Eastern Philosophy and Religion (3) and
      PHIL A314  Western Religions (3)
      PS A332  History of Political Philosophy I: Classical (3) and
      PS A333  History of Political Philosophy II: Modern (3)
      THR A311  Representative Plays I (3) and
      THR A312  Representative Plays II (3)
      THR A411  History of the Theatre I (3) and
      THR A412  History of the Theatre II (3)
   c. Natural Sciences (9 credits)*
      Complete a minimum of 9 credits 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 this list). 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.
      ASTR A103  Solar System Astronomy (3)
      ASTR A103L  Solar System Astronomy Laboratory (1)
      ASTR A104  Stars, Galaxies and Cosmology (3)
      ASTR A104L  Stars, Galaxies and Cosmology Laboratory (1)
      BIOL A102  Introductory Biology (3)
      BIOL A103  Introductory Biology Laboratory (1)
      BIOL A111  Human Anatomy and Physiology I (4)
      BIOL A112  Human Anatomy and Physiology II (4)
      BIOL A113  Lectures in Human Anatomy and Physiology I (3)
      BIOL A114  Lectures in Human Anatomy and Physiology II (3)
      BIOL A115  Fundamentals of Biology I (4)
      BIOL A116  Fundamentals of Biology II (4)
      CHEM A103  Survey of Chemistry (3)
      CHEM A103L  Survey of Chemistry Laboratory (1)
      CHEM A104  Introduction to Organic Chemistry and Biochemistry (3)
      CHEM A104L  Introduction to Organic Chemistry and Biochemistry 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)
      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)
      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 A248  Computer Organization and Assembly Language Programming 3
      PHIL A310  Professional Ethics and Dispositions 3
      PHIL A311  Data Structures and Algorithms 3
      PHIL A312  Operating Systems 3
      PHIL A321  Programming Language Concepts 3
      PHIL A351  Automata, Algorithms, and Complexity 3
      PHIL A360  Database Systems 3
      PHIL A365  Computer Networks 3
      PHIL A370  Software Engineering 3
      PHIL A470  Computer Science and Engineering Capstone Project 3
      ENGL A312  Advanced Technical Writing (3) or
      ENGL A414  Research Writing (3)
      MATH A201  Calculus II  4
      MATH A231  Introduction to Discrete Mathematics 3
      MATH A305  Professional Ethics (3)  3
      PHYS A123L  Basic Physics I with laboratory (4)
      PHYS A124L  Basic Physics II with laboratory (4)
      or
      PHYS A211L  General Physics I with laboratory (4)
      PHYS A212L  General Physics II with laboratory (4)
      or
      PHYS A212L  General Physics II with laboratory (4)
      4. Complete an additional 12 upper division credits in Computer Science/Computer Systems Engineering (CSCE prefix), Mathematics (excluding MATH A420 and MATH A495), or Statistics. Nine of these credits must be in courses with a CSCE prefix. A maximum of 3 credits of CSCE A395, a maximum of 3 credits of CSCE A495, and a maximum of 6 credits of CSCE A498 may be applied to degree requirements.
      5. A grade of C or higher must be received in all CSCE, MATH, and STAT courses required to satisfy the above program requirements.
      6. All Computer Science majors must take a standardized test of knowledge of computer science approved by the CS faculty for the purpose of evaluating program effectiveness. There is no minimum score required for graduation. This test will normally be taken during the senior year.
      7. Students are encouraged to develop their program with a Computer Science advisor.
8. 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 (17 credits):
   - CSCE A201 Computer Programming I 4
   - CSCE A202 Object-Oriented Programming 3
   - CSCE A211 Computer Programming II 4
   - CSCE A311 Data Structures and Algorithms 3
   - MATH A231 Introduction to Discrete Mathematics 3

2. Complete 9 credits of additional CSCE-prefixed courses, 3 of which may be lower division.

3. A total of 26 credits is required for the minor.

**FACULTY**

Dean Franklin, Adjunct, jdfranklin4@uaa.alaska.edu
Bilal Gonen, Term Assistant Professor, bgonen@uaa.alaska.edu
John Lund, Cooperating Assistant Professor, jaulund@uaa.alaska.edu
Kenrick Mock, Associate Professor, kjmock@uaa.alaska.edu
Frank Moore, Associate Professor, fmoore@uaa.alaska.edu
Kirk Scott, Associate Professor, kascott@uaa.alaska.edu

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**Engineering: Computer Systems, Electrical and Mechanical Engineering**

Engineering Building (ENGR), Room 201, (907) 786-1900
www.uaa.alaska.edu/schoolofengineering

**Bachelor of Science, Engineering**

The Computer Science and Engineering, Electrical Engineering, and Mechanical Engineering departments offer a Bachelor of Science in Engineering, with concentrations in Computer Systems Engineering, Electrical Engineering or Mechanical Engineering.

**Computer Systems Engineering**

The Department of Computer Science and Engineering offers a Bachelor of Science in Engineering with a concentration in Computer Systems Engineering (BSE CSCE), and a minor in Computer Systems Engineering. The program is a fully-accredited Bachelor of Science in Engineering, Computer Systems Engineering degree program. Students are introduced to principles of mathematics and physics during the first two years of study along with introductory courses in fundamentals of computer hardware and programming. The third and fourth years consist of upper division courses applicable to computer systems along with computer systems engineering electives in the area of the students’ interests. Students complete a project-oriented capstone course where they will apply their knowledge in computer systems engineering to solve challenging problems. Students also take courses on written and oral communication, humanities, social sciences, and fine arts to improve their communication skills and to put their profession into a broader societal context.

**Electrical Engineering**

The Department of Electrical Engineering offers a Bachelor of Science in Engineering with a concentration in Electrical Engineering (BSE EE), and a minor in Electrical Engineering. The program is a fully-accredited Bachelor of Science in Engineering, Electrical Engineering degree program. During the first two years of study, students are introduced to principles of mathematics, chemistry and physics, as well as basic circuit theory, digital logic and electrical devices. The third year of study largely focuses on fundamental electrical engineering concepts, including courses in signal analysis, electromagnetism, instrumentation and telecommunication. During the fourth year, students take more advanced courses, including technical electives that are more focused on electrical engineering analysis and design. Upper division electives include courses in computer design, antenna theory, communication theory, power distribution, and control systems. Students also take courses on written and oral communication, humanities, social sciences, and fine arts to improve their communication skills and to put their profession into a broader societal context.

**Mechanical Engineering**

The Department of Mechanical Engineering offers a Bachelor of Science in Engineering with a concentration in Mechanical Engineering (BSE ME), and minors in General Engineering and Mechanical Engineering. The program is a fully-accredited Bachelor of Science in Engineering, Mechanical Engineering degree program. Students are introduced to principles of mathematics, chemistry and physics during the first two years of study. The third year of study largely focuses on courses that apply these basic sciences in an engineering context. During the fourth year, students take more advanced courses, including technical electives that are more focused on mechanical engineering analysis and design. The program focuses on the design of systems related to transfer of thermal and mechanical energies where topics such as machine design and thermal systems, including heating, ventilation, air conditioning, and refrigeration (HVAC&R), are covered in detail. Students have the opportunity for hands-on experience in a state-of-the-art manufacturing lab with rapid prototyping through three dimensional printers and CNC machining. Students also take courses on written and oral communication, humanities, social sciences, and fine arts to improve their communication skills and to put their profession into a broader societal context.

**Accreditation**

**Computer Systems Engineering**

The Bachelor of Science in Engineering, Computer Systems Engineering program is accredited by the Engineering Accreditation Commission of ABET, www.abet.org.

**Electrical Engineering**

The Bachelor of Science in Engineering, Electrical Engineering program is accredited by the Engineering Accreditation Commission of ABET, www.abet.org.

**Mechanical Engineering**

The Bachelor of Science in Engineering, Mechanical Engineering program is accredited by the Engineering Accreditation Commission of ABET, www.abet.org.

**Program Objectives**

**Computer Systems Engineering**

1. Graduates are successful practitioners of computer engineering in a variety of industries, government agencies, and research/academic institutions, serving the State of Alaska as well as national/international needs.
2. Graduates exhibit high standards regarding ethical behavior and social responsibility.
3. Graduates successfully engage in life-long learning experiences such as graduate education, short courses, technical talks, conferences, training program, community groups, and writing and/or publishing papers.

**Electrical Engineering**

1. To produce electrical engineering graduates with the training and skills to enter the job market or to continue their education by attending graduate school.
2. To produce graduates who will become business and community leaders in Alaska and throughout the world.
3. To produce graduates who will, through their training in electrical engineering and their commitment to their continuing education, become the entrepreneurs driving Alaska’s growth in the future.

4. To produce graduates in electrical engineering who conduct themselves and practice their profession with the highest of professional standards.

**Mechanical Engineering**

1. To produce graduates who are able to practice mechanical engineering through design and analysis of mechanical systems in industry, government, and academic settings.

2. To produce graduates who are prepared for graduate-level education, research and development, and other creative endeavors in science and technology.

3. To produce graduates who are able to conduct themselves in a professional and ethical manner.

4. To produce graduates who are able to become contributors and leaders in the economic development and improving the quality of life in the State of Alaska, the nation, and the world.

**Program Student Learning Outcomes**

The program has chosen the following set of program outcomes. It is expected that graduates from the program will have:

1. An ability to apply knowledge of mathematics, science, and engineering.

2. An ability to design and conduct experiments, as well as analyze and interpret data.

3. 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.

4. An ability to function on multidisciplinary teams.

5. An ability to identify, formulate, and solve engineering 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 engineering solutions in a global, economic, environmental, and societal context.

9. A recognition of the need for, and the ability to engage in, lifelong learning.

10. A knowledge of contemporary issues.

11. An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

**Departmental Honors**

Undergraduate students in the program may be recognized for exceptional performance by earning Departmental Honors. The award will be noted on their permanent university transcript. In order to receive Departmental Honors, a student must meet each of the following requirements:

1. Complete all program requirements.

2. Be an active member for at least one year of both a national and an on-campus student chapter of a professional engineering society that addresses issues relevant to the engineering profession.

3. Earn a GPA of 3.50 or above in the courses required for the major.

4. Gain approval for, complete, and present a design/research project prior to applying for graduation. The project proposal, presentation, and final written report must be approved by the program faculty.

**Preparation**

While in high school, students can prepare for entering and succeeding in the university engineering program. In order to be the best prepared, students should complete the following high school courses with grades of C or better:

<table>
<thead>
<tr>
<th>Course</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algebra</td>
<td>2</td>
</tr>
</tbody>
</table>

Students successfully completing the above courses should be prepared to enroll in the first year of courses that count toward the engineering degree. Students without the above preparatory courses will need to take equivalent university courses before taking some of the first year of courses that count toward the engineering degree.

**Admission Requirements**

Admission to the program is to one of two levels: Pre-Engineering or Engineering. Students admitted to either of the two levels are considered to be degree-seeking engineering students majoring in Engineering.

**Pre-Engineering Level**

Applicants for admission who have completed only the Admission to Baccalaureate Programs requirements in Chapter 7 are admitted to the program at the Pre-Engineering level.

**Engineering Level**

Applicants for admission who, in addition to the Admission to Baccalaureate Programs requirements, have completed at least the level of high school courses listed above under Preparation (or their university equivalents) with grades of C or better will be admitted to the program at the Engineering level.

**Advancement**

**Pre-Engineering to Engineering**

To advance from the Pre-Engineering level to the Engineering level, students must meet the admission requirements to the Engineering level and complete and submit a Change of Major form.

**Academic Progress**

All prerequisites for engineering courses must be completed with a grade of C or higher, and all courses in the major requirements must be completed with a grade of C or higher. A student who is unable to earn a grade of C or higher in a CSE, EE, ES, ENGR or ME course may attempt to earn a satisfactory grade one additional time, on a space-available basis. Failure to earn a grade of C or higher on the second attempt may result in removal from the program. Re-admittance requires a letter of appeal from the student requesting re-admittance with an explanation of any mitigating factors and how these factors have been addressed. Re-admittance is subject to approval by the department chair of the program.

A student who has a semester GPA below 2.00 in the major requirements will be placed on academic warning by the program. If a student on academic warning status receives a semester GPA of at least 2.00 in the major requirements, that student will be removed from academic warning status by the program. Otherwise, if a student on academic warning status receives a semester GPA below 2.00 in the major requirements, the student will be dropped from the program and must reapply in order to continue in the program.

**Academic Integrity**

The program requires its students to abide by the principles of academic integrity described in the Student Code of Conduct. Should suspected cases of academic misconduct occur, these cases may be submitted to the UAA Dean of Students Office, where the Assistant Director of Student Conduct reviews all allegations of academic misconduct. At the conclusion of the review, the Assistant Director of Student Conduct issues a notification of the findings and conclusions to the reporting faculty member, department chair, and dean. Should a student from the program be found responsible for a case of academic misconduct by the UAA Dean of Students Office on two separate occasions, that student will be dropped from the program. Re-admittance requires a letter of appeal from the student requesting re-admittance with an explanation of any mitigating factors and how these factors have been addressed. Re-admittance is subject to approval by the department chair of the student’s degree program.
Graduation Requirements
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 (GER) for Baccalaureate Degrees listed at the beginning of this chapter.

C. Major Requirements
Students must choose Computer Systems Engineering, Electrical Engineering or Mechanical Engineering. All courses in the major requirements must be completed with a grade of C or higher.

Computer Systems Engineering
1. Complete the following core courses (86 credits):
   - CSCE A201 Computer Programming I 4
   - CSCE A211 Computer Programming II 4
   - CSCE/EE A241 Computer Hardware Concepts 4
   - CSCE A248 Computer Organization and Assembly Language Programming 3
   - CSCE A311 Data Structures and Algorithms 3
   - CSCE A320 Operating Systems 3
   - CSCE A342 Digital Circuits Design 3
   - CSCE A365 Computer Networks 3
   - CSCE A448 Computer Architecture 3
   - CSCE A465 Computer and Network Security 3
   - CSCE A470 Computer Science and Engineering Capstone Project 3
   - EE A203 Fundamentals of Electrical Engineering I 4
   - EE A333 Electronic Devices 4
   - EE A353 Circuit Theory 3
   - ENGL A212 Technical Writing 3
   - ESM A450 Economic Analysis and Operations 3
   - MATH A200 Calculus I 4
   - MATH A201 Calculus II 4
   - MATH A202 Calculus III 4
   - MATH A231 Introduction to Discrete Mathematics 3
   - MATH A302 Ordinary Differential Equations 3
   - PHIL A305 Professional Ethics 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
   - STAT A307 Probability and Statistics 4

2. Advanced engineering electives: 15
   Students are required to take 15 credits from the following list of approved CSE electives. Of the 15, at least 6 credits must be from classes with a CSCE prefix. A maximum of 3 credits from CSCE A395, a maximum of 3 credits from CSCE A495, and a maximum of 6 credits from CSCE A498 may be applied toward this degree requirement. Other relevant courses may be accepted by approved petition.
   Any upper division elective with a CSCE prefix (1-4 per course)
   - EE/PHYS A314 Electromagnetics (3)
   - EE/PHYS A324 Electromagnetics II (3)
   - EE A324L Electromagnetics Laboratory II (1)
   - EE A354 Engineering Signal Analysis (3)
   - EE A441 Integrated Circuit Design (3)
   - EE A451 Digital Signal Processing (3)
   - EE A462 Communication Systems (3)
   - EE A465 Telecommunications (3)

3. A total of 120 credits are required for the degree, of which 42 credits must be upper division.

Electrical Engineering
1. Complete the following core courses (95 credits):
   - CHEM A105 General Chemistry I 3
   - CHEM A105L General Chemistry I Laboratory 1
   - CSE A205 Introduction to C Programming for Engineers 3
   - CSCE A248 Computer Organizations and Assembly Language Programming 3
   - EE A203 Fundamentals of Electrical Engineering I 4
   - EE/CSCE A241 Computer Hardware Concepts 4
   - EE A261 Matlab for Electrical Engineers 1
   - EE A307 Introduction to Power Systems 3
   - EE/ME A308 Instrumentation and Measurement 3
   - EE/PHYS A314 Electromagnetics 3
   - EE/PHYS A324 Electromagnetics II 3
   - EE A324L Electromagnetics Laboratory II 1
   - EE A333 Electronic Devices 4
   - EE A353 Circuit Theory 3
   - EE A353L Circuit Theory Laboratory 1
   - EE A354 Engineering Signal Analysis 3
   - EE A438 Design of Electrical Engineering Systems 3
   - EE A441 Integrated Circuit Design 3
   - EE A465 Telecommunications 3
   - EE A471 Automatic Control 3
   - ENGL A212 Technical Writing 3
   - ENGR A105A Engineering Computer-Aided Design I 1
   - ENGR A105B Engineering Computer-Aided Design II 1
   - ENGR A151 Introduction to Engineering 1
   - ES A208 Engineering Statics and Dynamics 5
   - ES A302 Engineering Data Analysis 3
   - ESM A450 Economic Analysis and Operations 3
   - MATH A200 Calculus I 4
   - MATH A201 Calculus II 4
   - MATH A202 Calculus III 4
   - MATH A302 Ordinary Differential Equations 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

2. Choose from the following advanced mathematics electives: 3
   - MATH A314 Linear Algebra (3)
   - MATH A321 Analysis of Several Variables (3)
   - MATH A371 Stochastic Processes (3)
   - MATH A407 Mathematical Statistics I (3)
   - MATH A410 Introduction to Complex Analysis (3)
   - MATH A422 Partial Differential Equations (3)
   - MATH A423 Advanced Engineering Mathematics (3)
   - MATH A426 Numerical Methods (3)

3. Choose from the following advanced engineering electives: 12
   Students are required to take 12 credits from the following list of approved advanced engineering electives. Of the 12 credits, at least 6 of them must be from classes with the EE prefix.
   - CE A403/CE A603 Arctic Engineering (3)
   - ES A411 Northern Design (3)

Note: Only one of CE A403 or CE A603 or ES A411 can apply to the degree.

- CSCE A365 Computer Networks (3)
- CSCE A445 Computer Design and Simulation (4)
- CSCE A465 Computer and Network Security (3)
- EE/ME A306 Dynamics of Systems (3)
- EE A407 Power Distribution (3)
- EE A451 Digital Signal Processing (3)
- EE A458 Antenna Theory (3)
4. A total of 131 credits is required for the degree, of which 42 credits must be upper division.

**Mechanical Engineering**

1. Complete the following core courses (96 credits):
   - **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
   - **ENGL A212** Technical Writing 3
   - **ENGR A105A** Engineering Computer-Aided Design I 1
   - **ENGR A105B** Engineering Computer-Aided Design II 1
   - **ENGR A105C** Engineering Computer-Aided Design III 1
   - **ENGR A151** Introduction to Engineering 1
   - **ENGR A161** Engineering Practices II 3
   - **ES A209** Engineering Statics 3
   - **ES A210** Engineering Dynamics 3
   - **ES A302** Engineering Data Analysis 3
   - **ES A309** Elements of Electrical Engineering 3
   - **ES A331** Mechanics of Materials 3
   - **ES A341** Fluid Mechanics 3
   - **ES A341L** Fluid Mechanics Laboratory 1
   - **ES A346** Basic Thermodynamics 3
   - **ESM A450** Economic Analysis and Operations 3
   - **MATH A200** Calculus I 4
   - **MATH A201** Calculus II 4
   - **MATH A202** Calculus III 4
   - **MATH A302** Ordinary Differential Equations 3
   - **ME A280** Solid Modeling for Engineers 3
   - **ME/EE A306** Dynamics of Systems 3
   - **ME/EE A308** Instrumentation and Measurement 3
   - **ME A313** Mechanical Engineering Thermodynamics 3
   - **ME A334** Materials Science 3
   - **ME A334L** Materials Science Lab 1
   - **ME A403** Machine Design 3
   - **ME A414** Thermal System Design 3
   - **ME A414L** Thermal System Design Laboratory 1
   - **ME A438** Design of Mechanical Engineering Systems 3
   - **ME A441** Heat and Mass Transfer 3
   - **ME A441L** Heat and Mass Transfer Lab 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
   - **MATH A314** Linear Algebra (3)
   - **MATH A321** Analysis of Several Variables (3)
   - **MATH A371** Stochastic Processes (3)
   - **MATH A407** Mathematical Statistics I (3)
   - **MATH A410** Introduction to Complex Analysis (3)
   - **MATH A422** Partial Differential Equations (3)
   - **MATH A423** Advanced Engineering Mathematics (3)
   - **MATH A426** Numerical Methods (3)
   - **AEST A608** Fundamentals of Air Pollution (3)
   - **CE A403/A603** Arctic Engineering (3)
   - **ES A411** Northern Design (3)

3. Choose from the following advanced engineering electives: 12
   - **EE A203** Fundamentals of Electrical Engineering I (4)
   - **EE/CSCE A241** Computer Hardware Concepts (4)
   - **EE/ME A308** Instrumentation and Measurement (3)
   - **EE A307** Introduction to Power Systems (3)
   - **EE A314** Electromagnetics (3)
   - **EE A324** Electromagnetics II (3)
   - **EE A324L** Electromagnetics Laboratory II (1)
   - **EE A333** Electronic Devices (4)
   - **EE A335** Circuit Theory (3)
   - **EE A407** Power Distribution (3)
   - **EE A441** Integrated Circuit Design (3)
   - **EE A451** Digital Signal Processing (3)
   - **EE A458** Antenna Theory (3)
   - **EE A462** Communication Systems (3)

4. A total of 132 credits is required for the degree, of which 42 credits must be upper division.

**Minor, Computer Systems Engineering**

Students majoring in another subject who wish to minor in Computer Systems Engineering must complete the following requirements.

1. Complete the five required courses (18 credits):
   - **CSCE A201** Computer Programming I 4
   - **CSCE A211** Computer Programming II 4
   - **CSCE/EE A241** Computer Hardware Concepts 4
   - **CSCE A248** Computer Organization and Assembly Language Programming 3
   - **CSCE A311** Data Structures and Algorithms 3

2. Complete 6 credits of additional upper division CSCE-prefixed courses.

3. A total of 24 credits are required for the minor.

**Minor, Electrical Engineering**

Students majoring in another subject who wish to minor in Electrical Engineering must complete the following requirements. An * indicates a recommended set of courses for the minor.

1. A minimum of 18 credits must be selected from:
   - **EE A203** Fundamentals of Electrical Engineering I (4)
   - **EE/CSCE A241** Computer Hardware Concepts (4)
   - **EE/ME A308** Instrumentation and Measurement (3)
   - **EE A307** Introduction to Power Systems (3)
   - **EE A314** Electromagnetics (3)
   - **EE A324** Electromagnetics II (3)
   - **EE A324L** Electromagnetics Laboratory II (1)
   - **EE A333** Electronic Devices (4)
   - **EE A335** Circuit Theory (3)
   - **EE A407** Power Distribution (3)
   - **EE A441** Integrated Circuit Design (3)
   - **EE A451** Digital Signal Processing (3)
   - **EE A458** Antenna Theory (3)
   - **EE A462** Communication Systems (3)
Minor, General Engineering

Students majoring in a non-engineering subject who wish to minor in General Engineering must complete the following requirements. An * indicates a recommended set of courses for the minor.

1. The following courses are required:
   - ENGR A151 Introduction to Engineering 1
   - ENGR A161 Engineering Practices II 3
   - ES A208 Engineering Statics and Dynamics 5

2. In addition, at least three courses must be selected from the following list:
   - EE/ME A308 Instrumentation and Measurement (3)
   - ES A309 * Elements of Electrical Engineering (3)
   - ES A331 Mechanics of Materials (3)
   - ES A341 * Fluids Mechanics (3)
   - ES A346 * Basic Thermodynamics (3)
   - ESM A450 Economic Analysis and Operations (3)
   - ME A334 Materials Science (3)

Minor, Mechanical Engineering

Students majoring in another subject who wish to minor in Mechanical Engineering must complete the following requirements. An * indicates a recommended set of courses for the minor.

1. A minimum of 18 credits must be selected from:
   - ES A331 * Mechanics of Materials (3)
   - ES A341 * Fluids Mechanics (3)
   - ES A341L Fluid Mechanics Laboratory (1)
   - ES A346 * Basic Thermodynamics (3)
   - ME/EE A306* Dynamics of Systems (3)
   - ME/EE A308 Instrumentation and Measurement (3)
   - ME A313 Mechanical Engineering
     - Thermodynamics (3)
   - ME A334 * Materials Science (3)
   - ME A334L Materials Science Laboratory (1)
   - ME A403 Machine Design (3)
   - ME A414 Thermal System Design (3)
   - ME A414L Thermal System Design Lab (1)
   - ME A441 * Heat and Mass Transfer (3)
   - ME A441L Heat and Mass Transfer Lab (1)

FACULTY

Computer Systems Engineering

Sun-il Kim, Assistant Professor, kim@uaa.alaska.edu
John Lund, Assistant Professor, ajf11@uaa.alaska.edu
Jeff Miller, Associate Professor, jmiller@uaa.alaska.edu
Joe Mäxsell, Associate Professor, afmc1@uaa.alaska.edu
Jens Munk, Associate Professor/Chair, afjm@uaa.alaska.edu
Todd Petersen, Assistant Professor, aftp@uaa.alaska.edu

Electrical Engineering

John Lund, Assistant Professor, ajf11@uaa.alaska.edu
Joe Mäxsell, Associate Professor, afmc1@uaa.alaska.edu
Jens Munk, Associate Professor/Chair, afjm@uaa.alaska.edu
Todd Petersen, Assistant Professor, aftp@uaa.alaska.edu

Mechanical Engineering

Muhammad Ali, Assistant Professor, ali@uaa.alaska.edu
Jennifer Brock, Assistant Professor, afjm5@uaa.alaska.edu
Matt Cullin, Assistant Professor, afmc2@uaa.alaska.edu
Jeff Hoffman, Associate Professor/Chair, afjm5@uaa.alaska.edu
Nicole Lobontiu, Professor, afn@uaa.alaska.edu
Anthony Paris, Associate Professor, paris@uaa.alaska.edu
Steffen Peuker, Assistant Professor, speuker2@uaa.alaska.edu

GEOMATICS

The Department of Geomatics offers a two-year Associate of Applied Science in Geomatics, a four-year Bachelor of Science in Geomatics, a minor in Geographic Information Systems (GIS), and an Undergraduate Certificate in 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 seeking to enhance their knowledge of GIS and refine their skills using complementing a baccalaureate degree in a variety of disciplines including science, art, business management and engineering. GIS, as a part of geospatial science and information technologies, is widely used in many industries important to Alaska (e.g., oil, gas), governance and administration (municipalities and the state), and military applications and non-profit organizations.

The Associate of Applied Science in Geomatics prepares students for technician-level employment as land survey technicians or as automated mapping technicians. Those working as survey technicians frequently work outdoors, travel to various job locations, and enjoy an independent lifestyle. Automated mapping technicians work with the latest cartographic techniques and equipment and easily transfer skills learned in geomatics courses to other disciplines.

The Bachelor of Science prepares students for a wide variety of professional-level opportunities. Since Alaska poses unique geomatics challenges, the curriculum emphasizes northern principles and practices. UAA graduates are highly employable in the Alaska marketplace and worldwide. Employment opportunities are found in private industry, government, and municipal agencies. Geomatics graduates working at the professional level enjoy responsibility and a choice of indoor and outdoor employment with many opportunities for advancement and diversification.

The new high-tech fields open employment in GIS, photogrammetry, remote sensing, land surveying, automated mapping, land design and planning, survey engineering, and resource management positions. In Alaska, geomatics professionals work on state and Native land claims, mining claims, fishing leases, petroleum reserves, forest selections, transportation corridors, private developments, and government and military projects. In Alaska and elsewhere, geomatics professionals work in land surveying, land development and design, mapping and tax assessment, the defense industry, environmental engineering assessment and management, public safety and welfare, medicine, transportation, agriculture, business, and natural sciences.
5. 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, Geomatics program at UAA is accredited
by the Applied Science Accreditation Commission (ASAC) of ABET,
www.abet.org.

Educational Objectives and Program
Student Learning Outcomes

Program Educational Objectives
The UAA Bachelor of Science, Geomatics program has the following
program educational objectives.

Within five years of graduation, graduates of the Geomatics program
will have achieved the following.
1. Graduates who are pursuing careers in the surveying area will
have attempted the AELS Board's Fundamentals of Surveying
examination, and their overall pass rate will be at least 80 percent.
2. At least 60 percent of graduates who are pursuing careers in
non-surveying areas will have attempted equivalent professional
certification or registration, e.g., CP, GISP, as appropriate for their
career path.
3. At least 60 percent of graduates will be members of professional
organizations relevant to their career of choice.
4. At least 80 percent of graduates will have found employment in
the fields within the geomatics disciplines, including: surveying of
various types, mapping and cartography, GIS/LIS, remote sensing,
geodesy, photogrammetry or hydrographic surveying.
5. At least 80 percent of graduates will have completed at least one
professional development course or session, or completed one
higher education course.
6. At least 50 percent of graduates will have taught at least one
workshop or training session, made one conference presentation, or
published one article relevant to their career.

Program Student Learning 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, 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 solve geomatics problems
creatively and constructively;
6. An understanding of professional and ethical responsibility;
7. An ability to communicate effectively;
8. The broad education necessary to understand the impact of
gomatics 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:
   a. Field surveying and methods;
   b. Photogrammetric mapping, image interpretation and remote
      sensing;
   c. Surveying calculation and data adjustment;
   d. Geodetic coordinates and astronomy;
   e. Cartographic representation, projections, and map production;
   f. Computer-based multipurpose cadastre, geographic
      information systems.

Mission Statement
The Department of Geomatics' mission is to contribute to the wider
body of knowledge in the geospatial sciences, and to disseminate this
to society. By advancing our theoretical, professional, technical and
educational capabilities, we will develop and maintain a community
dedicated to the highest standards of scholarship. Within a student-
centered environment, we are committed to the theoretical, professional
and technical advancement of all our students, so that they may
contribute to the advancement of their profession, their society, and their
world, throughout their lives.

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 quarter 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.

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:

Mathematics
Algebra II
Trigonometry

Science
Physics
English Composition  Skill level as demonstrated by ACT, SAT or approved placement test to qualify for enrollment in ENGL A111

Undergraduate Certificate, Geographic Information Systems (GIS)

Admission Requirements
Satisfy the Admission to Certificate and Associate’s Degree Programs Requirements in Chapter 7.

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
   - GEO A460 Geomatics Design Project 3
   - 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 Information 3

2. Complete 9 credits from the following elective courses:
   - GEO A354 City and Regional Planning (3)
   - GEO A490 Selected Advanced Topics in Geomatics (1-6)
   - GIS A295 Internship in Geographic Information Systems I (3) or 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 A371 GIS Applications I (3)
   - GIS A433 Coastal Mapping (3)
   - GIS A468 Integration of Geomatics Technologies (3)
   - GIS A471 GIS Applications II (4)
   - GIS A490 Selected Advanced Topics in GIS (1-6)

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 Undergraduate Certificate in GIS.

Academic Progress
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. 'Satisfactory grade' means a grade of C or better, as this is the usual requirement for prerequisites in Geomatics courses (GEO and GIS). Failure to earn a grade of C or better on the second attempt may result in removal from the Geomatics program.

Bachelor of Science, Geomatics

Admission Requirements
Complete the Admission to Baccalaureate Programs Requirements in Chapter 7.

Academic Progress
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. 'Satisfactory grade' means a grade of C or better, as this is the usual requirement for prerequisites in Geomatics courses (GEO and GIS). Failure to earn a grade of C or better on the second attempt may result in removal from the Geomatics program.

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.
C. Major Requirements

1. Complete 4 credits in Physics from one of the following course pairs: 4
   - PHYS A123 Basic Physics I (3)
   - PHYS A123L Basic Physics I Laboratory (1)
   - or
   - PHYS A211 General Physics I (3)
   - PHYS A211L General Physics I Laboratory (1)

2. Complete the following (21 credits):
   - CSE A102 Introduction to Computer Systems 1
   - ENGL A212 Technical Writing 3
   - ENGR A161 Engineering Practices II 3
   - GEO A158 Geomatics Computer Fundamentals 1
   - MATH A109 Precalculus † 6
   - MATH A272 Applied Calculus * 3
   - STAT A253 Applied Statistics for the Sciences 4
   † MATH A107 College Algebra and MATH A108 Trigonometry (both) may be substituted for MATH A109 Precalculus.
   * MATH A200 Calculus I may be substituted for MATH A272 Applied Calculus.

3. Complete all of the following (71 credits):
   - BA/JUST A241 Business Law I 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 A167 Remote Sensing and Image Analysis 4
   - GEO A248 Digital Terrain Cartography 3
   - GEO A256 Municipal and Civil Geomatics 3
   - GEO A257 Elements of Photogrammetry 3
   - GEO A266 Advanced Surveying 3
   - GEO A267 Boundary Law I 4
   - GEO A301 Professional Development I 1
   - GEO A302 Professional Development 2 1
   - GEO A303 Professional Development 3 1
   - GEO A355 Land Development and Design 3
   - GEO A359 Geodesy and Map Projections 3
   - GEO A365 Geomatics Adjustment and Analysis 4
   - GEO A457 Boundary Law II 4
   - GEO A460 Geomatics Design Project 3
   - GEO A466 Geopositioning 3
   - GIS A268 Elements of Geographic Information Systems (GIS) 4
   - GIS A366 Spatial Information Analysis and Modeling 3
   - GIS A468 Integration of Geomatics Technologies 3
   - PHIL A305 Professional Ethics 3

4. Complete at least 11 credits in one of the emphasis areas:
   - **Surveying Emphasis**
     a. Complete the following 4 credits:
        - GEO A433 Hydrographic Surveying 3
        - PEP A110 Remote First Aid (1)
        - or
        - PEP A112 First Aid and CPR for Professionals (1)
     b. Complete 7 credits from the following: 7
        - GEO A354 City and Regional Planning (3)
        - GEO A358 Programming for Digital Cartography (3)
        - GEO A459 Geodetic Geomatics (3)
        - GEO A467 Analytical and Digital Photogrammetry (3)
        - GEO A490 Selected Advanced Topics in Geomatics (1-6)
        - GIS A367 GIS and Remote Sensing (3)
        - GIS A369 Land Information Systems (3)

4. Complete at least 11 credits in one of the emphasis areas:
   - **GIS Emphasis**
     a. Complete the following (3 credits):
        - GIS A458 Design and Management of Spatial Information 3
     b. Complete 8 credits from the following: 8
        - GEO A354 City and Regional Planning (3)
        - GEO A358 Programming for Digital Cartography (3)
        - GEO A467 Analytical and Digital Photogrammetry (3)
        - GIS A490 Selected Advanced Topics in Geomatics (1-6)
        - GIS A367 GIS and Remote Sensing (3)
        - GIS A369 Land Information Systems (3)
        - GIS A370 GIS and Remote Sensing for Natural Resources (3)
        - GIS A371 GIS Applications I (3)
        - GIS A433 Coastal Mapping (3)
        - GIS A471 GIS Applications II (4)
        - GIS A490 Selected Advanced Topics in GIS (1-6)
        - PEP A110 Remote First Aid (1)
        - or
        - PEP A112 First Aid and CPR for Professionals (1)

5. A total of 131 credits is required for the degree of which 42 must be upper division.

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**Minor, Geographic Information Systems (GIS)**

1. Students majoring in another subject who wish to minor in Geographic Information Systems must complete a minimum of 18 credits selected from: 18
   - 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 A433 Coastal Mapping (3)
   - GIS A458 Design and Management of Spatial Information (3)
   - GIS A468 Integration of Geomatics Technologies (3)
   - GIS A490 Selected Advanced Topics in GIS (1-6)

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**FACULTY**

Don Davis Jr., Professor Emeritus
Gennady Gienko, Associate Professor, ggienko@uaa.alaska.edu
Bill Hazleton, Associate Professor/Chair, rhazleton@uua.alaska.edu
Jeffery Hollingsworth, Assistant Professor, jphollingsworth@uua.alaska.edu

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University of Alaska Anchorage 2013-2014 Catalog
www.uaa.alaska.edu
UNIVERSITY HONORS COLLEGE

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 multidisciplinary 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 together in a range of honors activities that are 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 sciences and community service. All Honors courses have an emphasis on critical thinking and analytical reading, taking on challenging activities through interdisciplinary projects, and preparing students for participating in independent research in their disciplines.

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 curriculum in democratic institutions and leadership. Focusing on politics, history, and Alaska, it consists of selected courses, weekly tutorials 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 NCS 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 115). 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 are 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 GERs):

   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

   Honors Senior Project/Thesis Requirements (Honors Core)
   - HNRS A392 Honors Thesis Seminar 1
   - and one of the following options to total 6 credits
   - HNRS A490* Senior Honors Seminar (6 credits over two semesters)
   - or
   - a. 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)
   - or
   - b. An upper division course listed in the catalog as a specific departmental honors requirement (3 credits minimum)
   - and
   - c. Senior thesis or project (3 credits minimum; either departmental thesis/project, or HNRS A499 Honors Thesis)
4. 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 GPA of 3.50 or higher, as defined under Graduation with Honors in Chapter 7.

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 NCS Program receive the designation “University Honors Scholar: Natural and Complex Systems” on their transcripts upon successful completion of the program requirements.

Admission to the NCS 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 NCS Program requirements with a grade of C or higher (19 credits; * indicates courses that satisfy GERs):

   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

   Honors Senior Project/Thesis Requirements (Honors Core)
   - HNRS A392 Honors Thesis Seminar 1
   - HNRS A490* Senior Honors Seminar (special section designated for NCS Program) 6

3. Students must have earned a cumulative grade point average of 3.50 or higher, as defined under Graduation with Honors in Chapter 7.

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 GERs 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 115). 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
   - HNRS A191 Freshman Honors Tutorial (fall) 1
   - HNRS A191 Freshman Honors Tutorial (spring) 1

   Second-year Forty-Ninth State Fellows Program Requirements:
   - ECON A201† Principles of Macroeconomics 3
<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>HIST A131†</td>
<td>History of United States I</td>
<td>3</td>
</tr>
<tr>
<td>HIST A132†</td>
<td>History of United States II</td>
<td>3</td>
</tr>
<tr>
<td>HNRS A291</td>
<td>Sophomore Honors Tutorial (fall)</td>
<td>1</td>
</tr>
<tr>
<td>HNRS A291</td>
<td>Sophomore Honors Tutorial (spring)</td>
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<tr>
<td>PS A330</td>
<td>The American Political Tradition</td>
<td>3</td>
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**Third-year Forty-Ninth State Fellows Program Requirements:**

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<tbody>
<tr>
<td>HIST A341†</td>
<td>History of Alaska</td>
<td>3</td>
</tr>
<tr>
<td>HNRS A391</td>
<td>Junior Honors Tutorial</td>
<td>1</td>
</tr>
<tr>
<td>PS A332†</td>
<td>History of Political Philosophy I: Classical</td>
<td>3</td>
</tr>
<tr>
<td>PS A333†</td>
<td>History of Political Philosophy II: Modern</td>
<td>3</td>
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</table>

**Fourth-year Forty-Ninth State Fellows Program Requirements:**

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>PS A345</td>
<td>Alaska Government and Politics</td>
<td>3</td>
</tr>
</tbody>
</table>

† Indicates courses that can satisfy GERs and/or CAS requirements.

Forty-Ninth State Fellows ordinarily take all of the Forty-Ninth State requirements together as a cohort. Since Honors tutorials are paired with designated course sections, and specific courses are required, Fellows must secure advice and permission from the Forty-Ninth State advisors before registering for classes each term. In some cases, classes that meet GERs may be designated for Forty-Ninth State Fellows or for all University Honors students; these sections are highly recommended for Forty-Ninth State Fellows.

In case of time conflicts between courses required for Forty-Ninth State Fellows and for other degree requirements, the program may allow Fellows to substitute sections or to take courses outside the usual sequence.

4. As part of the advising and mentoring process, Forty-Ninth State Fellows’ progress will be evaluated every semester. Fellows whose performance indicates potential difficulties in meeting the requirements for the Forty-Ninth State Fellows Program or for the University Honors College will be counseled on how to correct these difficulties, but if performance improvements do not result, Fellows may be removed from the program.
Post-Baccalaureate Certificate Programs

Admission Requirements for Post-Baccalaureate Certificates

Related Post-Baccalaureate Certificate Policies

University Requirements for Post-Baccalaureate Certificates

Post-Baccalaureate Certificate Program Descriptions
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 grade point average (GPA) requirements of the specific certificate program to which they are applying.

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

Applicants with transcripts from institutions outside the U.S. 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 U.S. 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 the University of Alaska Anchorage and are only released or copied for use within the University of Alaska system. Once all required transcripts and test scores have been received, the Office of Admissions will forward 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 Student 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 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 U.S. 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 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 application 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 University Requirements for Post-Baccalaureate Certificates, 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 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-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 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 Chapter 5 or the UAA Fact Finder/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 Programs

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 Certificate Studies Plan
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. This courtesy change will be granted one time. Students accepted to the program.

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.

University Requirements for Post-Baccalaureate Certificates
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 regionally accredited institution and counted toward a post-baccalaureate certificate. Quarter credits are converted to semester credits by multiplying quarter credits by two-thirds. Acceptance of transfer credit toward program requirements is at the discretion of the individual program.
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-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 reapplication 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 November 1 for fall graduation, March 1 for spring graduation and July 1 for summer 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.
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 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 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) 786-4412
2. The Department of Counseling and Special Education with programs in counselor education, special education, early childhood special education and opportunities in speech and language pathology. (907) 786-6317
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, attitudes 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 and those enrolling in coursework offered at the Providence Early Learning Lab (PELL). In some cases, criminal history background clearance is required for admission to a department or program. In addition to self-disclosure of criminal history to the College of Education and its partners, a check of the Alaska and National Sex Offender Registries, a fingerprint-based check by the Federal Bureau of Investigation, and a name-based check through the Alaska Public Safety Information Network may be required. Various agencies and centers may have additional requirements.

Failure to comply with the College of Education background check requirements will result in denial of access to field placement settings or PELL. Failure to pass the criminal history background check will result in removal from the program. More information is available at www.uaa.alaska.edu/coe/currentstudents/field-experiences/background-checks.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 to 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
www.uaa.alaska.edu/coe

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 225, (907) 786-4412
www.uaa.alaska.edu/coe/degrees

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.

Program Descriptions and Student Learning Outcomes

The Post-Baccalaureate Certificate in Early Childhood Pre-K-Third Grade prepares professionals who already have baccalaureate degrees to work with young children from birth through eight years in preschool/primary school settings. Successful completion of program requirements leads to an institutional recommendation for initial teacher certification with an endorsement in pre-K-third grade. Courses at the 400-level and above applied to the certificate may also be applied to MEd programs with advisor approval.

Students who complete the post-baccalaureate certificate will demonstrate advanced integrated knowledge and skills in preparation for careers in teaching primary grades (K-3) as well as in 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. Candidates from the post-baccalaureate will be able to:

1. Create a healthy, respectful, supportive, and challenging learning environment based on knowledge of child development.
2. Create respectful, reciprocal relationships that support and empower families, and involve all families in their children’s development and learning.
3. Use systematic observations, documentation, and other effective assessment strategies in a responsible way, in partnership with families and other professionals, to positively influence children’s development and learning.
4. Design effective approaches to teaching and learning, implement and evaluate experiences that promote positive development and learning for all children.
5. Incorporate knowledge of content areas to create appropriate experiences for young children.
6. Use ethical guidelines and other professional standards related to early childhood practice.
7. Demonstrate knowledgeable, reflective, and critical perspectives on professional practice, making informed decisions that integrate knowledge from a variety of sources.

Admission Requirements

Admission to the University of Alaska Anchorage

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 College of Education

Department of Teaching and Learning

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.
3. Successfully complete the Praxis I examination or other Alaska Early Education and Development (EED) approved basic competency exam requirement (www.eed.state.ak.us/TeacherCertification). 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 College of Education 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 (0011 or 0014 or other state approved). Contact the College of Education for details.

5. Provide evidence of successful experiences working with children.

6. Initiate fingerprinting and criminal background check.

7. Provide evidence of current physical examination. This service is available free at the UAA Student Health and Counseling Center for current UAA students.

8. 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. University Requirements for Post-Baccalaureate Certificates
Complete the 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. concentrations
There are three concentrations within the program leading to an Early Childhood Pre-K-Third Grade Post-Baccalaureate Certificate.

1. Certification Route I: This concentration is for applicants who have a baccalaureate degree and are seeking their initial teacher certificate. The certificate requires foundations coursework, early childhood major coursework, methodology coursework, and internship.

2. Certification Route II: This concentration is for applicants who have a baccalaureate degree and an Associate Degree in Early Childhood or a Baccalaureate in Early Childhood (non-licensure program).

3. Certification Route III: This concentration is for applicants seeking an early childhood endorsement on an existing teacher certificate.

Certification Route I (for applicants with a baccalaureate degree) (36 credits):

1. Complete the following foundation area coursework (6 credits):
   
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDFN A300</td>
<td>Philosophical and Social Context of American Education (3)</td>
</tr>
<tr>
<td>EDFN A304</td>
<td>Comparative Education (3)</td>
</tr>
<tr>
<td>EDSE A212</td>
<td>Human Development and Learning (3)</td>
</tr>
<tr>
<td>EDEC A600</td>
<td>Contemporary Issues and Approaches in Early Childhood (3)</td>
</tr>
</tbody>
</table>

2. Complete the following early childhood major coursework (13 credits):
   
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDEC A242</td>
<td>Family and Community Partnerships</td>
</tr>
<tr>
<td>EDEC A407</td>
<td>Observation and Documentation in Early Childhood (4)</td>
</tr>
<tr>
<td>EDEC A607</td>
<td>Observation and Documentation: Inquiry in Action (4)</td>
</tr>
<tr>
<td>EDEC A206</td>
<td>Integrated Curriculum for Young Children (3)</td>
</tr>
<tr>
<td>EDEC A210</td>
<td>Guiding Young Children (3)</td>
</tr>
<tr>
<td>EDEC A303</td>
<td>Young Children in Inclusive Settings (3)</td>
</tr>
<tr>
<td>EDEC A408</td>
<td>Children’s Literature: Early Childhood Years (3)</td>
</tr>
<tr>
<td>EDEC A608</td>
<td>Analysis of Children’s Literature: Early Childhood Years (3)</td>
</tr>
<tr>
<td>EDEC A604</td>
<td>Responsive Practices in Early Childhood (3)</td>
</tr>
<tr>
<td>EDEC A650</td>
<td>Leadership and Advocacy in Early Childhood (3)</td>
</tr>
</tbody>
</table>

3. Complete the following methodology requirements (6 credits):
   
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDEC A403</td>
<td>Mathematics and Science in Early Childhood</td>
</tr>
<tr>
<td>EDEC A404</td>
<td>Literacy for Young Children</td>
</tr>
</tbody>
</table>

4. Complete the following internship and seminar requirements (11 credits):
   
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDEC A492</td>
<td>Early Childhood Seminar (1+1)</td>
</tr>
<tr>
<td>EDEC A495</td>
<td>Early Childhood Internship (3+6)</td>
</tr>
</tbody>
</table>

*SPECIAL NOTE: Completion of 9 credits required for degree and certification.

Satisfaction of all major requirements, totaling 36 credits, must be demonstrated through coursework completed either before or after the award of the student’s first baccalaureate degree. However a minimum of 24 approved credits, including EDEC A495, must be completed after the award of the baccalaureate degree.

Certification Route II (for applicants with a baccalaureate degree and an associate degree in Early Childhood or a baccalaureate in Early Childhood) (24-27 credits):

1. Complete the following early childhood major coursework (7 credits):
   
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDEC A407</td>
<td>Observation and Documentation in Early Childhood (4)</td>
</tr>
<tr>
<td>EDEC A607</td>
<td>Observation and Documentation: Inquiry in Action (4)</td>
</tr>
<tr>
<td>EDEC A408</td>
<td>Children’s Literature: Early Childhood Years (3)</td>
</tr>
<tr>
<td>EDEC A608</td>
<td>Analysis of Children’s Literature: Early Childhood Years (3)</td>
</tr>
<tr>
<td>EDEC A604</td>
<td>Responsive Practices in Early Childhood (3)</td>
</tr>
<tr>
<td>EDEC A650</td>
<td>Leadership and Advocacy in Early Childhood (3)</td>
</tr>
</tbody>
</table>

2. Complete the following methodology requirements (6 credits):
   
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>EDEC A403</td>
<td>Mathematics and Science in Early Childhood</td>
</tr>
<tr>
<td>EDEC A404</td>
<td>Literacy for Young Children</td>
</tr>
</tbody>
</table>

3. Complete the following internship and seminar requirements (11-14 credits):
   
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDEC A492</td>
<td>Early Childhood Seminar</td>
</tr>
<tr>
<td>EDEC A495</td>
<td>Early Childhood Internship</td>
</tr>
</tbody>
</table>

**Internship credits will vary depending on past teaching experience.**
Satisfaction of all major requirements, totaling 24-27 credits, must be demonstrated through coursework completed either before or after the award of the student’s first baccalaureate degree. However, a minimum of 24 approved credits, including EDEC A495, must be completed after the award of the baccalaureate degree.

Certification Route III (for applicants seeking an early childhood endorsement on an existing teacher certificate) (24-26 credits):

1. Complete the following foundation area course work (3 credits):
   - EDSE A212 Human Development and Learning (3)
   - or EDEC A600 Contemporary Issues and Approaches in Early Childhood (3)

2. Complete the following early childhood major coursework (13 credits):
   - EDEC A242 Family and Community Partnerships (3)
   - EDEC A407 Observation and Documentation in Early Childhood (4)
   - EDEC A607 Observation and Documentation: Inquiry in Action (4)
   Complete two courses from the following: 6
   - EDEC A206 Integrated Curriculum for Young Children (3)
   - EDEC A210 Guiding Young Children (3)
   - EDEC A303 Young Children in Inclusive Settings (3)
   - EDEC A408 Children’s Literature: Early Childhood Years (3)
   - EDEC A608 Analysis of Children’s Literature: Early Childhood Years (3)
   - EDEC A604 Responsive Practices in Early Childhood (3)
   - EDEC A650 Leadership and Advocacy in Early Childhood (3)

3. Complete the following internship and seminar requirements (8-10 credits):
   - EDEC A492 Early Childhood Seminar (1)
   - EDEC A495 Early Childhood Internship 7-9**

   **Internship credits will vary depending on past teaching experience.

Satisfaction of all major requirements, totaling 24-26 credits, must be demonstrated through coursework completed either before or after the award of the student’s first baccalaureate degree. However, a minimum of 16 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 (3 credits) and Alaska multicultural course (3 credits). See eed.alaska.org for more details.

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 or other EED approved highly qualified exam requirement (www.eed.state.ak.us/TeacherCertification).
4. Internships satisfactorily completed.
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. University Requirements for Post-Baccalaureate Certificates
Complete the 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)
   - EDFN A304 Comparative Education (3)
   - EDFN A301 Foundations of Literacy and Language Development (3)
   - EDFN A302 Foundations of Educational Technology (3)
   - EDFN A303 Foundations of Teaching and Learning (3)
   - EDSE A212 Human Development and Learning (3)
   - PSY A365 Child and Adolescent Development (3)
   - EDSE A212L Human Development and Learning Lab (1)
   - EDSE A482 Inclusive Classrooms for All Children (3)
   - MATH A205 Communicating Mathematical Ideas (3)

2. Complete the following methods 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 (4)
   - EDEL A428 Teaching Science in Elementary Schools (3)
   - EDEL A430 Teaching Language Arts in Elementary Schools (2)
   - 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)

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 EDEL A495A and EDEL 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 Issues 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.

FACULTY
Jeff Bailey, Professor, AFJGB@uaa.alaska.edu
Robyn Bailey, Term Assistant Professor, AFRABA@uaa.alaska.edu
Susan Barstow, Term Assistant Professor, AFSDB@uaa.alaska.edu
Liz Beario, Term Assistant Professor, ANLEB@uaa.alaska.edu
Nancy Bextler, Term Assistant Professor, ANNJB1@uaa.alaska.edu
Ellen Brigham, Term Assistant Professor, AFETB1@uaa.alaska.edu
Teresa Bunsen, Associate Professor, AFDB@uaa.alaska.edu
Robert Capuzzo, Assistant Professor, AFRC2@uaa.alaska.edu
Keith Cates, Assistant Professor, AFKAC1@uaa.alaska.edu
Pat Chesbro, Term Assistant Professor & AEIN Project Director, AFPRC@uaa.alaska.edu
Carolyn Coe, Term Assistant Professor, AFCMC@uaa.alaska.edu
Cathy Coulter, Assistant Professor, AFCAC@uaa.alaska.edu
Kitty Deal, Term Assistant Professor, KDEAL@kodiak.alaska.edu
Claudia Dybdahl, Professor, AFCSD@uaa.alaska.edu
Micah Fierstein, Assistant Professor, AFMF@uaa.alaska.edu
Susan Garton, Associate Professor, AFSCG@uaa.alaska.edu
Christine Gehrett, Associate Professor, IFCKG@uaa.alaska.edu
Satasha Green, Associate Dean, SLGREEN4@uaa.alaska.edu
Hsing-Wen Hu, Assistant Professor, HHU2@uaa.alaska.edu
Bonny Headley, Term Assistant Professor, AFBCH@uaa.alaska.edu
Jim Powell, Associate Professor, AFJHP2@uaa.alaska.edu

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The UAA Justice Center, established by the Alaska Legislature in 1975, has a mandate to provide statewide justice-related education, research and service. The Justice Center is an interdisciplinary unit that provides undergraduate, graduate and professional education; conducts research in the areas of crime, law and justice; and provides service to government units, justice agencies and community organizations throughout urban and rural Alaska to promote a safe, healthy and just society.

The Justice Center offers a variety of programs that prepare students for work in law-related or public service fields. The core of each program is a foundational sequence of courses combining theoretical knowledge of the law with skills-based training in American legal practice.

Legal Studies Goals
Students in all programs will acquire:

1. Broad-based knowledge achieved through general college education.
2. Exceptionally strong competency in critical thinking and in written and oral communication skills.
5. Operational knowledge of legal investigatory and discovery techniques.
6. Command of skills required for legal research, critical analysis and technical drafting.
7. Knowledge of theories of law, historical influences on the development of law and fundamental principles of substantive law.
8. Appreciation for the role of law in the allocation of public resources and regulation of social and economic relationships.

Pro Bono Service Honors
The Justice Center awards Pro Bono Service Honors to those Legal Studies students who work toward improving access to justice by contributing volunteer service to Alaska legal aid agencies. Paralegal Studies Post-Baccalaureate Certificate students are eligible to graduate with Pro Bono Service Honors upon satisfactory completion of the following requirements:

1. Meet the catalog requirements for the certificate.
2. Complete 50 hours of volunteer hours with a legal services agency approved by the Legal Studies program coordinator.
3. Obtain written verification of hours of service from the legal service agency or agencies assisted.
4. Submit verification of service hours and written notice of intent to graduate with Pro Bono Service Honors to the Legal Studies program coordinator. The verification and notice must be received by the Legal Studies coordinator on or before the date established by the Office of the Registrar as the deadline to apply for graduation.

Post-Baccalaureate Certificate, Paralegal Studies
The American Bar Association defines a paralegal as a person "who is employed or retained by a lawyer, law office, corporation, governmental
Program Student Learning Outcomes

Students graduating with a Post-Baccalaureate Certificate in Paralegal Studies will be able to:

• Produce superior university-level written documents and oral reports.
• Identify and accurately apply the rules of professional ethics governing lawyers and nonlawyer staff, and the rules governing the unauthorized practice of law in Alaska.
• Interpret and accurately apply legal terminology and foundational principles of substantive and procedural law in the analysis of legal issues.
• Develop and execute legal research plans using law library resources and commonly used legal research databases.
• Synthesize primary and secondary legal authorities and draft memoranda of legal analysis.
• Prepare legal investigation and discovery plans and draft legal pleadings that conform to the rules of civil procedure and incorporate standard techniques and resources for managing a case in litigation.
• Relate legal rules and doctrines to client problems in the performance of entry-level paralegal duties in a private law firm, public legal service agency, or law department.

Admission Requirements

1. Students must meet the Admission Requirements for Post-Baccalaureate Certificates listed at the beginning of this chapter.
2. Students must have completed the equivalent of ENGL A111 with a minimum grade of C and (ENGL A211 or ENGL A212 or ENGL A213 or ENGL A214 or ENGL A311 or ENGL A312 or ENGL A313 or ENGL A414 or ENGL A487) with a minimum grade of B.
3. Students must have a cumulative grade point average of 2.00 in their baccalaureate program.

Advising

1. Students who have not completed the English prerequisites for admission to the program should begin their English coursework in their first semester.
2. Proficiency in the use of computers and standard office software is an important component of legal practice. Students are strongly encouraged to build their technological skills through coursework in Computer Information and Office Systems (CIOS), Computer Information Systems (CIS), or Computer and Networking Technology (CNT) as they progress through the program.
3. Campus restrictions for this program are enforced in accordance with American Bar Association Guidelines for the Approval of Paralegal Education Programs. Therefore, the certificate cannot be completed at extended campuses. Courses designated in this catalog as legal specialty courses may be taken only at the Anchorage campus.
4. Post-Baccalaureate certificates are subject to specific restrictions on the use of transfer credits. See UAA catalog for details.

Certificate Requirements

1. Complete the following required core courses (21-24 credits):
   - LEGL A101 Introduction to Law 3
   - LEGL A215 Legal Ethics and the Role of the Legal Professional 3
   - LEGL A356 Legal Research, Analysis, and Writing 3
   - LEGL A367 Civil Procedure and Pretrial Practice 3
   - LEGL A377 Evidence, Investigation, and Discovery 3
   - LEGL A487 Trial and Advanced Litigation Processes 3
   - LEGL A495 Legal Studies Internship (3-6) 3

2. Complete one of the following Legal Studies elective courses (3 credits):
   - LEGL JUST A340 Family Law (3)
   - LEGL JUST A352 Criminal Law and Procedure (3)
   - LEGL A362 Contracts, Debt and Principles of Ownership (3)
   - LEGL A380 Torts, Workers’ Compensation and Insurance Law (3)
   - LEGL A385 Health Care Law and Regulatory Compliance (3)
   - LEGL A489 Legal Studies Senior Seminar (3)
   - Other upper division Legal Studies or Justice course with Legal Studies coordinator approval (3)

3. Students must achieve a minimum grade of C in each Legal Studies core course and in the selected Legal Studies and Justice electives. Courses may be repeated twice to improve grades.
4. All Paralegal Studies students must take the Legal Studies Exit Examination. There is no minimum score required for graduation.
5. Students must complete at least 24 approved semester credits earned after the posting of their previous degree.
6. A total of 24 credits is required for the certificate.

FACULTY

John Angell, Professor Emeritus, AHJEA@uaa.alaska.edu
Allan Barnes, Professor, abarnes@uaa.alaska.edu
Jason Brandtis, Assistant Professor, jbrandtis@uaa.alaska.edu
Sharon Chamard, Associate Professor, schamard@uaa.alaska.edu
Robert Congdon, Professor Emeritus, AFREC@uaa.alaska.edu
Ronald Everett, Associate Professor, reverett@uaa.alaska.edu
Ryan Forstom, Assistant Professor, rforstom@uaa.alaska.edu
Kristin Knudsen, Assistant Professor, kknudsen@uaa.alaska.edu
Corin LePace, Assistant Professor, crlepace@uaa.alaska.edu
Bradley Myrstol, Associate Professor, bmyrstol@uaa.alaska.edu
Troy Payne, Assistant Professor, tpayne9@uaa.alaska.edu
Deborah Periman, Program Coordinator/Associate Professor, dperiman@uaa.alaska.edu
Randy Rivera, Associate Professor, mriviera11@uaa.alaska.edu
Andre Rosey, Director, abrosey@uaa.alaska.edu
Nancy Schaafer, Professor Emeritus, AHNES@uaa.alaska.edu
Graduate Programs

Graduate Study
Admission Requirements for Graduate Degrees
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University Requirements for Graduate Degrees

Cooperative Doctoral Programs
Admission Requirements for Graduate Certificates
Related Graduate Certificate Policies

University Requirements for Graduate Certificates
Graduate Program Descriptions
Graduate Programs

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, master’s degrees and doctoral degrees. Students may also pursue graduate studies at UAA that apply toward doctoral degrees offered by other institutions. Some or all coursework and research may be completed at UAA while the doctoral degree is granted by another university.

Students who have completed UAA graduate programs possess the knowledge and 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. For expected student outcomes in graduate programs, please see individual program listings.

To ensure the most beneficial educational experience, students’ academic preparation and likelihood of success in their programs are carefully assessed and validated. Admission requirements provide an opportunity for students to document their credentials and demonstrate readiness for graduate studies. If an entrance examination is required, the nature of that examination is determined by the appropriate discipline. As they progress in their studies, students can expect discipline-specific advising from mentors in their programs.

Graduate students are subject to relevant policies contained in the complete UAA catalog, as well as individual program requirements listed in this catalog and in graduate student handbooks developed by these graduate programs.

Admissions
All students intending to pursue a graduate certificate or degree must apply for admission. Applications for Admission are available online via www.uaa.alaska.edu/admissions or from the UAA One Stop.

Admission Requirements for Graduate 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 chapter).

Admission is granted to applicants who have received their baccalaureate degrees from a regionally accredited institution in the United States or a foreign equivalent. Students who expect to receive their baccalaureate degree were 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 U.S. or of another English-speaking country and demonstrates fluency in reading, writing, listening and speaking English.

Applications accompanied by appropriate fees, 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. If all required transcripts and test scores have been received, the Office of Admissions will forward each student’s admission packet to the dean or department chair or designee for consideration.

Admissions are undertaken by individual graduate programs, subject to review by the Graduate School. Each graduate program has individual admission standards and document requirements. Additional information such as goal statements, letters of recommendation, research proposals, writing samples and/or personal interviews may be required by specific programs. These materials must be submitted directly to the department chair or designee. At the time of admission, students will be assigned an advisor (see Graduate Advisor in this chapter). All admitted graduate students are expected to attend a formal orientation before the beginning of their first semester of study.

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

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

No more than 9 credits may be completed in the student’s graduate program before formal program admission.

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

1. Official TOEFL (minimum score of 79-80 IBT) or IELTS (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 U.S. or English-speaking Canada must submit an international credential evaluation from the World Evaluation Service (WES) International Credential Evaluation Service, stating that they have earned the equivalent of
a U.S. baccalaureate degree. These WES ICAP evaluations should be sent directly to the UAA Office of Admissions, P.O. Box 141629, Anchorage, AK 99514-1629.

5. Students transferring from other institutions in the U.S. must also complete and submit the F-1 Transfer Eligibility Form. International students in F-1 visa status must be formally admitted, full-time, degree-seeking students. Health insurance is mandatory. Visit the International Student Services web site at www.uaa.alaska.edu/iss for details and forms.

**Western Regional Graduate Program**

Students from Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington and Wyoming may be eligible for resident tuition through the Western Regional Graduate Program (WRGP). This program is for students doing graduate work in Clinical-Community Psychology, Early Childhood Special Education, Global Supply Chain Management, Nursing Science and Social Work. For more information, visit the Graduate School website at www.uaa.alaska.edu/graduateschool.

**Application and Admission Status Definitions for Graduate Degree-Seeking Students**

**Application Status**

- **Incomplete Application:** An incomplete application is one that is not accompanied by all required documents; generally, an application is considered incomplete until all required official transcripts and test scores have been received.

- **Pending Application:** A pending application has met university requirements and is awaiting departmental recommendation for admission.

- **Postponed Application:** Students may postpone their applications to a future semester by notifying the Office of Admissions prior to the end of the semester for which they originally applied.

- **Withdrawn Before Admission:** Students must complete or postpone their admission by the end of the semester for which they have applied. At the end of each semester, all applications still incomplete or not postponed may be withdrawn by the university. 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 and deadlines for meeting those provisions are established at the time of admission and are monitored by the department chair or designee and the Graduate School. Normally such provisions are to be satisfied within one academic year. If the provisions are not met within the specified deadlines, the student may be removed from graduate degree-seeking status.

- **Postponed Admission:** Upon approval by their graduate program and the Graduate School, students may postpone their admission to a future semester once, for up to one year prior to the end of the semester for which they originally applied. Students who have failed to matriculate after one year postponement must re-apply to the graduate program.

- **Withdrawn After Admission:** Admission may 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 Graduate Degree Policies**

**Transfer Credits**

Coursework used to obtain a graduate certificate or a master’s degree may be used to satisfy requirements for a graduate degree at UAA if accepted as part of the official Graduate Studies Plan.

Up to 9 semester credits not used toward an undergraduate degree may be transferred from UAA from an accredited institution and counted toward a graduate degree. Up to 9 graduate credits may also be transferred in the case of a second master’s degree, although doctoral degree credits may not be used toward an additional master’s degree unless that degree is in a distinctly different field. Up to 21 previously attained graduate credits may be transferred in the case of a doctoral degree. The Graduate School dean or designee may allow credit earned at other universities within the UA system, excluding thesis credit and credits used toward another degree, to satisfy UAA program requirements, as long as at least 9 credits applicable to the student’s program are earned at UAA after acceptance into that program. Acceptance of transfer credit toward graduate program requirements must be approved by the individual program faculty, college dean and Graduate School.

**Resident Credit**

Resident credit at UAA is defined as credit 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.

If a program is delivered collaboratively with UAF or UAS, collaborative program credit from each participating institution is counted toward fulfillment of residency requirements.

**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 for approval. Students will be expected to meet all admission and program requirements of their new major or emphasis area, and must submit a revised official Graduate Studies Plan to the Graduate School through their advisor/committee within one semester.

**Change of Degree**

Graduate students who wish to change degree programs must apply for admission to the new program through the Office of Admissions and pay the appropriate fee. This applies both to changes between 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). However, this policy does not apply to changes between certificate and degree programs within a given field (such as from an Educational Leadership graduate certificate to an M.Ed.). 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 or doctoral degree.
Graduate Programs

Additional Master's Degrees
Students who have received a master’s or doctoral degree from a regionally accredited college or university may earn a UAA master’s degree by completing a minimum of 30 credits, of which 21 must be resident credits not used for any other previous degree. The student must meet all the University Requirements for Graduate Degrees, school or college requirements, and program requirements. Students may apply up to 9 credits required for a particular master’s degree program from a previously earned master’s program. These courses should be listed as transfer courses on the student’s GSP, even if taken at UAA. Transferred credit may not include research, project or thesis credit. All other UAA policies governing master’s degrees are applicable to second master’s degrees. If the appropriate credits and other requirements have been earned, two or more degrees may be awarded simultaneously.

Formal Acceptance to Graduate Degree Programs
Once all required admission documents have been received by the Office of Admissions, the student’s admission packet is forwarded to the chair or designee of the specific program. The acceptance decision is made by the chair or designee, subject to review by the Graduate School. The Graduate School then informs the Office of Admissions of the decision. The Office of Admissions sends a letter of acceptance directly to the applicant, accompanied by the official Certificate of Admission from the Graduate School. Acceptance does not establish candidacy in a graduate program (see Advancement to Candidacy in this chapter).

Non-Degree-Seeking Students
Non-degree-seeking students who wish to register for graduate courses must have the department chair’s or faculty member’s approval. Registration as a non-degree-seeking student implies no commitment by the university to the student’s later admission to a degree program. 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 for further information.)

Full-Time/Half-Time/Part-Time Status for Graduate 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. A graduate student enrolled at UAA for 5 to 8 credits is classified as half-time. Courses at the 400-level will also count toward full-time or half-time status if they are listed on the approved Graduate Studies Plan. A graduate student enrolled at UAA for fewer than 5 credits is classified as part-time. Audited courses, continuing education units (CEUs) and continuous registration are not included in the computation of a student’s full-time, half-time or part-time status.

Graduate Assistantships
Graduate assistantships give students financial aid as well as opportunities to acquire valuable experience. They fall under three categories: teaching assistantships, research assistantships and service assistantships. Teaching assistantships involve academic instruction or instructional support activities under the supervision of a faculty member. Research assistantships involve research or research support activities under the supervision of a faculty member. Service assistantships involve service activities such as office duties, library services, residence hall duties, athletic services or other academic or professional assignments. A student may hold two graduate assistantships for which the terms of appointment overlap, only if each of the assistantships is half-time (no more than 10 hours) during the period of overlap. Teaching and service assistants should have Family Educational Rights and Privacy Act (FERPA) training, and research assistants should have training in responsible conduct of research. Performance reviews may be required by individual programs for any graduate assistants.

Graduate assistantships are available through the programs offering graduate degrees. These programs may set policies governing required duties for these assistantships, and may require organizational meetings prior to the beginning of the semester. Fellowships or scholarships may also be granted by graduate programs; these may be governed by specific program rules or policies, including tuition awards. Graduate student assistantship contracts offered by programs are subject to review by the Graduate School. Contract letters must be brought to the Graduate School before the deadline for payment of student tuition and fees.

To be awarded graduate assistantships, students must be in good academic standing, as reflected by an Annual Report of Student Progress on file with the Graduate School (if beyond their second semester of study). Incomplete (I) grades may affect the ability of students to receive tuition awards associated with graduate assistantships. A graduate student with a GPA less than 3.00 for one semester will be allowed to petition to continue as a graduate assistant for the next semester. A maximum one-semester exception will be allowed per student. The petition by the student must be approved by the student’s graduate committee chair, department head, school or college dean, and the Graduate School.

Graduate assistants receive stipends for either a semester or for the academic year. Graduate assistants can be paid for a maximum of 20 hours per week while school is in session. Students with assistantships must be registered for at least 9 credits during the fall and spring semesters or as attendance is appropriate to their program (audited credits are not eligible). This requirement does not apply to graduate students undertaking fieldwork during the summer semester. Graduate students spending significant time in the field during the fall or spring semester on a research assistantship (see below) are only required to enroll in 6 credits. Graduate students in their final semester of study are only required to register for 6 credits for graduate assistantships. For UAA graduate students in collaborative/cooperative graduate programs with other units of the University of Alaska system, payment of tuition scholarships may be governed by specific memorandum of agreement. Tuition scholarships may be used for tuition only. All fees are the responsibility of the student unless the department or grant makes other arrangements with the UAA Business Office prior to registration. Graduate assistants receive a health insurance benefit paid on their behalf. Graduate students must come to the Office of the Graduate School each semester and show a copy of their contract letter to complete the health insurance enrollment process. Students who expect to have teaching, service or research assistantships during an upcoming academic year may have health insurance paid by the relevant department, school or college for the preceding summer period.

Teaching or service assistantships include a tuition scholarship from the university for no more than 9 credits during each semester if the workload is 15 to 20 hours per week. If the workload is 10 to 14 hours per week, no more than 5 credits will be included. No tuition will be included if the workload is less than 10 hours per week. Graduate programs should provide prospective teaching and/or service assistants with notification of positions no later than April 30 for fall positions or December 1 for spring positions. Students are under no obligation to respond to such offers prior to April 30, but any acceptance of a position after this time commits the student not to accept another offer without first obtaining a written release from the Graduate School.

Research assistantships include a tuition scholarship from UAA grants/contracts for no more than 10 credits during each semester if the workload is 15 to 20 hours per week. If the workload is 10 to 14 hours per week, no more than 5 credits will be included. No tuition will be included if the workload is less than 10 hours per week.

Catalog Year for Graduate Degree Programs
Students may elect to graduate under the requirements of the catalog in effect at the time of formal acceptance to a graduate 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-year catalog are not met within seven years after formal acceptance into the program, or if the requirements for a doctoral degree as specified in the entry-year catalog are not met within 10 years after 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 a master’s degree, including transfer credit, must be earned within the consecutive seven-year period prior to graduation. All credits counted toward a doctoral degree, including
to meet or maintain these criteria may result in departmental probation or removal from a major program.

**Academic Probation**

Academic probation is the status assigned to those students not in good academic standing, i.e., whose semester and cumulative GPA falls below 3.00. It also applies to students who fail to undertake continuous registration or fail to make progress toward a graduate degree as indicated by the Annual Report of Student Progress.

**Continuing Probation**

Continuing probation is the status assigned to those students who begin a semester on probation and during that semester earn a semester GPA of 3.00 or higher without raising their cumulative GPA to 3.00. This status may be continued until the student raises their cumulative GPA to 3.00 or loses their graduate certificate- or degree-seeking status.

**Academic Disqualification**

Academic disqualification is the status assigned to those students who begin a semester on probation or continuing probation and fail to earn a semester GPA of 3.00, fail to undertake continuous registration or fail to make progress toward a graduate certificate or degree. Those students’ admission status will be changed to non-degree-seeking. Students who have lost graduate certificate- or degree-seeking status may continue to attend UAA as non-degree-seeking students. However, those students do not qualify for financial aid and international students will lose their immigration status. Students must apply for reinstatement to UAA (see Reinstatement to Graduate Degree-Seeking Status in this chapter).

**Removal from Graduate Degree-Seeking Status**

A graduate student’s academic status may be changed to non-degree-seeking if the requirements to remove provisional admission or probation are not satisfied, or if minimum academic standards are not met.

**Reinstatement to Graduate Degree-Seeking Status**

Students who have been removed from graduate degree-seeking status for failure to undertake continuous registration or failure to make continuous progress toward a graduate degree as indicated by the Annual Report of Student Progress must re-apply for graduate study and pay the appropriate fee after one calendar year from the semester in which they were removed. When re-applying for graduate studies, it is the student’s responsibility to demonstrate ability to succeed in the graduate program. Readmission may be conditional on maintaining minimum academic standards within the first semester of study.

**Academic Appeals**

Students have the right to appeal academic actions. See Academic Dispute Resolution Procedure in Chapter 5 or the UAA Fact Finder/Student Handbook for more information.

**Graduate Advisor**

The chair or designee of the department offering the graduate program, with the approval of the Graduate School, appoints a graduate advisor for each student accepted to the program. The graduate advisor and the departmental chair will normally be from the same program unless prior approval has been made by the Graduate School. Assigned advisors must have FERPA training and must be registered with the Office of the Registrar. Students are expected to meet with advisors by the end of their first semester at UAA. Graduate students in their second year of study and beyond must also have an Annual Report of Student Progress on file with the Graduate School to be considered in good standing. Students in good standing are academically eligible to re-enroll at UAA.

**Graduate Studies Committee**

For graduate programs with a thesis, independent scholarship or research project, the advisor and the student select a graduate studies committee as part of the process to complete the requirements of the graduate degree. Depending on the graduate degree, the committee minimally consists of three or four UAA faculty members, including the committee chair, who shall normally be a full-time faculty member. Committee members and chairs whose status has changed to emeritus faculty may continue to serve on the committee. One faculty committee member may be from a discipline outside the student’s school or college.
or UAA. Committee members who are not UAA faculty but have appropriate professional credentials may be included with the approval of the graduate advisor, the college dean and the dean of the Graduate School. The committee members must agree to serve and the committee must be approved by the college dean and dean of the Graduate School by submitting the Appointment of Graduate Committee form. For doctoral degrees, an additional outside evaluator is required to sign the proposal and evaluate the dissertation defense. For thesis-option students (see below), graduate committees should be selected by the end of the second semester, or the equivalent of 18 credits of study, and should be listed on the initial Graduate Studies Plan (see below). Graduate committees should plan to meet at least twice during the academic year.

**Responsibilities of Graduate Advisor/Committee**

The division of responsibility between the graduate advisor and/or graduate committee is determined at the program level. The graduate advisor and/or graduate committee will do the following:

1. Review and approve the graduate student’s program, ensuring that it includes University Requirements for Graduate 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; thesis/project defense; any special program requirements; and arrangements to remove any deficiencies in the student’s academic background.

2. Monitor the student’s progress, including grades, continuous registration and timely submission of Annual Reports of Student Progress to the Graduate School.

3. Review and approve requests for temporary leaves of absence, which, if approved, will result in the student being placed on inactive status.

4. Review and approve any changes to the student’s program of study.

5. Review and approve the thesis, independent scholarship or research project, including initial proposals, according to procedures established by the individual graduate program. The graduate advisor and/or committee are responsible for ensuring that thesis content, language and formatting follow the requirements in the UAA Thesis Formatting Handbook (see www.uaa.alaska.edu/graduateschool) as well as the style manual appropriate to the particular discipline.

6. Administer and assess the qualifying examination, independent scholarship evaluation or thesis/project defense.

**Graduate Studies Plan**

The official Graduate Studies Plan (GSP) formally establishes the specific program requirements which will, upon satisfactory completion, entitle the student to receive a graduate degree. The plan is based upon the catalog requirements for the graduate degree program to which the student has been accepted. All graduate courses and leveling courses taken must be listed on the GSP. An initial GSP, including information on the student’s advisor and graduate committee, should be submitted by the end of the first semester of study. The plan becomes official once it is approved by the dean of the Graduate School or designee and is filed with the Office of the Registrar. Students are expected to complete all requirements listed on their official GSP, as well as all University Requirements for Graduate Degrees. Revised GSP’s need to be submitted to the Graduate School through the graduate advisor/committee. A final GSP must be submitted at the time of application for graduation (for doctoral students, the additional requirement to Candidacy form serves as the final GSP). Courses listed on the final GSP reflect catalog requirements in effect at the time a student is accepted into the program, or at the time of graduation. All GSP’s are submitted electronically through Degree Works, except for Interdisciplinary Studies programs (see below).

**University Requirements for Graduate Degrees**

To complete a graduate degree, a student must complete the University Requirements for Graduate Degrees, school or college requirements, and program requirements. 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, unless a student wishes to apply credits from a previous graduate certificate in the same or closely related subject area.

3. The student must complete at least 30 approved semester credits beyond the baccalaureate degree for a master’s degree, and must complete at least three years of post-baccalaureate study for a doctoral degree. For a master’s degree, individual programs may place limits on the number of credits derived from thesis, individual research and/or independent study courses. No more than 45 credits may be required by any master’s degree program, unless specifically approved by the University of Alaska Board of Regents. The actual number of credits required for each graduate degree program, including prerequisites for required courses, are specified in the current course catalog. While no minimum or maximum credits are specified for doctoral programs, a student is expected to be affiliated with the university for at least two years. On approval by the dean of the Graduate School and college dean, an official Graduate Study Plan may stipulate other course credit requirements, including leveling courses.

4. Up to 9 semester credits not used toward any other degree (graduate or 400 level) may be transferred to UAA from an accredited institution and counted toward a graduate degree. In the case of a second master’s degree, up to 9 credits may be transferred from a previous master’s degree. In the case of a doctoral degree, up to 21 credits may be transferred from previous graduate study. Acceptance of transfer credit toward program requirements is approved by individual programs, college deans, and the Graduate School.

5. Only 400- and 600-level courses approved by the graduate student’s advisor, graduate studies committee and dean or designee may be counted toward graduate program requirements. Courses at the 500 level are for professional development and are not applicable toward any degree.

6. A cumulative GPA of at least 3.00 must be earned in courses identified in the official Graduate Study Plan.

7. In 600-level courses, a grade of C is minimally acceptable, provided the student maintains a cumulative GPA of 3.00 (B) in all courses applicable to the graduate program. At least 21 credits must be taken at the graduate level (600) for any master’s degree, including thesis credits. For performance comparison only, in 600-level courses a grade of P (pass) is equivalent to a B or higher, but does not enter into the GPA calculation.

8. Courses taken as credit by examination, or graded credit/no credit (CR/NC) do not count toward graduate program requirements. They may, however, be used to satisfy prerequisites or establish competency in a subject, allowing the advisor or committee to waive certain courses in an established program as long as the total credits in the program remain the same.

9. All credits counted toward the degree, including transfer credits, must be earned within the consecutive seven-year period for a master’s degree or the consecutive 10-year period for a doctoral degree prior to graduation. If these requirements are not met, admission expires and the student must reapply for admission and meet the admission and graduation requirements in effect at the time of readmission or graduation.

10. Students must be continuously registered throughout their graduate program (see Continuous Registration in this chapter).

11. Students must complete all requirements established by the program and must pass a written or oral comprehensive examination; an evaluation of independent scholarship, project or thesis defense; or similar evaluation as established by the program. For programs with a thesis option, selection of that option will be indicated on the GSP and on the annual progress report. The evaluation, examination or defense must be approved by all
graduate committee members as passing the requirement. For programs with projects that result in a written record, those records will be maintained by the programs for one year and are subject to review by the Graduate School. After the completion of a written or oral comprehensive exam, a thesis or a project, the student’s graduate committee chair must submit a Graduate Requirement Report (GRR), indicating the date of completion; this form is then approved by the program chair, school/college dean and the Graduate School.

12. When an oral comprehensive examination, project or thesis defense, or evaluation of independent scholarship is required, the student may select an outside reviewer approved by the dean of the Graduate School and college dean to participate in the evaluation. An outside examiner is required for a doctoral defense. Typically, the outside examiner is a faculty member from another department in the university, or other qualified individual in the area in which the student is seeking a degree.

13. All theses and dissertations must have final approval by the dean of the Graduate School.

Examinations (Requirement Determined by Program)

Qualifying Examinations
Some graduate degree programs require the student to complete a written and/or qualifying examination before advancement to candidacy. This examination is an interim evaluation of academic progress; the student may pass unconditionally or conditionally. A conditional pass indicates specific weaknesses that the student must remedy before degree requirements are completed. The Annual Report of Graduate Student Progress and Advancement to Candidacy forms should indicate mechanisms for addressing these weaknesses.

Comprehensive Examinations
Some graduate programs require that students pass a comprehensive examination, given to determine whether a graduate student has integrated knowledge and understanding of the principles and concepts underlying major and related fields, in order to achieve advancement to candidacy. For master’s degrees, the graduate student’s advisory committee may choose to give a written and/or comprehensive examination prior to advancement to candidacy. For doctoral degrees, written comprehensive examinations are normally required, although the student’s committee may additionally choose to give an oral examination.

Defense of Project
Graduate students who are required to complete a project in fulfillment of degree requirements may be required to pass an oral defense of the project. The defense will consist of a presentation followed by questions on the research, analysis and written project presentation. All committee members must be present at the project defense.

Defense of Thesis
Graduate students who are required to complete a thesis in partial fulfillment of degree requirements must pass an oral defense of the thesis. The defense will consist of a presentation followed by questions on the research, analysis and written thesis presentation. The Graduate School will not accept a thesis for final submission until the student has successfully defended it. All committee members normally must be present for the defense of thesis, either physically present or through electronic media.

Examination Committee
In most cases, the student’s graduate advisory committee prepares and gives the examinations under guidelines formulated by the program in which the degree is being taken.

Outside Examiner (for Doctoral Defense)
An outside examiner representing and appointed by the dean of the Graduate School is required at all doctoral defenses. The examiner must be from a different department than the student and the chair of the advisory committee. The outside examiner is present to determine that a stringent, unbiased examination is fairly administered and evaluated, but may also make substantive contributions to the evaluation process.

Advancement to Candidacy (Requirement Determined by Program)
Some master’s programs and all doctoral programs require students to apply for advancement to candidacy. Advancement to candidacy status is a prerequisite to graduation and is determined by the program chair or designee. Candidacy is the point in a graduate study program at which the student has demonstrated an ability to master the subject matter and has progressed to the level at which a Graduate Studies Plan can be approved. For doctoral program students, an Advancement to Candidacy form serves as the final Graduate Studies Plan.

To be approved for candidacy, a student must:
1. Be in good academic standing.
2. Demonstrate competence in the methods and techniques of the discipline, which may include passing a comprehensive examination.
3. Receive approval of the independent scholarship, thesis or research project proposal from the student’s graduate committee.
4. Satisfy all prerequisites, remove all academic deficiencies and satisfy all terms of provisional admission.
5. Submit an approved, final official Graduate Studies Plan.

Thesis Review
Before final acceptance, all members of a student’s graduate committee, department/program chair, school/college dean, and the Graduate School dean must approve a thesis as required by the student’s graduate program. Changes or corrections to the thesis may be required at any of these levels. The graduate committee is primarily responsible for thesis evaluation, but the department chair and school/college dean may also conduct reviews to monitor the quality of theses and check for any overlooked errors. The Graduate School checks that format and style conform to UAA standards. Ideally, these checks should be made before the defense of a thesis or dissertation. Thesis signature pages must be approved by the Graduate School prior to the thesis defense. In addition, the Graduate School dean may review selected theses in detail and does not give final approval until all required corrections are made.

Application for Graduation
Graduate students must submit an Application for Graduation, accompanied by the required fee, to the Office of the Registrar. The current deadline for submitting an Application for Graduation is the last day of the semester, although students wishing to appear in the commencement program need to apply by April 1. Students who apply for graduation but do not complete degree requirements by the end of the semester must re-apply for graduation. However, if a student is within 6 credits of graduating, their application will be automatically rolled to the next semester, including summers. (This is a one-time courtesy.) The application fee must be paid with each new Application for Graduation.

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.

Diplomas and Commencement
UAU issues diplomas to graduates throughout the year. All students who complete degree requirements during the academic year are invited to participate in the annual hooding and commencement ceremonies in May.

In order to participate in the graduate hooding ceremony, a student must have essentially completed all degree requirements by doing the following:
1. Successfully completed all required coursework, examinations and thesis/project defense prior to commencement; and
2. Submitted to the Graduate School, by April 15, a memorandum signed by the student and the graduate advisor certifying that any
required revisions to the thesis can be completed and final copies submitted to the Graduate School by July 10 of the same year. For a project, the student must make a commitment to complete the project by July 31 of the same year.

Graduate Student Research
Graduate students planning to conduct research that involves the use of human participant subjects and/or human participant data, vertebrate animals, hazardous chemicals, biohazards, and/or radioactive materials are required to complete a Research Compliance and Intellectual Property (RCIP) form. Also, if graduate students are planning research that will lead to intellectual property with commercial potential, they should complete the RCIP form. At the same time, all graduate students are expected to respect the copyright, license and intellectual property rights that may attach to files of any media type, including software, texts, databases, images, video, music and other audio files, especially when using university computing and/or networking resources. For further information, contact the UAA Research Compliance Office or the associate provost for Research Administration and Commercialization.

Interdisciplinary Studies Degree
A student who has received a baccalaureate degree from a regionally accredited institution and whose credentials indicate the ability to pursue graduate work may develop an Interdisciplinary Studies major. The proposed program must differ significantly from and may not substitute for an existing UAA graduate degree program. The student may select no more than one half of the program credits from one existing graduate degree program, and courses must come from two or more disciplines (i.e., subjects). In addition to the University Requirements for Graduate Degrees, students must comply with the following procedures:

1. The student submits a UAA Graduate Application for Admission (as an Interdisciplinary Studies Major) with the appropriate fee to the Office of Admissions. This application will be reviewed by the Graduate School for determination of acceptance to graduate study, contingent on items 2-5 below.
2. The student invites a faculty member to chair their graduate studies committee and to serve as the student’s graduate advisor. The chair shall normally be a full-time faculty member. The chair must agree to serve and must be approved by the Graduate School dean or designee.
3. The student proposes a graduate studies committee of at least three faculty members (including the chair) from the appropriate academic disciplines. The committee members and chair must represent all concentration areas of 9 credits or more. The committee members must agree to serve and be approved by the Graduate School dean or designee by submitting an Appointment of Committee form.
4. The student develops an interdisciplinary proposal, including a paper Graduate Studies Plan specifying the degree (MA/MS) and title or concentration. In developing this proposal, the student should review all graduate degree policies and procedures. To receive an interdisciplinary studies master’s degree from UAA, the student must incorporate into his or her proposal all University Requirements for Graduate Degrees and any school or college requirements applicable. Of the minimum 30 credits required for the master’s degree, minimum of 21 credits must be drawn from existing 600-level courses. No more than 6 thesis credits should be substituted for an existing UAA graduate degree program. The student dev...
a bachelor’s degree and meet the required prerequisites. After successful completion of the program, students are eligible to sit for the National Board for Certification in Occupational Therapy (NBCOT) examination, and to apply for licensure.

Creighton University is accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools. The program in Occupational Therapy is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), Inc.

For information on prerequisites, curriculum and application procedures, please visit www.uaa.alaska.edu/collegeofhealth/departments/ot.

**Creighton University/UAAS Pharmacy Program**

The Creighton University (CU)-UAAS Pharmacy program is an online professional program leading to the Doctorate in Pharmacy (PharmD) degree. The Creighton distance pathway allows students to take didactic coursework using the latest in distance education technology. Interactions with faculty and mentors occur via conferencing software, discussion boards, e-mail, telephone and other methods. Students complete two weeks of intensive labs in Omaha for each of three summers during the program. Clinical rotations may be arranged within Alaska.

Creighton University is fully accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools, the accrediting agency for the region in which the university is located. The pharmacy program, accredited by the Accreditation Council on Pharmacy Education (ACPE), is a member of the American Association of Colleges of Pharmacy.

For information on prerequisites, curriculum and application procedures, please visit the Creighton program website at http://spahp.creighton.edu/admission/pharmacy/pharmd-distance-alaska-online or contact the UAAS Pharmacy Technology department at afdas@uaa.alaska.edu.

**University of Washington School of Medicine WWAMI School of Medical Education**

Health Sciences Building (HSB), Room 301, (907) 786-4789 www.uaa.alaska.edu/wwami

Each year, 20 certified Alaska residents begin their medical education in a collaborative medical school that operates among the campuses of five northwestern states: Washington, Wyoming, Alaska, Montana and Idaho (WWAMI). First-year classes for Alaskans are held at UAA. 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**

Alaska residents are eligible to apply for admission. Detailed eligibility information is available at www.uaa.alaska.edu/wwami/apply/akeligibility.cfm. 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.

**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 Alaska 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.

**FACULTY**

Raymond Bailey, Professor, rbailey@uaa.alaska.edu
Jaine Butler, Adjunct Assistant Professor, jainebueller@hotmail.com
Kathy Case, Adjunct Assistant Professor, kcase@ak.net
Lorna “Jamie” Elsivick, Term Instructor, laelsivick@uaa.alaska.edu
Robert Furilla, Professor and Associate Director, rafurilla@uaa.alaska.edu
Timothy Hinterberger, Associate Professor, tjhinterberger@uaa.alaska.edu
Clarence Hughes, Adjunct Assistant Professor, clance@hughesair.com
Cindy Knall, Associate Professor, cknall@uaa.alaska.edu
Tanya Leinicke, Associate Professor, leinicke@gmail.com
Ryan McGlan, Adjunct Assistant Professor, ryannmcghan1@hotmail.com
Karsten Miller, Adjunct Assistant Professor, mzb@gei.net
Jesse Owens, Adjunct Professor, jesselewowens@yahoo.com
Quentin Reuer, Professor, qreuer@uaa.alaska.edu
N. Jane Shelby, Director and Professor, njaneshelby@uaa.alaska.edu
Ram Srinivasan, Professor, rsrinivasan@uaa.alaska.edu
Lex VonHafften, Adjunct Assistant Professor, alexander.vonhafften@providence.org

**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. Success in graduate-level certificate programs prepares students to better accomplish the goals of their discipline.

**Admissions**

All students intending to register for one or more courses must apply for admission. Applications for admission are available from the UAA One Stop or online at 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 in this chapter). 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 grade point average (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. (Exception: Students do not need to request transcripts from any University of Alaska campus.) All U.S. and English Canadian transcripts should be submitted by the providing institution directly to the UAA Office of Admissions, P.O. Box 141629, Anchorage, AK 99514-1629. Individual 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 for details.

Applicants with transcripts from non-US or from French Canadian institutions must submit official transcripts for translation and evaluation as well as an official statement of educational equivalency from the World Evaluation Service (WES) International Credential Evaluation Package (ICAP) Course-by-Course Evaluation Service. These WES ICAP evaluations should be sent directly to the UAA Office of Admissions, P.O. Box 141629, Anchorage, AK 99514-1629. 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 shown proficiency in English through the Test of English as a Foreign Language (TOEFL) or through other appropriate measures.

Students do not need to request transcripts from any University of Alaska campus.) All U.S. and English Canadian transcripts should be submitted by the providing institution directly to the UAA Office of Admissions, P.O. Box 141629, Anchorage, AK 99514-1629. Individual 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 for details.
been a long-term resident of the U.S. or 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 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 goal statements, letters of recommendation, research proposals, writing samples and/or personal 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 additional information.

**International Graduate Certificate Students**

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

1. Official TOEFL (minimum score of 79-80 IBT) or IELTS (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 U.S. or English-speaking Canadian institutions must submit an international credential evaluation from the World Evaluation Service (WES) International Credential Advantage Package (ICAP) Course-by-Course Evaluation Service, stating that they have earned the equivalent of a U.S. baccalaureate degree. The WES ICAP evaluations should be sent directly to the UAA Office of Admissions, P.O. Box 141629, Anchorage, AK 99514-1629. Students transferring from other institutions in the U.S. must also complete and submit an 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 Definitions for Graduate Certificate-Seeking Students**

**Application Status**

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

**Admission Status**

- **Complete Admission:** All required documents have been received and all admission standards met.
- **Incomplete Admission:** Students who expect to receive their baccalaureate or master’s degree from a regionally accredited institution within two semesters (three if including summer) may apply for graduate admission. Formal acceptance becomes final only after the baccalaureate or master’s degree is completed and conferred, and all other admission requirements are met. All admission requirements must be satisfied prior to advancement to candidacy.
- **Provisional Admission:** Students who show potential for success in graduate studies but do not meet all the admission requirements for a program may be provisionally admitted. Provisions and deadlines for meeting those provisions are established at the time of admission and are monitored by the department chair or designee and the Graduate School. Normally, such provisions are to be satisfied within one academic year. If the provisions are not met within the specified deadlines, the student may be removed from graduate certificate-seeking status.
- **Postponed Admission:** Upon approval by their program and the Graduate School, students may postpone their admission to a future semester once, for up to one year prior to the end of the semester for which they originally applied.
- **Withdrawn After Admission:** Admission will be withdrawn when students do not attend classes during or postpone their admission before the end of their admission semester. Students whose admissions have been withdrawn must re-apply for subsequent admission to UAA.

**Related Graduate Certificate Policies**

**Graduate Certificate Transfer Credits**

Up to one-third of the semester credits (e.g., 4 credits for a 12-credit certificate program or 9 credits for a 27-credit certificate program) or the equivalent earned at a regionally accredited institution and not previously used to obtain any undergraduate degree or certificate may be transferred to UAA and accepted toward a graduate certificate. Acceptance of transfer credits toward program requirements is at the discretion of individual programs.

**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 a UAA graduate certificate by completing at least one-third of the certificate credit requirements (e.g., 4 credits for a 12-credit certificate program or 9 credits for a 27-credit certificate program) in residence at UAA and after admission to the certificate program. Credits previously used for any undergraduate certificate or degree may not be used to satisfy graduate certificate program requirements. Multiple graduate
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Graduate Programs

Formal Acceptance to Graduate Certificate Programs
Once all required admission documents have been received by the Office of Admissions, the student’s admission packet is forwarded to the chair or designee of the specific program. The acceptance decision is made by the chair or designee, subject to review by the Graduate School. The Graduate School then informs the Office of Admissions of the decision. The Office of Admissions sends a letter of acceptance directly to the applicant, accompanied by an official Certificate of Admission from the Graduate School. Acceptance to a graduate certificate program does not guarantee later admission to other graduate certificates or degrees.

Non-Degree-Seeking Students
Non-degree-seeking students who wish to register for graduate courses must have the department chair’s or faculty member’s signature for each course taken. Registration as a non-degree-seeking student implies no commitment by the university to the student’s later admission to a graduate certificate program. Up to one-third of the credits of graduate certificate coursework may be completed in the student’s graduate certificate program before program admission. Non-degree-seeking students do not qualify for federal or state financial aid benefits, nor do they qualify to receive a Form I-20 Certificate of Eligibility for Nonimmigrant (F-1) Student Status.

Full-Time/Half-Time/Part-Time Status for Graduate Certificate-Seeking Students
A student who has been admitted to a UAA graduate certificate program and is enrolled at UAA for 9 or more 600-level credits is classified as full-time. A graduate certificate student enrolled at UAA for 5-8 credits is classified as half-time. Courses at the 400 level will count toward full-time status only if they are applicable to the graduate certificate program (i.e., listed on the Graduate Studies Plan). A graduate certificate student enrolled at UAA for fewer than 5 credits is classified as part-time. Audited courses, continuing education units (CEUs) and professional development courses (500 level) are not included in the computation of the student’s full-time, half-time or part-time status.

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-year catalog are not met within seven years of formal acceptance into the program, admission expires and the student must re-apply 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. Students must meet the enrollment requirements in effect for courses at the time they enroll in each course. These requirements would include all catalog pre- or co-requisites for the course, as well as other registration restrictions at the time of graduation.

Removal from Graduate Certificate-Seeking Status
A graduate certificate student’s academic status may be changed to non-certificate-seeking if the requirements to remove provisional admission are not satisfied or if minimum academic standards are not met.

A graduate certificate student whose cumulative GPA falls below 3.00 (B) in courses applicable to his/her graduate certificate program, or a graduate certificate student who, for reasons specified in writing, is not making satisfactory progress toward completing the program requirements, may be removed from graduate certificate-seeking status.

Each school or college has developed procedures to deal with appeals arising from removal from graduate certificate-seeking status.

Reinstatement to Graduate Certificate-Seeking Status
Students who have been removed from graduate certificate-seeking status for failure to make satisfactory progress must re-apply for a graduate certificate program and pay the appropriate fee after one calendar year from the semester in which they were removed. When re-applying for a graduate certificate program, it is the student’s responsibility to demonstrate ability to succeed in that program.

Readmission may be conditional on maintaining minimum academic standards within the first semester of study.

Academic Appeals
Students have the right to appeal academic actions related to graduate certificates. See Academic Dispute Resolution Procedure in Chapter 5 or in the UAA Fact Finder/Student Handbook for more information.

Graduate Certificate Advisor
The chair or designee of the department offering the graduate program, with the approval of the Graduate School, appoints a graduate advisor for each student accepted to the program. Assigned advisors must have FERPA training and must be registered with the UAA Office of the Registrar.

Responsibilities of the Graduate Certificate Advisor/Committee
The division of responsibility between the advisor and/or committee is determined at the program level. The graduate certificate advisor and/or committee will do the following:

1. Review and approve the student’s Graduate 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. Monitor the student’s progress and timely completion of all requirements.
4. Monitor the timely submission of the official Graduate Studies Plan and other documents to the Graduate School.
5. Review and approve any changes to the official Graduate Studies Plan. The Graduate School will forward the original and final documents to the Office of the Registrar.
6. Review and approve the capstone experience or project according to procedures established by the individual program.
7. Administer and assess a comprehensive examination, if required.

University Requirements for Graduate Certificates
University requirements for all graduate certificates are as follows:

1. A student must be admitted to the certificate program and establish an approved Graduate Studies Plan. Students must fulfill all General University Requirements, college requirements and certificate program requirements.
2. No fewer than 12 nor more than 29 credits may be required for any graduate certificate.
3. The student must complete all requirements established by individual programs, as specified in the current UAA catalog.
4. A cumulative GPA of at least 3.00 (B) must be earned in courses identified on the official Graduate 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. At least one third of the credits used to satisfy graduate certificate requirements must be UAA resident credit completed after acceptance into the program.

11. Courses taken by correspondence, credit by examination or graded credit/no credit (CR/NC) do not count toward graduate certificate requirements. They may, however, be used to satisfy prerequisites or to establish competency in a subject, thus allowing the advisor or committee to waive certain courses in an established program, as long as the total credits in the graduate certificate program remain the same.

12. All credits counted toward the graduate certificate, including transfer credits, must be earned within the consecutive seven-year period prior to graduation.

13. If the requirements for a graduate certificate 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 readmission or graduation.

Application for Graduation
Graduate certificate students must submit an Application for Graduation, accompanied by the required fee, to the Office of the Registrar. Students must apply for graduation no later than the last day of the semester, although they need to apply by April 1 to be included in the commencement program. Students who apply for graduation but do not complete the graduate certificate requirements by the end of the semester must re-apply for graduation. A new application fee must be paid with each Application for Graduation.
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 advances 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 ANTH A602, ANTH A605, and ANTH A611 seminars with a grade no less than a B. If necessary, a seminar may be repeated once, but failure to earn a B or higher the 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 Graduate 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/Practicum 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 advance to candidacy within three years based upon fulfillment of the Candidacy Requirements listed above.
6. The student must submit a written MA thesis to the graduate studies committee, conforming to UAA specifications.
7. The student must pass an oral defense of the thesis, open to the university community and the general public.
8. The student must submit an Application for Graduation.
9. 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 A620 Research Design 3
   - ANTH A699 Thesis Research 1-6
   - 600 level elective courses 11-17
   - 400 level elective courses 0-6

2. 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 A620 Research Design 3
   - ANTH A699 Thesis Research 1-6
   - 600 level elective courses 2-8
   - 400 level elective courses 0-6
   
   * All proseminar courses and Research Design must be taken in residence at UAA. These courses may not be taken by directed study or by correspondence. Students may not take Research Design or 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 Cultural 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 (4)
   - 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)*

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ANTh A676  Ethical Issues in Archaeology (3)
ANTh A680  Advanced Analytical Techniques in Archaeology (3)
ANTh A681  Advanced Museum Studies in Anthropology (3)
ANTh A695  Anthropology Practicum (3)

*N0 more than 3 credits may be applied to this emphasis.

3. A total of 30 credits are required for the degree.

FACulty
Alan Boras, Professor (KPC campus), IFASB@uaa.alaska.edu
Phyllis Fast, Assistant Professor, AFPAF@uaa.alaska.edu
Kerry Feldman, Professor Emeritus, AFKD@uaa.alaska.edu
Christine Hanson, Professor, AFCHL@uaa.alaska.edu
Diane Hanson, Associate Professor, AFDKH@uaa.alaska.edu
Steve Langdon, Professor/Chair, AFSL@uaa.alaska.edu
Paul White, Assistant Professor, AFJW@uaa.alaska.edu
William Workman, Professor Emeritus, AFMBW@uaa.alaska.edu
David Yesner, Professor, AFDRY@uaa.alaska.edu

BIOLOGICAL SCIENCES
ConocoPhillips Integrated Sciences Building (CPSB), Room 101,
(907) 786-4770
www.uaa.alaska.edu/biology

The WWAMI School of Medical Education may be found at
www.uaa.alaska.edu/wwami

Master of Science,
Biological Sciences

The graduate program in Biological Sciences offers a research program
of study leading to the Master of Science degree. The MS 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/
documentsanddates.cfm. General guidelines for prospective students
 can also be found on UAA’s Graduate School webpage: www.uaa.
alaska.edu/graduateschool/prospective.

Program Student Learning Outcomes

Students graduating with a Master of Science in Biological Sciences:

• Have mastered the fundamental concepts of Biology, including
cell and molecular biology, genetics, physiology, evolution, and
ecology.

• Will have a working knowledge of the principles of scientific
methodology, of the methods and technology of biological
research, of quantitative analysis of scientific data, and will be
capable of writing a publishable scientific paper.

• Will have a demonstrated mastery of at least one focus area within
Biology or Biochemistry.

• Are prepared for a career in Biological Sciences, or are prepared
to pursue more advanced research opportunities (e.g., PhD or
postdoctoral programs).

Admission Requirements

Students seeking admission into the Biological Sciences MS degree
program should meet the following requirements. Details on this
process are available at www.uaa.alaska.edu/biology/graduate/
documentsanddates.cfm.

1. Students must have a bachelor’s degree in biology, chemistry,
or equivalent science to be determined by the Graduate Affairs
Committee (GAC). 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 the general Graduate Record Examination
(GRE). Applicants are encouraged to take the subject (biology,
biochemistry, or chemistry) exam, but this is not required.

3. Applicants must have at least a 3.00 GPA, or at least a 70th
percentile in two of the six possible GRE scores (verbal
reasoning, quantitative reasoning, analytical writing, and the three
subtests of the subject GRE). Successful applicants ordinarily have
no grade lower than a C in undergraduate science courses.

4. If English is not the applicant’s native language or was not the
language of instruction for the applicant’s baccalaureate degree,
students must take the Test of English as a Foreign Language
(Toefl) Exam and, at a minimum, meet the TOEFL score
guidelines set by UAA for undergraduate admission. These
guidelines can be found in the UAA Catalog. TOEFL scores may be
waived if the applicant has been a long-term resident of the United
States or other English speaking country.

Required Documents for Admission

1. The UAA graduate application form, which is available at www.uaa.alaska.edu/admissions/printed_application_forms.cfm.

2. 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.

3. Official scores from the GRE must be requested by the student and
sent directly by the testing agency to the university. Scores must be
received prior to admission to the program.

4. If necessary, scores from the TOEFL exam must be requested by the
student and sent directly by the testing agency to the university.
Scores must be received prior to admission to the program.

5. A brief (typically one page) statement of the applicant’s research
and career goals.

6. 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.

7. A letter of support from a UAA faculty member from the
Department of Biological Sciences expressing willingness to
accept the applicant into his/her research group and a statement of
available funding or funding opportunities for research support for
the student. Because students will not be admitted to the program
without a faculty mentor from the department, prospective
graduate students are strongly advised to contact faculty for
research/mentor arrangements at an early stage of their admission
process. Faculty research interests are available online: www.uaa.
alaska.edu/biology/facultyandstaff/tenuretrackfaculty.cfm

Items 1-4 must be submitted to Enrollment Services; items 5-7 should be
submitted directly to the Department of Biological Sciences. Applicants
should also submit unofficial copies of items 1-4 to the department.

Questions about this process should be directed to the departmental
secretary, at (907)-786-4770.

Mailing address:

Department of Biological Sciences Graduate Program
3101 Science Circle, CPSB 101N
Anchorage, AK 99508

Admission deadlines: All materials are due by March 1 for fall
admission and by November 1 for spring admission. Acceptance is
determined by the GAC and is based on the prospective student’s
overall credentials and the availability of appropriate faculty for student
research interests. Files received after these deadlines will be considered
on a case-by-case basis for admission the subsequent semester.
Graduation Requirements

In order to receive the Master of Science in Biological Sciences, students must:

1. Satisfy all the University Requirements for Graduate Degrees listed at the beginning of this chapter;
2. Complete 30 credits of coursework approved in advance by the student’s graduate study committee (GSC);
3. Satisfactorily complete thesis research approved in advance by the student’s GSC and pass an oral thesis defense;
4. Submit a written graduate thesis that has been approved by the GSC, departmental director, and deans of the College of Arts and Sciences and the Graduate School.

Course Requirements

1. Students must complete the following courses:
   - 600-level Science Electives minimum 9 credits
   - BIOL A601 Experimental Design and Statistics (3)
   - BIOL A604 Experimental Design for Cell/Molecular Biologists (3)
   - BIOL A605 Graduate Proseminar in Sciences 3
   - BIOL A606 Advanced Analysis and Interpretation * 3
   
   *This requirement can be waived by the student’s GSC if the student has sufficient other experience or coursework in statistical analysis.

2. Upper division (400-level) credits may be applied to the degree only with approval of the student’s 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 600-level courses, and a minimum grade of C in all 600-level courses, provided that the cumulative GPA does not drop below 3.00.

Program Requirements

1. Within the first semester of study, each student must select a GSC consisting of a minimum of three members (no more than five is recommended). Two of the three members must be full-time, tenure-track faculty in the Department of Biological Sciences. The committee chair will be the student’s primary research advisor if that person is a full-time UAA faculty member in the Department of Biological Sciences. If the primary research advisor is an affiliate faculty member, the chair will be shared with a full-time UAA faculty member from the Department of Biological Sciences, and both will be designated as co-chairs. To be a co-chair, a non-UAA faculty member must have official affiliate status within the department.

2. A student’s GSC must meet at least once each year to review a student’s progress. The annual report on student progress (available online from the Graduate School) must be submitted and approved by the student’s GSC. A copy of the approved proposal shall be placed in the student’s departmental file.

3. Each student must submit an official Graduate Study Plan (GSP) form by the end of the first semester of graduate work. The GSP formally establishes the specific program requirements that will, upon satisfactory completion, entitle the student to receive the graduate degree or certificate. This form must be approved by the student’s GSC and also be signed by the department director and the dean of the Graduate School.

4. All graduate students must remain in good standing throughout their program. At a minimum, students not in good standing will not be able to compete for teaching assistantships or be awarded tuition waivers from the department, college, or Graduate School. Students not in good standing risk being placed on probation and/or removed from the degree program. In order to remain in good standing in the program, students must:
   a. maintain a 3.00 GPA (cumulative) in all coursework listed on their GSP;
   b. file a GSP by the end of their first semester in residence;
   c. file satisfactory progress reports during each year in residence.

5. Within their first year in the program, each graduate student is required to submit a written thesis proposal that details the plan for the student’s graduate work. This document is developed in consultation with the graduate advisor, and once prepared must be submitted and approved by the student’s GSC. A copy of the approved proposal shall be placed in the student’s departmental file.

6. Students will conduct the research outlined in the thesis proposal and present their results as a graduate thesis following guidelines provided by the Graduate School. This written thesis must be approved by the GSC, the director of the Biological Sciences Department, the dean of the College of Arts and Sciences, and the dean of the Graduate School in order to be considered complete. No student shall graduate without completing a written thesis.

7. Following submission of their thesis to their GSC, students must present a thesis defense seminar, which will be followed by a private meeting with their 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

Lilian Alessa, Professor, lalessa@uaa.alaska.edu
Eric Bortz, Assistant Professor, ecbortz@uaa.alaska.edu
Jason Burkhead, Assistant Professor, jburkhead@uaa.alaska.edu
Jennifer Burns, Professor, jmburns@uaa.alaska.edu
Matt Carlson, Associate Professor, mlcarlson@uaa.alaska.edu
Douglas Causey, Professor, dcausey@uaa.alaska.edu
Khrys Duddleston, Associate Professor, knduddleston@uaa.alaska.edu
Sarah Gerken, Associate Professor, sagerken@uaa.alaska.edu
Miki Ii, Assistant Professor, mii@uaa.alaska.edu
Andy Kliskey, Professor, akkliskey@uaa.alaska.edu
Jocelyn Krebs, Professor, jkrebs@uaa.alaska.edu
Jerry Kudenov, Professor, jdkudenov@uaa.alaska.edu
Kim Peterson, Professor, kpetersen@uaa.alaska.edu
David Pfeiffer, Professor, dpfeiffer@uaa.alaska.edu
Fred A. Rainey, Professor and Director, farainey@uaa.alaska.edu
Donald Spalinger, Professor, despalinger@uaa.alaska.edu
Jonathan Stecyk, Assistant Professor, jstecyk@uaa.alaska.edu
Bjartmar Sveinbjörnsson, Professor, bsvinbjornsson@uaa.alaska.edu
Ian van Tets, Associate Professor, ivvantets@uaa.alaska.edu
Frank von Hippel, Professor, favonhippel@uaa.alaska.edu
Creative Writing
And Literary Arts
Administration/Humanities Building (ADM), Room 270, (907) 786-4394
www.uaa.alaska.edu/cwla

Master of Fine Arts, 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, science and the arts, regardless of 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 thesis essay, 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.

Program Student Learning Outcomes

Students graduating with a Master of Fine Arts in Creative Writing and Literary Arts will be able to:

- Demonstrate a thorough understanding of historical context, traditions, and contemporary issues in form and theory by situating the content of their own work within their genre.
- Demonstrate their skills in craft by producing a substantial body of original creative work and by articulating the craft elements in their genre.
- Demonstrate skills necessary for professional employment in literary fields such as writing, and editing.

Admission Requirements

See Admission Requirements for Graduate 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 Graduate 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)
   - 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)
   - This is an umbrella course and may be repeated with changes in subtitle.

5. Successful presentation of thesis in colloquium.

6. A total of 45 credits is required for the degree.

FACULTY

Anne Caston, Term Associate Professor, anne.caston@gmail.com
Jo-Ann Mapson, Term Assistant Professor, AFJM2@uaa.alaska.edu
Linda McCarriston, Professor, AFLJM@uaa.alaska.edu
Sherry Simpson, Associate Professor, AFSS3@uaa.alaska.edu
Ronald Spatz, Professor, AFRMS1@uaa.alaska.edu
David Stevenson, Term Professor/Director, AFDDS1@uaa.alaska.edu

English

Administration/Humanities Building (ADM), Room 101, (907) 786-4355
www.uaa.alaska.edu/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 linguistics. This degree prepares students both to pursue a more specialized PhD program and to take a variety of jobs in teaching, writing, editing and related fields. Students take three required courses: Contemporary Literary Theory (ENGL A602), Advanced Research and Professional Practices (ENGL A689) and Thesis (ENGL A699). Teaching assistants (TAs) also are required to take Composition Theory and Practice (ENGL A687). Otherwise, students enjoy significant flexibility in designing their degree. The degree culminates in the master’s thesis, a thoroughly researched and carefully argued article-length work that
demonstrates the student’s academic achievement and enables students to take on a variety of professional roles or to pursue advanced study. Competitive teaching assistantships and research assistantships are also available. Contact the English Department for details, deadlines, and applications.

Program Student Learning Outcomes
Students graduating with a Master of Arts in English will be able to:

- Address precisely articulated critical questions,
- Demonstrate deep familiarity with print and electronic scholarship,
- Apply detailed evidence to support claims,
- Utilize field-appropriate theories and methodologies effectively,
- Write analytically according to disciplinary conventions, and to
- Document fully according to disciplinary stylesheets.

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 Graduate Degrees at the beginning of this chapter for additional prerequisites. Complete application packets are due by May 1 for fall enrollment (April 1 if applying for a teaching assistantship) and November 1 for spring enrollment. Late applications will be reviewed for the following semester. 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.
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 Graduate Degrees, applicants whose native language is not English must submit an official Test of English as a Foreign Language (TOEFL) score, and the department reserves the right to require TOEFL scores above the university requirement for graduate admission.

Teaching 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 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 advise the student in selecting a thesis committee and thesis advisor. Students are advised to complete the required MA courses in the following sequence: ENGL A602, ENGL A689, ENGL A699 (final semester).

The thesis proposal, a requirement of ENGL A689, must be approved by the graduate English coordinator; students will not be allowed to enroll for ENGL A699 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 during the semester that the student takes ENGL A689. 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 School webpage at www.uaa.alaska.edu/graduateschool.

Thesis Requirements
The thesis is the culmination of the MA program. It is an extended, article-length 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 conversation with the graduate English coordinator. 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, linguistic, cinematic, or electronic texts, concepts, and perspectives) and methodologies (literary critical and rhetorical analysis, qualitative or quantitative research). Secondarily, the project may incorporate cultural studies approaches, popular culture topics, or extra-canonical texts, if pertinent and approved by the thesis advisor.
3. 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).
4. The thesis may be an extension of coursework; however, under no circumstances is it permissible to turn in the same paper for both a course and the thesis.
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 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 by the chair of the Department of English;
   - Revised according to the chair’s instructions (if any);
   - Submitted, reviewed and approved in the College of Arts and Sciences Dean’s Office.

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• 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 (DF) grades.

Continuous Registration and Leaves of Absence

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 (or summer, if they plan to use university facilities or consult with faculty during that time) prior to completion of their degree must submit the appropriate continuous registration paperwork and fee to ensure continuous enrollment during the degree-seeking period. Students not continually registered or on an approved leave of absence risk being removed from degree-seeking status. See the Related Graduate Degree Policies at the beginning of this chapter for additional details.

Graduation Requirements

See University Requirements for Graduate Degrees at the beginning of this chapter. Application for Graduation deadlines are July 1 for summer graduation, November 1 for fall graduation, and March 1 for spring graduation. Late or incomplete applications are processed the following term, and students who apply for graduation but do not complete the requirements must reapply with the appropriate fee in a subsequent semester.

Program Requirements

In general, MA degrees in English should follow the guidelines below, but the graduation requirements for individual students are based upon each student’s approved Graduate Studies Plan.

1. Core courses (9-12 credits*)
   Complete the following three core courses
   
   ENGL A602 Contemporary Literary Theory 3
   ENGL A689 Advanced Research and Professional Practices 3
   ENGL A699 Thesis (1-6) 3
   *TAs as also required to take ENGL A687 Composition Theory and Practice 3

2. Distribution requirements (18 credits)
   All courses are repeatable up to 6 credits with a change of subtitle:
   
   ENGL A610 Studies in Literary Periods and Movements (3)
   ENGL A611 Studies in Genre (3)
   ENGL A612 Studies in English Linguistics (3)
   ENGL A613 Studies in Rhetoric and Composition (3)
   ENGL A636 Studies in Contemporary Theory (3)
   ENGL A676 Studies in Texts and Cultures (3)
   
3. Elective courses (6-9 credits)
   Elective courses may include, with the approval of the committee chair:
   Any additional 600-level ENGL course (3-6)
   Up to 6 credits of 400-level ENGL courses (3-6)

Up to 6 credits of approved coursework outside the department (3-6)

4. A minimum of 36 credits is required for the MA in English

Note: A tentative course rotation schedule is available from the English Department.

FACULTY

David Bowie, Assistant Professor, david.bowie@uaa.alaska.edu
Jean Breining, Associate Professor, jnbreining@uaa.alaska.edu
Jacqueline Cason, Assistant Professor, jecason@uaa.alaska.edu
Robert Crossman, Professor, rcrossman@uaa.alaska.edu
Suzanne Forster, Associate Professor, smforster@uaa.alaska.edu
Patricia Jenkins, Associate Professor, pmjenkins@uaa.alaska.edu
Daniel Kline, Professor / Chair, dtkline@uaa.alaska.edu
Patricia Linton, Professor, plinton@uaa.alaska.edu
Judith Moore, Professor Emeritus, jkmoore@uaa.alaska.edu
Clay Nunnally, Professor, jcnunnally@uaa.alaska.edu
Jennifer Stone, Associate Professor, jstone32@uaa.alaska.edu
Toby Widdicombe, Professor, twiddicomb@uaa.alaska.edu

PSYCHOLOGY

Social Sciences Building (SSB), Room 264, (907) 786-1795
www.uaa.alaska.edu/psych

Graduate Certificate, Children’s Mental Health

The Graduate Certificate in Children’s Mental Health prepares graduate students and post graduates to practice children’s mental health using principles and methods from multidisciplinary sources to assist in the mental health treatment of children and their families. This certificate will strengthen competencies for work in education, social work and psychology jobs that specialize in children’s mental health. The program builds on the knowledge and skills acquired through current or previous master’s level study in these or related fields. The 14-credit graduate certificate is designed to supplement each candidate’s existing experience and academic preparation and the extent to which each candidate achieves the program outcomes. Therefore, specific required courses are not listed for some of the course requirements, since individual graduate studies plans may vary considerably based on the prior coursework of each candidate. The faculty advisors will use the program’s academic preparation requirements derived from state and national children’s mental health workforce competency guidelines to guide coursework selections included on the graduate studies plan.

Students develop advanced knowledge and competencies for working with children’s mental health issues as well as cross-discipline skills for working in Alaska’s systems of care. Applicants may either be in a behavioral health graduate program or have graduated from an approved program.

Program Student Learning Outcomes

The program is designed to expand specific skills and clinical experiences in children’s mental health and allow students to expand their expertise through a multidisciplinary understanding of children’s mental health practices in Alaska. Outcomes for the program are based on state and national competency guidelines for children’s mental health. Students who complete this program will be able to:

1. practice within the legal and ethical parameters of the profession;
2. identify children and their families who are at risk and to assess and intervene properly;
3. apply a variety of theories and methods of assessment and intervention in their practice;
4. understand systems of care as they apply to children’s mental health; and
5. assess, collaborate, intervene and document resources and services for children’s mental health.

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Admission Requirements
Applicants for the Graduate Certificate in Children’s Mental Health must:
1. satisfy the Admission Requirements for Graduate Certificates at the beginning of this chapter;
2. complete the Children’s Mental Health Graduate Certificate Application (application can be found on the program website);
3. have graduated from or are currently students in an accredited or approved program of Social Work, Psychology, or Counseling/Special Education or a related field with a cumulative graduate GPA of 3.00 on a 4.00 scale (with no course below a grade of B);
4. have completed a prerequisite or corequisite course in child development; and
5. provide a written summary of their children’s mental health related experiences, and career goals.

Curriculum Requirements
Applicants must complete the following requirements for a total of 14 credits.

**Area Requirements (minimum 9 credits)**
*Applicants who have graduated from or are currently students in an accredited or approved program of Social Work, Psychology, or Counseling/Special Education or a related field are required to complete or show evidence of having successfully completed graduate coursework in the following areas:

- Family systems 3
- Assessment/intervention/ethics in children’s mental health 3
- Specialty content coursework in children’s behavioral health issues minimum 3

*Graduate coursework completed as part of a degree program may be used toward certificate programs. (Note: Courses that fulfill these requirements must be approved by the advisor)

**Course Requirements**
In addition, applicants are required to complete the following courses as part of the certificate program:

- PSY/SWK/EDSE A677 Multidisciplinary Seminar in Children’s Mental Health (1)* 2
- PSY/SWK/EDSE A691 Children’s Mental Health Systems of Care 3

*To be taken 1 credit per semester over 2 sequential semesters. While attending this seminar, students should be involved with an academic or work experience involving children’s mental health.

Certificate Completion Requirements
Admitted students are required to complete curriculum requirements for the graduate certificate with a cumulative GPA of 3.00 or better. All courses must be at or above a grade of B.

Program Requirements
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 coursework as specified on the Graduate Studies Plan.
4. Maintain an overall GPA of 3.00 in the program with no grade below a B.

Master of Science, Clinical Psychology
The Master of Science in Clinical Psychology is designed to be responsive to the needs of a variety of Alaska mental health service settings and to meet prerequisites for licensing requirements at the master’s level in psychology for the state of Alaska. The MS degree allows graduates to pursue either the Licensed Professional Counselor (LPC) or the Licensed Psychological Associate (LPA) license.

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:
   - PSY A604 Biological and Pharmacological Bases of Behavior 3
   - PSY A609 Applied Research Methods 3
   - PSY A611 Ethics and Professional Practice 3
Students graduating with a Ph.D. in Clinical-Community Psychology will be adequately prepared for licensure as psychologists. Clinical training mandated for doctoral-level clinical psychologists and community psychology.

Anchorage. The program focus includes clinical, community and cultural psychology with a focus on rural, indigenous issues and an Indigenous Emphasis is a program jointly delivered and administered by the Departments of Psychology at the University of Alaska Anchorage and the University of Alaska Fairbanks. The degree is awarded jointly by UAA and UAF. Students can complete the entire degree program in residence at UAA. All program courses are co-taught by the Departments of Psychology.

The PhD program in Clinical-Community Psychology is accredited by the American Psychological Association as a clinical psychology program.

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 Anchorage and the University of Alaska Fairbanks. The degree is awarded jointly by UAA and UAF. Students can complete the entire degree program in residence at UAA. All program courses are co-taught across campuses via video conference 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 focus includes clinical, community and cultural psychology with a focus on rural, indigenous issues and an applied emphasis on the integration of research and practice. 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 clinical training mandated for doctoral-level clinical psychologists and will be adequately prepared for licensure as psychologists.

PhD, Clinical-Community Psychology

ayphd@uaa.alaska.edu
http://psyphd.alaska.edu

The PhD program in Clinical-Community Psychology is accredited by the American Psychological Association as a clinical psychology program.

Students graduating with a Ph.D. in Clinical-Community Psychology will be able to:

- Demonstrate culturally grounded knowledge and skills in scientific inquiry.
- Demonstrate competency in using the research and evaluation skills to disseminate new knowledge and inform clinical and community practice.
- Demonstrate culturally grounded knowledge and skills in rural clinical-community practice.
- Demonstrate competence in developing and implementing culturally relevant prevention and intervention efforts and programs.
- Demonstrate culturally grounded knowledge and skills relevant to social and healthcare solutions.
- Possess the competency to facilitate policy and social change.

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 UAA or UAF Graduate School, depending on a selected applicant’s campus of residence. 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 fall admission. This is the only opportunity for program admission each year.
2. Compliance with the requirements for admission to graduate studies as detailed in the UAA and UAF catalogs.
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://psyphd.alaska.edu/forms/annualdisclosure.pdf, 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. Additional information on the FBI criminal background check is located at http://psyphd.alaska.edu/admissions.htm.

Graduation Requirements

1. Complete the university requirements for graduate degrees as outlined in the UAA or UAF catalog, depending on the student’s campus of residence.
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 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.

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, but includes direct exposure to Alaska Native and other cultural worldviews, values and life experiences through contact with cultural elders and advisors. The goal of the cultural experience...
is to provide an opportunity to interact directly with cultures in a non-classroom setting.

2. Complete the following required courses.
   - PSY A602 Native Ways of Knowing 3
   - PSY A603 Alaskan and Rural Psychology 3
   - PSY A604 Biological and Pharmacological Bases of Behavior 3
   - PSY A605 History and Systems 1
   - PSY A607 Cognition, Affect, and Culture 3
   - PSY A611 Ethics and Professional Practice 3
   - PSY A612 Human Development in a Cultural Context 3
   - PSY A616 Program Evaluation and Community Consultation I 3
   - PSY A617 Program Evaluation and Community Consultation II 3
   - PSY A622 Multicultural Psychopathology 3
   - PSY A623 Intervention I 3
   - PSY A629 Intervention II 3
   - PSY A632 Community Psychology Across Cultures 3
   - PSY A633 Tests and Measurement in Multicultural Context 3
   - PSY A639 Research Methods 3
   - PSY A652 Practicum Placement - Clinical I (1-3) 6
   - PSY A653 Practicum Placement - Clinical II (1-3) 6
   - PSY A657 Quantitative Analysis 3
   - PSY A658 Qualitative Analysis 3
   - PSY A672 Practicum Placement - Community I (1-3) 3
   - PSY A679 Multicultural Psychological Assessment I 3
   - PSY A681 Substances of Abuse in Alaska 1
   - PSY A682 Clinical Interventions for Substance Abuse 1
   - PSY A683 Substance Abuse Assessment and Treatment Planning 1
   - PSY A686 Predoctoral Internship (6) 18
   - PSY A699D Dissertation (1-9) 18

3. Electives 9

4. A total of 115 credits is required for the degree.

**Additional Requirements**

**Clinical Competency**
Clinical competency is demonstrated through preparation of a clinical portfolio that will be evaluated by an ad hoc committee. Criteria for the clinical portfolio are clearly defined and samples will be provided for students. Students must demonstrate clinical competency before applying to Advance to Predoctoral Internship and must pass the clinical competency and community competency before starting PSY A686 Predoctoral Internship.

**Community Competency**
Community competency is demonstrated through preparation of a Community portfolio that will be evaluated by an ad hoc committee. Criteria for the portfolio will be clearly defined and samples will be provided for students. Students must pass both the clinical competency and community competency before starting PSY A686 Predoctoral Internship.

**Research Competency**
Research competency is demonstrated through preparation of a research portfolio that will be evaluated by an ad hoc committee. Criteria for the research portfolio will be clearly defined and samples will be provided for students.

**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 the student to date, submitted paperwork and the student’s progress through the program. Feedback from the review will be provided to the student by her or his advisor. To advance to candidacy, students must also have received at least a conditional pass on their comprehensive exam. The program defines the comprehensive exam as being met through passing the required competency portfolios. Passing one portfolio qualifies the student for a conditional pass on the comprehensive exam, which is sufficient for advancement to candidacy. All portfolios must be passed for the comprehensive exam to be fully passed.

**Doctoral Dissertation Proposal Defense**
Before commencing data collection for a dissertation project, students must defend their proposal to their dissertation committee. The defense must be based on a written dissertation proposal to be distributed to the dissertation committee after approval by the dissertation chair. The defense will be an oral presentation to the committee by the student and will not be a public meeting. For data-collection based dissertations, the proposal must also be approved by the UAA 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 pass the clinical portfolio before applying to advance to PSY A686 Predoctoral Internship. In addition to passing the clinical portfolio, students must apply to the local program director (PD), by September 30 (the fall semester prior to the year during which the student seeks to complete the internship) stating their intent to advance to internship. For most students this will mean that the application needs to be made in the fall of the fourth year in the program. The PD will notify the core faculty committee, who will review each student’s coursework, ensure that adequate progress has been made toward all prior milestones (i.e., clinical competency, community competency, research competency, doctoral dissertation outline (the outline must be completed, submitted, and approved by the chair), and advancement to candidacy) before approving the student for internship and before writing a letter of support for the student. Students must fully pass both the clinical portfolio and the community portfolio before starting internship. Failure to pass the Clinical Portfolio or the Community Portfolio results in the student not being eligible to enroll in internship credits.

**Predoctoral Internship (PSY A686)**
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.

**APA Ethical Guidelines**
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://psypbh.ualaska.edu.

**FACULTY**
Robert Boeckmann, Associate Professor, rboeckmann@uaa.alaska.edu
Christiane Brems, Professor, cbrems@uaa.alaska.edu
Eric John David, Assistant Professor, edavid@uaa.alaska.edu
Patrick Dulin, Assistant Professor, apdulin@uaa.alaska.edu
Gloria Eldridge, Associate Professor, gedelridge@uaa.alaska.edu
Jim Fitterling, PhD Program Director/Assistant Professor, jfitterling@ualaska.edu
Vivian Gonzalez, Assistant Professor, vmgonzalez@uaa.alaska.edu
Mark Johnson, Professor, mjohnson@uaa.alaska.edu
Claudia Lampman, Chair/Professor, cllampman@uaa.alaska.edu
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Graduate Programs, College of Business & Public Policy

John Petraitis, Professor, jmpetraitis@uaa.alaska.edu
Rosellen Rosich, Professor, rmrosich@uaa.alaska.edu
Patricia Sandberg, Associate Professor/PSC Director, prsandberg@uaa.alaska.edu
Joshua Swift, Assistant Professor/Intern Coordinator, jkswift@uaa.alaska.edu

College of Business and Public Policy

The College of Business and Public Policy (CBPP) offers three graduate degrees: Master of Business Administration, General Management; Master of Science, Global Supply Chain Management; and Master of Public Administration. These degree programs prepare students to function as effective leaders and managers in for-profit and not-for-profit organizations. Because of the related nature of the three CBPP degrees, students interested in pursuing two degrees simultaneously or in pursuing a second graduate degree may be able to complete the second degree with a significantly reduced number of credit hours, in accordance with the Graduate School’s policies on Additional Master’s Degrees in this catalog.

Business Administration

Edward & Cathryn Rasmuson Hall (RH), Room 304, (907) 786-4171
www.uaa.alaska.edu/cbpp

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 in all coursework in the MBA program. Although minimally acceptable, a grade of C in a graduate course may be offset with an A grade in another graduate 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 one academic year. All advanced MBA course requirements (core plus electives) must be completed within seven calendar years.

The faculty reserves the right, where warranted by evaluation of a student’s progress and apparent knowledge, to require additional coursework or other preparation to ensure the degree candidate possesses adequate professional skills and capabilities. This includes the ability to reason and communicate effectively, both verbally and quantitatively.

The MBA program is the responsibility of CBPP’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 CBPP Graduate Programs 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.

Contact the CBPP Graduate Programs Office for full program information, including application forms and procedures.

Graduate Programs Office
UAA College of Business and Public Policy
3211 Providence Drive, Anchorage, AK 99508, U.S.A.
Telephone: (907) 786-4171
Facsimile: (907) 786-4115

Master of Business Administration, General Management

The MBA in General Management provides students with perspectives and skills to prepare them for increasingly significant managerial leadership roles.
The focus of the program is management practice, recognizing 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.

The program serves full- and part-time students and classes are generally scheduled evenings or Saturdays. Although many students are from the greater Anchorage area, the program also attracts students from throughout the United States and from foreign countries, particularly those on the Pacific Rim.

Students may enter the program in either 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 CBPP Graduate Programs Office.

Program Student Learning Outcomes

Students graduating with a Master of Business Administration in General Management will be able to:

- Develop an understanding of the organization as a complex goal-seeking system interacting with and adapting to the dynamics of its external environment.
- Demonstrate an understanding of the key elements and tools of business performance management.
- Demonstrate effective communication skills utilizing a variety of tools and media suited to specific situations.
- Provide leadership in settings ranging from the organization-wide level to the team.
- Demonstrate professionalism through the maintenance of high standards of personal performance, teamwork, professional development and ethical behavior.

Admission Requirements

Applicants must meet both the Admission Requirements for Graduate Degrees and the College of Business and Public Policy requirements outlined here.

Admission to the MBA program is limited to students who have earned a baccalaureate degree from an AACSB or regionally accredited university, or foreign equivalent. Undergraduate GPA on a 4.00 scale and the Graduate Management Admission Test (GMAT) score must satisfy the following formula:

Undergraduate GPA x 200 + GMAT > 1150.

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 3.50 or higher.

If an applicant is not eligible for a GMAT waiver, admission will be deferred until he or she submits an examination score.

Additional indicators for predicting success in individual cases may be provided through documented performance in extracurricular activities; evidence of creativity and leadership; or a record of accomplishment in business or other professional activity.

Each applicant must submit the following to the UAA Office of Admissions as part of their application materials:

- A statement of purpose.
- A resume, including the names and contact information of three references.
- All transcripts from prior college/university studies.

Applicants whose native language is not English must score at least 80 (Internet based exam scale) 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 is currently 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.

General Management Program Structure

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 A600 Fundamentals of Finance 3
- ECON A602 Introduction to Economics for Managers 3

All students must complete the three foundation courses. Advisors may, however, waive one or more of the foundation courses if the student has completed disciplinary equivalent coursework within five years preceding their admission.

Entering students are expected to have basic mathematical, computer, and communication skills. Students lacking these fundamental skills will be required to improve by means of independent study, noncredit courses, undergraduate coursework, or seminars and 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 A650 Seminar in Executive Uses of Accounting 3
- BA A610 Business Intelligence and Analytics 3
- BA A613 Applied Leadership 3
- BA A632 Organizational Behavior and Foundations of Behavioral Science 3
- BA A635 Current Marketing Issues Seminar 3
- BA A636 Financial Decision Making 3
- BA A655 Strategic Management Seminar 3

In certain cases, where warranted by previous education or experience, students may petition to substitute an elective instead.

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 and Conflict Management 3
- BA A631 Business Environment Analysis 3
- BA A634 Organizational Design and Development 3

b. Elective coursework (9 credits)

- Students may design an area of concentration from CBPP courses that focus on management theory and practice, marketing, finance, international business and 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, disciplines, or graduate courses offered by other accredited universities.

- Elective coursework requirement (3 credits)

- Capstone course requirement (3 credits)

- Capstone courses provide the opportunity to integrate acquired knowledge of business administration. Select one course based on preferred nature of experience (practical or academic) and application (applied or theoretical):

- BA A656 Management Project 3
- BA A686 Management Simulation 3
- BA A698 MBA Individual Research 3

Thesis Option:

- BA A699 Thesis 6

Students (especially those who are considering pursuing a PhD degree) may elect to complete a master’s thesis.
MBA with an Emphasis in Business Intelligence and Business Analytics

MBA degree candidates will receive a degree with an emphasis in Business Intelligence and Business Analytics by completing the following sequence of elective courses as a part of their degree program:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA A633</td>
<td>Problem Formulation and Decision Analysis</td>
<td>3</td>
</tr>
<tr>
<td>BA A648</td>
<td>Business Intelligence and Data Mining</td>
<td>3</td>
</tr>
<tr>
<td>BA A690</td>
<td>Advanced Topics in Business (1-6)*</td>
<td>3</td>
</tr>
</tbody>
</table>

*Recommended Advanced Topics in Business courses include business statistics and data analysis.

FACULTY

Carlos Alsua, Associate Professor, AFCJA@ uaa.alaska.edu
Naliniwatcha Bhattacharyya, Professor, AFNB@ uaa.alaska.edu
Yong Cao, Associate Professor, AFYC@ uaa.alaska.edu
Alpana Desai, Associate Professor, alpana@ uaa.alaska.edu
Ted Eschenbach, Professor Emeritus, AFTGE@ uaa.alaska.edu
Edward Forred, Professor, AFEJF1@ uaa.alaska.edu
George Geistaus, Professor, AFGCA@ uaa.alaska.edu
Bogdan Hoanca, Professor/Director of CBPP Graduate Programs, AFBH@ uaa.alaska.edu
Lee Huskey, Professor, AFLH@ uaa.alaska.edu
Frank Jeffries, Professor, AFFLJ@ uaa.alaska.edu
Yonggang Lu, Assistant Professor, AFYL@ uaa.alaska.edu
Terry Nelson, Assistant Professor
Rashmi Prasad, Professor/Dean, AFRP2@ uaa.alaska.edu
Darren Prokop, Professor, AFDJP1@ uaa.alaska.edu
Larry Ross, Professor, AFLR@ uaa.alaska.edu
Suresh Srivastava, Professor, AFSCS@ uaa.alaska.edu

LOGISTICS

Edward & Cathryn Rasmuson Hall (RH), Room 304, (907) 786-4171
www.uaa.alaska.edu/cbpp

Graduate Certificate, Supply Chain Management

Admission to the certificate program is currently suspended. Contact the department for further information.

Master of Science, Global Supply Chain Management

The MS GSCM degree focuses on managing global supply chain systems with an emphasis on managerial leadership, information technology and international business practices. The degree requires five six-credit courses, 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 among one another. Students apply their coursework to a host business to attain hands-on experience.

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 and Public Policy at (907) 786-4171 for tuition and pre-application information.

Program Student Learning 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.

Academic Progress

A minimum GPA of 3.00 is required 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. A student must withdraw from the program if he or she earns three C course grades.

The program’s cohort format allows students to develop working relationships with group members, undertake group activities and research, and share professional experiences.

The MS GSCM program is the responsibility of the Logistics Department, which acts as the program’s policy-making body, and appeals board. Students are expected to be familiar with, and adhere to, the MS GSCM program requirements and procedures, as well as general UAA admissions and graduate degree requirements.

Contact the CBPP Graduate Programs Office for full program information, including application forms and procedures:

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Program Requirements

1. Complete the following requirements:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOG A661</td>
<td>Supply Chain Strategic Planning</td>
<td>6</td>
</tr>
<tr>
<td>LOG A662</td>
<td>Supply Chain Knowledge Management</td>
<td>6</td>
</tr>
<tr>
<td>LOG A663</td>
<td>International Supply Chain Management and Marketing Strategies</td>
<td>6</td>
</tr>
<tr>
<td>LOG A664</td>
<td>Supply Chain Management Leadership</td>
<td>6</td>
</tr>
<tr>
<td>LOG A665</td>
<td>Supply Chain Measurement*</td>
<td>6</td>
</tr>
</tbody>
</table>

*A final research project is required as part of the degree requirements.

2. A total of 30 credits is required for the degree.

FACULTY

Philip Price, Professor, philipp@ uaa.alaska.edu
Darren Prokop, Professor/Chair, AFDJP1@cbpp. uaa.alaska.edu
Master of Public Administration

The Master of Public Administration (MPA) degree provides students with knowledge and skills needed for professional careers in public service. MPA students learn analytical techniques and add to their expertise in organizational and program management, policy analysis, and related areas. Emphasis is on public policy, management and administrative issues. Students specialize in one of the following emphasis areas: Public Management, Public Policy Analysis, Health Administration or Criminal Justice. Dual emphasis areas are also offered.

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 structure and processes of public organizations, and the history and context of the field of public administration.

The Public Policy Analysis emphasis offers professional staff of executive and legislative departments of local, state and federal governments the capability to analyze the effects of a broad range of actual and hypothetical government policies. It emphasizes application of economic analysis and other quantitative and qualitative methods to Alaska and national policy issues.

The Health Administration emphasis prepares students as health administrators in local, state or federal agencies; 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 provides a theoretical basis for management careers in criminal justice. Students develop knowledge and skills necessary for effective public management: planning and decision-making, and managing people, money and programs. These skills are applicable to a wide spectrum of employment areas in law enforcement and the criminal justice system, and they prepare students seeking to earn a terminal degree in justice administration.

The dual emphasis in Public Management and Public Policy Analysis is designed for those who work for, or plan to work for, both executive and legislative agencies of local, state and federal government; for private, nonprofit organizations; and in government relations units of private corporations. It combines the basic tools of public management with the capability to analyze the effects of a broad range of actual or hypothetical government policies. It provides an understanding of the structure and processes of public organizations, the history and context of the field of public administration, and emphasizes the application of economic analysis and other quantitative and qualitative methods to Alaska and national policy issues. This dual emphasis requires an additional 9 credits.

Various additional dual emphasis areas may be created by combining individual emphasis areas. Interested students should speak with their advisor.

Students who have earned the MPA degree may earn a Master of Business Administration (MBA) degree by completing a minimum of 21 resident credits not used for any previous degree. Specific course requirements are at the discretion of the CBPP director of graduate programs and will be reflected in the student’s MBA program plan prior to beginning coursework toward a second degree.

Program Student Learning Outcomes

Upon graduation, students earning the MPA at UAA will be able to:

• Demonstrate leadership and decision-making skills.
• Demonstrate effective communication skills.
• Describe the values and tradeoffs in public service, including sustainability, citizen engagement, democratic values and transparency.
• Explain the role of financial, human, information, technology and other resources.
• Explain the policy process, including assessment and problem solving, including the use of evidence.
• Apply information processing and technology for effective administration.

Admission Requirements

Students enter the MPA program with a bachelor’s degree from a variety of educational backgrounds. Accordingly, the program meets the needs of students with a wide mix of professional and educational backgrounds and interests.

Students interested in the MPA 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 UAA Admission Requirements for Graduate Degrees and the Department of Public Policy and 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 ECON A202 or ECON A602, and PS A101) or their equivalents.

Detailed admission standards are available on our website, www.mpa.alaska.edu. Contact the CBPP Graduate Office for full program information, including application forms and procedures.

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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, starting with the first term of enrollment. The 6 semester credits may consist of either undergraduate prerequisite courses or graduate program courses. Failure to comply with the 6 credit minimum each calendar year may result in a student being dropped from the program.

Graduation Requirements

See University Requirements for Graduate Degrees at the beginning of this chapter.

Program Requirements

1. Complete the MPA core courses (18 credits):
2. Complete one of the following emphasis areas:

**Public Management Emphasis (15 credits)**
- PADM A603 Management Analysis
- PADM A610 Organizational Theory and Behavior
- PADM A624 Human Resources Administration and Labor Relations
- Plus two 600-level electives

**Public Policy Analysis Emphasis (15 credits)**
- PADM A632 Public Policy Analysis
- PADM A688 Program Evaluation and Performance Measurement
- Plus three 600-level electives

**Health Administration Emphasis (15 credits)**
- HS/NS A626 Principles of Epidemiology
- HS A605 Public Health and Society
- HS A615 Health Services Administration
- PADM A624 Human Resources Administration and Labor Relations
- Plus one 600-level elective

**Criminal Justice Emphasis (15 credits)**
- JUST A625 Seminar in Criminal Violation
- JUST A630 Justice Administrative Theory and Practice
- JUST A670 Administrative Law
- Choose one of the following:
  - JUST A640 Corrections Theory and Research (3)
  - JUST A650 Policing Theory and Research (3)
- Plus one 600-level elective

**Dual Emphasis: Public Management and Public Policy Analysis (24 credits)**
- PADM A603 Management Analysis
- PADM A610 Organizational Theory and Behavior
- PADM A624 Human Resources Administration and Labor Relations
- PADM A632 Public Policy Analysis
- PADM A688 Program Evaluation and Performance Measurement
- Plus three 600-level electives

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 Administration Capstone

6. A total of 36-39 credits is required for the degree, 45-48 credits required for a degree with a dual emphasis.

**FACULTY**
- Steven Aufrechter, Professor Emeritus, AFSEA@uaa.alaska.edu
- Sharan Haley, Professor Emeritus, AFSH@uaa.alaska.edu
- Heather Hudson, Professor, AFHEH@uaa.alaska.edu
- Greg Pretasel, Associate Professor, AFGP@uaa.alaska.edu
- Sheila Selkregg, Assistant Professor, sheilas@uaa.alaska.edu

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**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 collegiate 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 generate 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 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) 786-4412
2. The Department of Counseling and Special Education with programs in counselor education, special education, early childhood special education and opportunities in speech and language pathology. (907) 786-6317
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)

www.uaa.alaska.edu/coe

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

www.uaa.alaska.edu/coe/degrees

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 content based classrooms.
- Committed to a life of thoughtful practice.
- Dedicated to working with all children, their families, and support personnel.
- Knowledgeable in the appropriate subject matter and skilled in how to teach it.
- Committed to the highest standards of professional ethics.

Program Student Learning Outcomes

Students graduating with a Master of Arts in Teaching will be able to:

- Demonstrate and examine how their educational philosophy affects their teaching in the classroom. (AK Standard 1)

- Demonstrate application of learning theory, effective instructional planning and practice, and assessment processes for all students. (AK Standards 2, 5)
- Demonstrate knowledge of the individual and cultural diversity in Alaskan communities and schools and apply that knowledge in educational practice. (AK Standard 3)
- Demonstrate content and pedagogical knowledge in the endorsement area as specified by the appropriate Specialized Professional Association (SPA) - NCTM, NSTA, NCSS, NCTE, ACTFL, TESOL, NASM, etc. (AK Standard 4)
- Demonstrate technological knowledge and proficiency to enhance instructional practice. (AK Standard 5)
- Demonstrate an appropriate learning environment including effective classroom management. (AK Standard 6)
- Demonstrate participation in and contribution to the profession by maintaining high professional standards, including collaboration and communication (both oral and written), with all stakeholders in the university and school community. (AK Standards 7, 8)
- Complete the MAT program and receive an Institutional Recommendation for initial licensure. (AK Standards 1-8)

Admission Requirements

See the beginning of this chapter for Admission Requirements for Graduate 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.
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

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 www.uaa.alaska.edu/coe/currentstudents/field-experiences/background-checks.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 A478 Issues in Alaska Native Education, K-12 and EDFN A649 Capstone Seminar: Inquiry in Teaching and Learning 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 Graduate Degrees.

### Teaching Endorsement and Grade Level Options

There are two grade level options in the MAT:

- Secondary Education (7-12)
- K-12

The grade level option an applicant selects is based on the teaching endorsement area.

### A. Secondary Education 7-12

with 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

#### Program Requirements

1. Required Foundations Courses (6-9 credits)
   - EDFN A478 Issues in Alaska Native Education, K-12 3
   - EDFN A601 Foundations: Philosophy of Education 2
   - EDFN A602 Foundations: Educational Psychology 2
   - EDFN 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 EDFN A601 and EDFN A603)
     
     Notes: Minimum grade of B required in EDFN A478. With departmental approval, the above courses may be taken before formal admission to the MAT program. If EDFN A478 is taken as part of an undergraduate program, it may be waived for the MAT.

2. Required Core Courses (11 credits)
   - EDFN A647 Developing Literacies Across the K-12 Continuum 1
   - EDFN A649 Capstone Seminar: Inquiry in Teaching and Learning 2
   - EDSE A637 Inclusive Teaching and Learning in Content Area Classrooms 2
   - EDSY A630 Language, Culture, and Teaching in Secondary Schools 2
   - EDSY A644 Community of Learners in Content Area Classrooms 3
   - EDSY A648 Developing Literacies in the Secondary Content Areas 1

   *Note: Minimum grade of B required in EDFN A649.*

3. Required Methods Classes (6 credits)
   - Choose appropriate two-course sequence:
     - EDSY A661 General Methods for Secondary Classrooms 3
     - and (select appropriate content course): 3
CTE A643 Teaching in Career and Technical Education (3)
or
EDSY A663 Teaching English/Language Arts in Secondary Schools (3)
or
EDSY A664 Teaching Social Studies in Secondary Schools (3)
or
EDSY A665 Teaching Mathematics in Secondary Schools (3)
or
EDSY A667 Teaching World Language in Secondary Schools (3)
or
EDSY A668 Teaching English as a Second Language in Secondary Schools (3)
or
EDSY A669 Teaching Science in Secondary Schools (3)

4. Required Field Experiences (9 credits)
   EDFN 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.

B. K-12 with a teaching endorsement in Music or Physical Education

Program Requirements

1. Required Foundations Courses (6-9 credits)
   EDFN A478 Issues in Alaska Native Education, K-12 3
   EDFN A601 Foundations: Philosophy of Education 2
   EDFN A602 Foundations: Educational Psychology 2
   EDFN A603 Foundations: Educational History and Sociology 2
   Notes: Minimum grade of B required in EDFN A478. With departmental approval, the above courses may be taken before formal admission to the MAT program. If EDFN A478 is taken as part of an undergraduate program, it may be waived for the MAT.

2. Required Core Courses (10 credits)
   EDFN A647 Developing Literacies Across the K-12 Continuum 1
   EDFN A649 Capstone Seminar: Inquiry in Teaching and Learning 2
   EDSE A637 Inclusive Teaching and Learning in Content Area Classrooms 2
   EDSY A630 Language, Culture, and Teaching in Secondary Schools 2
   EDSY A644 Community of Learners in Content Area Classrooms 3
   Note: Minimum grade of B required in EDFN A649.

3. Required Methods Classes (6 credits)
   MUS A668A Methods for Teaching Music I, K-12 (3) 6*
   MUS A668B Methods for Teaching Music II, K-12 (3) or
   PEP A645 Methods in Elementary Physical Education (3)
   PEP A646 Methods in Secondary Physical Education (3)

4. Required Field Experiences (9 credits)
   EDFN A695 Internship (1-9) 9*
   *Special note: Completion of 9 credits required for degree and certification.

5. Total credits for degree: 31-34

6. Candidates must successfully complete a comprehensive portfolio demonstrating that they have met all of the applicable standards.

Program Options

1. 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.

2. 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).

3. 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, an unprofessional attitude, unsatisfactory field reports, violation of professional ethics, or other factors may result in removal from the field experience and denial of the 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.

*For more information, please contact the College of Education.

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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. Teaching and Learning

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 and those enrolling in coursework offered at the Providence Early Learning Lab (PELL). In some cases, criminal history background clearance is required for admission to a department or program. In addition to self-disclosure of criminal history to the College of Education and its partners, a check of the Alaska and National Sex Offender Registries, a fingerprint-based check by the Federal Bureau of Investigation, and a name-based check through the Alaska Public Safety Information Network may be required. Various agencies and centers may have additional requirements.

Failure to comply with the College of Education background check requirements will result in denial of access to field placement settings or PELL. Failure to pass the criminal history background check will result in removal from the program. More information is available at www.uaa.alaska.edu/coe/currentstudents/field-experiences/background-checks.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 Graduate 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 Graduate 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 graduate student will not necessarily be applicable toward a specific graduate 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

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, technology, 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.

Program Student Learning Outcomes
Upon completion of this program, graduates will be able to:
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 in multicultural contexts.
3. Utilize individual and group approaches to assessment and evaluation to support and improve counseling practices in multicultural contexts.
4. Show dispositions relating to effective counseling practices for diverse populations.
5. Engage in work that meets ethical standards and legal mandates in the field of counseling.
6. Communicate essential knowledge and understanding of career development and related life issues.
7. Utilize professional literature, research methods, and program evaluation to support and improve counseling practices.
8. Communicate essential knowledge of and skills in effective group counseling practice including theoretical and experiential understanding of group approaches in a multicultural society.
9. Create a plan for continued professional development in a counseling specialty area.

Admission Requirements
1. See Admission Requirements for Graduate Degrees at the beginning of this chapter and Admission Requirements for Master of Education degrees at the beginning of this section.
2. Complete the Counselor Education application (application packet can be found on the program web site).
3. Submit three letters (or reference forms) of professional recommendation (see application packet for forms).
4. Provide a goal statement of approximately 500 words that contains an autobiography, career goals, and how the MEd program relates to those goals.
5. Participate in an interview, if requested.
6. Provide an additional 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
3. Choose one of two options:
   a. School Counseling
   b. Community Agency Counseling.

   The School Counseling and Community Agency 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) in Alaska. 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 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 A680 Counseling Practicum 3
   EDSE A632 Special Education Law: Principles and Practices 3

   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 A637 Treating Emotional and Mental Disorders 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.

4. See College of Education Graduation Requirements at the beginning of this section.

5. Successful completion of a portfolio is required.

6. Successful completion of a case study analysis is required.

7. A minimum of 48 credits is required for the degree. Note: EDRS A660 is waived for candidates entering the program with a master’s degree that included an equivalent research course. EDCN A680 Counseling Practicum and an internship (EDCN A695E, EDCN A695C, EDCN A695S) are required for all candidates seeking a master’s degree in Counselor Education. Also, coursework taken at another institution to satisfy requirements for the master’s degree must be pre-approved by an advisor in the Counselor Education program in order to be accepted as part of the graduate studies plan.

B. Early Childhood Special Education

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 from 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).

Program Student Learning Outcomes

Student outcomes for the program are based on the Council for Exceptional Children (CEC) standards (www.cec.sped.org/Standards/Special-Educator-Professional-Preparation?sc_lang=en) and the Division of Early Childhood Special Education standards (www.dec-sped.org/About_DEC/Personnel_Standards_for_Early_and_the_Division_of_Early_Childhood_Special_Education). 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 ensure 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.

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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>EDCN A613</td>
<td>Human Development for Helping Professionals</td>
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<td>EDCN A614</td>
<td>Counseling Diverse Populations</td>
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<td>Counseling Theories</td>
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<td>EDCN A620</td>
<td>Assessment in Counseling</td>
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<td>Counseling Skills and Techniques</td>
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<td>Group Counseling</td>
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<td>EDCN A680</td>
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<td>EDSE A632</td>
<td>Special Education Law: Principles and Practices</td>
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<td>EDCN A627</td>
<td>Counseling in Community Agencies</td>
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<tr>
<td>EDCN A637</td>
<td>Treating Emotional and Mental Disorders</td>
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<tr>
<td>EDCN A695C*</td>
<td>Counseling Internship: Community Agency (3-6)</td>
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*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.
6. Critically analyze and apply principles of research in the area of early childhood special education.

**Admission Requirements**

1. Satisfy Admission Requirements for Graduate 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 experience in early childhood special education, early childhood education or a related field. Students without the experience may be required to take additional coursework and enter the program on a provisional admission status.
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, including one from a supervisor.
6. Participate in an interview if requested by the department.
7. Submit copies of applicable licenses, certificates, or other professional credentials.
8. Successfully complete the Praxis I: Pre-Professional Skills Test (PPST).

**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, and access to equipment to engage in distance learning

1. Complete required courses (36 credits):
   - EDRS A660 Fundamentals of Research in Education (2)
   - EDRS A661 Data-Informed Instruction (2)
   - or EDRS A662 Action Research in Education (2)
   - EDRS A664 Developing and Writing Literature Reviews
   - EDSE A474 Special Children from Birth Through Five
   - EDSE A610Y Assessment: Early Childhood Special Education
   - EDSE A622Y Strategies: Early Childhood Special Education
   - EDSE A633 Autism: Communication and Social Disorders
   - EDSE A674 Family Partnerships in Early Childhood Special Education
   - EDSE A695Y Advanced Internship: Early Childhood Special Education (3-6)
   - Electives by advisement

2. Complete a 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:** Prior to receiving an institutional recommendation for initial teacher certification, candidates must: a. pass the Praxis I or other EED-approved test at the level established by EED, and 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. Also, prior to advancing to the professional certificate, EED requires passing scores on the Praxis II 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**

**www.uaa.alaska.edu/coe/degrees**

The MEd in Educational Leadership is designed for individuals seeking advanced professional preparation to become school leaders. The program specifically prepares individuals for principal or teacher leadership positions. The options include:

- Principal (with Type B certificate)
- Teacher Leadership (without Type B certificate) — admission suspended

**Admission Requirements**

1. Satisfy Admission Requirements for Graduate Degrees at the beginning of this chapter and Admission Requirements for Master of Education degrees at the beginning of this section.
2. Have at least three years of experience as a certified elementary teacher, secondary teacher, or special services provider (Type C).
3. Hold a current teacher certificate or provide evidence of eligibility for an Alaska Teacher Certificate.

**Program Student Learning Outcomes**

Student learning outcomes for the MEd in Educational Leadership are based on the Educational Leadership Constituent Council (ELCC) Standards for School Leaders. Students who complete the Educational Leadership degree program will be able to:

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 a 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):**
   - EDL A610 Orientation to Graduate Studies in Leadership 3
   - EDL A620 Leadership in Alaska Culture and Social Justice Issues 3
   - EDRS A660 Fundamentals of Research in Education 2
   - EDRS A661 Data-Informed Instruction 2
   - EDRS A667 Program Evaluation 2

2) **Principal Core (24 credits):**
   - EDL A637 Educational Leadership and Organizational Behavior 3
Admission Requirements
1. Satisfy Admission Requirements for Graduate Degrees listed at
the beginning of this chapter and Admission Requirements for
Master of Education degrees as noted earlier in this section.
2. Complete the Department of Teaching and Learning
application packet, including two letters of reference, an
application essay, and transcripts documenting a minimum
GPA of 3.00 in the most recent 30 credits.
3. Submit a resume documenting education or leadership
experience and at least one year of appropriate professional experience;
or successful completion of a teacher education program from a regionally accredited university.
4. Participate in an interview if requested by the department.

Program Requirements
1. Research (9 credits):
   - EDFN A698 Individual Research (1-3) 3
   - EDRS A660 Fundamentals of Research
     in Education* 2
   Select 4 credits from the following:
   - EDRS A661 Data-Informed Instruction (2)
   - EDRS A662 Action Research in Education (2)
   - EDRS A663 Research Design (2)
   - EDRS A664 Developing
     and Writing Literature Reviews (2)
   - EDRS A667 Program Evaluation (2)
   *This required course must be completed within the first 12 credits
   of program coursework.
2. Professional Concentration (12 elective credits) 12
   In consultation with a faculty advisor, candidates are required
to choose an approved area of concentration designed to
enhance their professional expertise, then select 12 credits of
coursework that maintain thematic integrity in support of the
professional concentration. Examples of concentrations include
courses from Mathematics, Science, English, Humanities,
Business, Early Childhood, Special Education, Literacy, English
for Speakers of Other Languages, Research, etc.

Note: Concentration may include courses outside the College of
Education.
3. Select nine (9) credits from the following courses that support
the teaching and learning core principles:
   - EDCN A613 Human Development for Helping
     Professionals (3)
   - EDEC A600 Contemporary Issues and Approaches
     in Education (3)
   - EDEC A604 Responsive Practices in Early Childhood (3)
   - EDEC A650 Leadership and Advocacy in Early
     Childhood (3)
   - EDFN A478 Issues in Alaska Native Education, K-12 (3)
   - EDFN A609 Philosophical Communities of Inquiry (3)
   - EDFN A621 Culture, Language, and Teaching (3)
   - EDFN A622 Philosophy of Education (3)
   - EDFN A631 Advanced Educational Psychology (3)
   - EDFN A636 Innovations in Teaching and Learning (3)
   - EDFN A651 Curriculum Theory and Development (3)
   - EDFN A654 Brain, Mind, and Education (3)
   - EDL A637 Educational Leadership
     and Organizational Behavior (3)
   - EDL A638 Instructional and Curricular Leadership (3)
   - EDL A639 The Politics of Education (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)
4. Complete a comprehensive portfolio documenting professional growth and reflective practice throughout the program. An oral presentation is required.
5. Satisfy College of Education Graduation Requirements listed at the beginning of this section.
6. Complete a minimum of 30 credits for the degree.

**E. Special Education**

www.uaa.alaska.edu/coe/degrees

The MEd in Special Education has two options:

a. Special Education Concentration
b. 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.

**Program Student Learning Outcomes**

Student outcomes for the program are based on the professional standards of the Council for Exceptional Children (CEC) located at www.cec.sped.org.

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 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 300-500 word 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**

The College of Education (COE) provides coursework through a variety of methodologies and delivery formats, including distance education. Candidates must have the technological knowledge, skills and access to engage in distance learning.

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) Satisfactorily complete a comprehensive examination 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. NOTE: EDRS A660 (2 credits) and research credits by advisement (4 credits) may be waived for candidates entering the program with a master’s degree. Candidates pursuing an additional master's degree are required to take a minimum of 21 resident credits not used for any other previous degree. Candidates admitted or seeking admission to the MEd in Special Education must receive pre-approval from their advisor prior to taking coursework from another institution intended to satisfy requirements for the master's 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 option is suspended.

**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.

**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 as a Second Language (ESL) and Culturally Sustaining Pedagogy 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.

**Graduate Certificate, Counselor Education**

*www.uaa.alaska.edu/coe/degrees*

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.

**Program Student Learning Outcomes**

The outcomes for the program are based on the National Board of Certified Counselors standards located at [www.nbcc.org](http://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 Admission Requirements for Graduate Certificates 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 4.00 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 the University Requirements for Graduate Certificates 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 their website for more information: [www.commerce.state.ak.us/occ/ppco.htm](http://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](http://www.nbcc.org).
B. **Graduate Certificates, Educational Leadership**

[www.uaa.alaska.edu/coe(degrees)](http://www.uaa.alaska.edu/coe(degrees))

**Principal and Superintendent**

The Educational Leadership Graduate Certificate programs are designed for individuals with master’s degrees who are seeking advanced professional preparation to become principals or superintendents.

**Program Student Learning Outcomes**

Student outcomes for these certificates are based on the Educational Leadership Constituent Council (ELCC) Standards for School Leaders. Students who complete the Educational Leadership Graduate Certificate programs will be able to:

1. Facilitate the development, implementation, and monitoring of 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.

**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 Leadership Graduate Certificate: Principal.
4. Provide a resume documenting educational experience including at least three years of experience as a certificated elementary teacher, secondary teacher, or special services provider (Type C).
5. Submit an educational goal statement.
6. Submit three letters of recommendation or rating forms from professional references.

**Graduation Requirements**

1. Satisfy the University Requirements for Graduate Certificates 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 A637  Educational Leadership and Organizational Behavior  3
   - ED LF631  Culture, Community, and the Curriculum (3) or
   - EDL A638  Instructional and Curricular Leadership (3)  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](http://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.eed.state.ak.us](http://www.eed.state.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 certificated 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. Contact the Department of Teaching and Learning for more information.

D. Graduate Certificate, Language Education

www.uaa.alaska.edu/coe/degrees

The Graduate Certificate in Language Education is designed for individuals seeking advanced professional preparation to increase knowledge and skills in working with language learners in the P-6 setting. Those who teach languages in public or private settings, both in the United States and abroad, may enhance their knowledge and practice by completing this standards-based program.

English as a Second Language (ESL) and Culturally Sustaining Pedagogy Concentration

The ESL concentration is for candidates who are seeking one of the following:

1. Institutional Recommendation for an English as a Second Language (ESL) endorsement on a current teacher certificate or
2. Advanced preparation in ESL for increasing professional performance in community programs.

Program Student Learning Outcomes

The student outcomes for this concentration are based on the Teachers of English to Speakers of Other Languages (TESOL), and World-Class Instructional Design and Assessment (WIDA) standards. More information about these standards may be found at www.tesol.org and www.wida.us. Students who complete the Graduate Certificate in Language Education with a concentration in English as a Second Language and Culturally Sustaining Pedagogy will:

- Demonstrate understanding of language as a system and demonstrate a high level of competence in helping language learners acquire and use the new language in speaking, reading and writing for social and academic purposes.
- Understand and apply concepts, theories, research and practice to facilitate the acquisition of a primary and a new language in and out of classroom settings.
- Know, understand and use the major concepts, principles, theories and research related to the nature and role of culture in language development and academic achievement that support an individual student’s learning and apply this knowledge to improve teaching and learning.
- Know, understand and use knowledge of how cultural groups and students’ cultural identities affect language learning and school achievement.

- Know, understand and apply concepts from research to plan instruction in a supportive learning environment for language learners.
- Understand various issues of measurement (e.g., equity; cultural and linguistic bias; and political, social, and psychological factors) in assessment, IQ and special education testing; the importance of standards; and the difference between language proficiency and other types of assessment.
- Serve as a professional advocate and resource for language learners and the community.

Admission Requirements

1. Satisfy the Admission Requirements for Graduate Certificates found at beginning of this chapter.
2. Document professional background (must hold or be eligible to hold a teacher certificate from the State of Alaska.)
3. Provide a minimum of three letters of recommendation addressing the candidate’s potential for program success.
4. Submit a current resume.
5. Submit a writing sample including an educational goal statement directly related to the certification program.

Graduation Requirements

1. Satisfy the University Requirements for Graduate Certificates 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 18 credits beyond the baccalaureate degree including:
   EDFN A621 Culture, Language and Literacy 3
   EDFN A645 Culturally Sustaining Literacy for P-6 English Language Learners 3
   EDFN A646 Culturally Sustaining Instruction in Science, Technology, Engineering, Arts and Mathematics (STEAM) for English Language Learners in P-6 Classrooms 3
   EDFN A689 Action Research Experience: Culturally Sustaining Pedagogy for English Language Learners in P-6 Classrooms 1-6
   EDFN A691 Current Topics in Second Language Education (1-3) 3
   EDSY A668 Teaching English as a Second Language in Secondary Schools 3

2. Meet the TESOL Standards for ESL teachers. This may require students to take additional credits beyond the minimum of 18 required for a graduate certificate.
3. Maintain an overall GPA of 3.00 in the program with no more than one C in a required course.

Note: As with all graduate certificates in the College of Education, coursework applied to the certificate may apply to the MEd with faculty advisor approval.

Institutional Recommendation

Following are the requirements for an institutional recommendation for an ESL endorsement:

1. Professional Teacher Certificate or equivalent.
2. Baccalaureate degree from a regionally accredited institution or foreign equivalent.
3. Completion of all program requirements as indicated above.
Alaska certification note: The State of Alaska Department of Education and Early Development (EED) in Juneau awards endorsements. Graduates must meet all requirements specified by EED at the time of application for the endorsement.

E. Graduate Certificate, Special Education

www.uaa.alaska.edu/coe/degrees

The Graduate Certificate in Special Education is designed for individuals who want to become certificated special education teachers. This program expands teaching competencies by providing the theory, knowledge, and practical experience in special education needed to serve children with disabilities and their families. Graduates of this program are eligible for an institutional recommendation for (a) an initial teaching certificate with a special education endorsement, or (b) a special education endorsement on an existing teaching certificate from the Alaska Department of Education and Early Development (EED). Students who are admitted to the Graduate Certificate in Special Education may apply to the MEd in Special Education. Courses applied to this certificate may also apply to the MEd in Special Education.

Program Student Learning Outcomes

Student outcomes for the Special Education Graduate Certificate program are based on the professional standards of the Council of Exceptional Children (CEC) located at www.cec.sped.org. 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 nationally 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 the University Requirements for Graduate Certificates 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. These concentrations have different entry points.

a. Certification Route I: This concentration is for applicants seeking their first teacher certificate and requires completion of prerequisite coursework before admission to the program.
b. Certification Route II: This concentration is for applicants seeking a special education endorsement on an existing teacher certificate.

The concentration one completes is based on the professional background an applicant brings to the program.

a. Certification Route I (Special Education with Initial Teaching Certification), Graduate Certificate

Certification route I is for individuals with baccalaureate degrees who are not certificated teachers, but have professional experience in working with children with disabilities. Individuals in this concentration will need to take the Praxis II examination in a content area prior to receiving an institutional recommendation for certification.

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 the following 15 credits of prerequisite courses with a minimum grade of B in each course. An advisor may waive one or more of the prerequisite courses if the applicant can demonstrate successful completion of an equivalent course taken at a regionally accredited institution within the consecutive seven-year period prior to graduation. Prerequisites must be successfully completed prior to beginning the graduate-level program requirements.

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDEL A426</td>
<td>Teaching Mathematics in Elementary Schools 3</td>
<td></td>
</tr>
<tr>
<td>EDFN A303</td>
<td>Foundations of Teaching and Learning       3</td>
<td></td>
</tr>
<tr>
<td>EDSE A212</td>
<td>Human Development and Learning             3</td>
<td></td>
</tr>
<tr>
<td>EDSE A482</td>
<td>Inclusive Classrooms for All Children       3</td>
<td></td>
</tr>
<tr>
<td>EDSE A483</td>
<td>Language and Literacy: Assessment and Interventions 3</td>
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</tr>
</tbody>
</table>

Background Check Requirements

See Field Placements located at the beginning of the College of Education section of this chapter.

Program Requirements

The College of Education allows access to coursework through a variety of methodologies and delivery formats, including distance education. Candidates must have the technological knowledge, skills and access to engage in distance learning. Prerequisite courses must be successfully completed prior to taking the following program requirements.

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)  6
EDSE A695S  Advanced Internship in Special Education: Secondary (3-6)  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 enroll(s) 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. Candidates admitted or seeking admission to the Graduate Certificate in Special Education must receive pre-approval from their advisor prior to taking coursework from another institution intended to satisfy requirements for the graduate certificate.

b. Certification Route II (Special Education Endorsement), Graduate Certificate

Certification Route II is for teachers holding a current Alaska teaching certificate who wish to add a special education endorsement to their 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
The College of Education (COE) allows access to coursework through a variety of methodologies and delivery formats, including distance education. Candidates must have the technological knowledge, skills and access to engage in distance learning.

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):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title and Program Planning</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDSE A610</td>
<td>Clinical Assessment: Eligibility and Program Planning</td>
<td>3</td>
</tr>
<tr>
<td>EDSE A623</td>
<td>Language and Literacy: Best Practices in Assessment and Intervention</td>
<td>3</td>
</tr>
<tr>
<td>EDSE A624</td>
<td>Social/Emotional Development, Assessment, and Intervention</td>
<td>3</td>
</tr>
<tr>
<td>EDSE A625</td>
<td>Teaching Mathematics to Special Learners</td>
<td>3</td>
</tr>
</tbody>
</table>

3) Complete a total of 24 credits for the graduate certificate and application for an institutional recommendation for a special education endorsement on an existing teaching certificate. Candidates admitted or seeking admission to the Graduate Certificate in Special Education must receive pre-approval from their advisor prior to taking coursework from another institution intended to satisfy requirements for the graduate certificate.

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 Certification Route I, passing scores on the Praxis II, 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.

Alaska certification note: The institutional recommendation for an initial certificate with a special education endorsement (Certification Route I) will be at the level of the internship. The institutional recommendation for special education endorsement (Certification Route II) 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 (Certification Route I), 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 website for more information: www.eed.state.ak.us.

FACULTY

Jeff Bailey, Professor, AFJGB@uaa.alaska.edu
Robyn Bailey, Term Assistant Professor, AFRA@uaa.alaska.edu
Susan Barstow, Term Assistant Professor, AFSDR@uaa.alaska.edu
Liz Boario, Term Assistant Professor, ANLEB@uaa.alaska.edu
Sharon Bohjanen, Term Assistant Professor, slbohjanen@uaa.alaska.edu
Nancy Boxler, Term Assistant Professor, ANNJB1@uaa.alaska.edu
Ellen Brigham, Term Assistant Professor, slbohjanen@uaa.alaska.edu
Robert Capuozzo, Assistant Professor, AFRCM2@uaa.alaska.edu
Keith Cates, Assistant Professor, AFKAC1@uaa.alaska.edu
Carolyn Coe, Term Assistant Professor, AFCMC@uaa.alaska.edu
Cathy Coulter, Assistant Professor, AFCAC@uaa.alaska.edu
Kitty Deal, Term Assistant Professor, KDEAL@kodiak.alaska.edu
Master of Public Health, 
Public Health Practice

Public health embraces an ecological approach that recognizes the interactions and relationships among multiple determinants of health. Public health professionals typically take a community or population focus. Our graduate program prepares public health practitioners who identify and assess needs of populations; plan, implement and evaluate programs to address those needs; and otherwise assure conditions that protect and promote the health of populations. The Master of Public Health (MPH) in Public Health Practice is an interdisciplinary degree designed to provide a broad background to meet the challenges of the diverse and complex field of public health, with a particular focus on the needs of Alaska and the circumpolar north. Students with backgrounds in the natural sciences, social sciences, health professions, human services, business, education and law have successfully entered the field of public health at the graduate level.

Both mid-career students and recent graduates may pursue their careers with minimal disruption while working on the MPH 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.

Program Student Learning 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 U.S. [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 Graduate 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 Graduate Degrees at the beginning of this chapter.

**Program Requirements**

1. Complete the MPH core courses (28 credits total):
   - HS A605 Public Health and Society 3
   - HS A610 Environmental and Occupational Health 3
   - HS A615 Health Services Administration 3
   - HS A624 Circumpolar Health Issues 3
   - HS/NS A625 Biostatistics for Health Professionals 3
   - HS/NS A626 Principles of Epidemiology 3
   - HS/SWK A628 Program Evaluation 3
   - HS A629 Public Health Research Tools and Methods 4
   - HS A630 Public Health Emergencies and Disasters 3
2. Complete three focused public health-related emphasis courses at the 600-level (graduate) with advisor approval 9
3. Complete a Project Practicum (HS A698) or Thesis Practicum (HS A699) 5
4. A total of 42 credits are required for the degree.

**FACULTY**

Betty J. Monsour, Associate Professor, Betty.Monsour@uaa.alaska.edu
Gabriel Garcia, Assistant Professor, GGarc116@uaa.alaska.edu
Liz Hodges Snyder, Assistant Professor, EHodges4@uaa.alaska.edu
Rhonda M. Johnson, Professor/MPH Coordinator, Rhonda.johnson@uaa.alaska.edu
Jenny Miller, Assistant Professor, VLMiller2@uaa.alaska.edu
Nancy Nix, Assistant Professor, NANNix@uaa.alaska.edu

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**HUMAN SERVICES**

Professional Studies Building (PSB), Room 212, (907) 786-6453
www.uaa.alaska.edu/hums

**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.

**Program Student Learning 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 the Admission Requirements for Graduate Certificates 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 the University Requirements for Graduate Certificates found at the beginning of this chapter.
2. Complete program requirements below.

**Program Requirements**

1. Complete core courses (12 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:
   - 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
SCHOOL OF NURSING

Health Sciences Building (HSB), Room 101, (907) 786-4550
www.uaa.alaska.edu/schoolofnursing

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 (EDUC), as a Family Nurse Practitioner (FNP) or Psychiatric-Mental Health Nurse Practitioner (PMH-NP). 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 FNP option are eligible to write the national certification examination for advanced professional practice as a family nurse practitioner. Graduates of the PMH-NP option are eligible to write the national certification exam for advanced professional practice as a psychiatric-mental health nurse practitioner. Graduates of the EDUC option, who have had two years of full-time academic teaching experience, are eligible to take the NLN Certified Nurse Educator Examination.

Program Student Learning Outcomes

The graduate is prepared to:

1. Engage in scholarly inquiry, including evaluation and application of evidence-based research to advanced nursing practice or nursing education.
2. Practice in a manner that incorporates ethical, legal, and professional standards for advanced nursing practice or nursing education.
3. Collaborate across disciplines and in partnership with communities, groups, families and individuals through culturally sensitive practice.
4. Demonstrate competence and caring in the professional nurse role to serve as a leader, provider, and educator in the health care system.
5. Articulate a plan for self-directed, lifelong learning and professional development.

Master of Science, Nursing Science

UAA Admission Requirements

See the beginning of this chapter for Admission Requirements for Graduate 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. 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.
4. Submit the School of Nursing graduate admission application directly to the School of Nursing.
5. Submit three letters of professional recommendation. Letters 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.
6. Complete a minimum of one year of half-time clinical experience as a registered nurse.
7. Hold and maintain an active unencumbered Alaska State RN license throughout the program.*

*There are different reasons for a license to be encumbered and some may preclude admission to the program. Students with encumbered licenses should meet with the graduate chair to determine program eligibility.

The following School of Nursing application submission deadlines are required to ensure full processing of application:

- November 1 for graduate study and/or PMH-NP or EDUC specialty
- March 1 for graduate study and/or FNP or EDUC 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 specialty 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 master’s 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.

In addition, students in the Family Nurse Practitioner or the 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. For each additional year that passes without completing degree requirements the student will need to complete an additional 2 credits of clinical. 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.

Part-Time/Full-Time Study

This program is designed to be completed in six to eight semesters of part-time study, although students can take longer. Prior to being formally admitted to graduate study, students with a bachelor’s or
graduate degree in nursing and who are licensed or eligible to be licensed in Alaska as an RN may complete up to 9 credits of degree-applicable coursework, 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, rubella, 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 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 audioconferencing. 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 Graduate 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
   - **NS A696** Individual Project (2 credits/semester) 4

   *Students seeking a second master’s degree may petition to have core courses waived based on evaluation of prior graduate degree.

2. Complete one of the following options:

**Family Nurse Practitioner Option (32 credits)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>NS A601</td>
<td>Advanced Pathophysiology</td>
<td>3</td>
</tr>
<tr>
<td>NS A602</td>
<td>Advanced Health Assessment in Primary Care</td>
<td>3</td>
</tr>
<tr>
<td>NS A610</td>
<td>Pharmacology for Primary Care</td>
<td>3</td>
</tr>
<tr>
<td>NS A660</td>
<td>Family Nurse Practitioner I</td>
<td>4</td>
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<tr>
<td>NS A661</td>
<td>Family Nurse Practitioner II</td>
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</tr>
<tr>
<td>NS A662</td>
<td>Family Nurse Practitioner III</td>
<td>5</td>
</tr>
<tr>
<td>NS A663</td>
<td>Family Nurse Practitioner IV</td>
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</tr>
<tr>
<td>Elective</td>
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</tbody>
</table>

**Psychiatric-Mental Health Nurse Practitioner Option (32 credits)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>NS A601</td>
<td>Advanced Pathophysiology</td>
<td>3</td>
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<tr>
<td>NS A602</td>
<td>Advanced Health Assessment in Primary Care</td>
<td>3</td>
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<tr>
<td>NS A610</td>
<td>Pharmacology for Primary Care</td>
<td>3</td>
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<tr>
<td>NS A611</td>
<td>Psychopharmacology</td>
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</tr>
<tr>
<td>NS A670</td>
<td>Advanced Psychiatric/Mental Health Nursing I</td>
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<tr>
<td>NS A671</td>
<td>Advanced Psychiatric/Mental Health Nursing II</td>
<td>5</td>
</tr>
<tr>
<td>NS A672</td>
<td>Advanced Psychiatric/Mental Health Nursing III</td>
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</tr>
<tr>
<td>NS A674</td>
<td>Advanced Psychiatric/Mental Health Nursing IV</td>
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**Nursing Education Option (27 credits)**

<table>
<thead>
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<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>NS A601</td>
<td>Advanced Pathophysiology</td>
<td>3</td>
</tr>
<tr>
<td>NS A602</td>
<td>Advanced Health Assessment in Primary Care</td>
<td>3</td>
</tr>
<tr>
<td>NS A610</td>
<td>Pharmacology for Primary Care</td>
<td>3</td>
</tr>
<tr>
<td>NS A640</td>
<td>Teaching and Learning in Nursing</td>
<td>3</td>
</tr>
<tr>
<td>NS A641</td>
<td>Curriculum Development and Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>NS A643</td>
<td>Assessment and Evaluation in Nursing Education</td>
<td>3</td>
</tr>
<tr>
<td>NS A644</td>
<td>Distance Education in Nursing</td>
<td>3</td>
</tr>
<tr>
<td>NS A647</td>
<td>Teaching Practicum in Nursing</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>Advisor approved</td>
<td>3</td>
</tr>
</tbody>
</table>

3. A total of 45-50 credits is required for the degree.

**Scholarly Project**

A total of 4 credits of NS A696 Individual Project, taken over two semesters, are required for the degree. Students who are unable to complete the project after two semesters will be required to register for 2 credits of NS A696 Individual Project every semester thereafter (excluding summer sessions) until the project is satisfactorily completed. In the event a student wants to work on the 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/NP). The independent study credit does not count toward the 4 required project credits. There is no limit to the number of project credits that may be accrued; however, if a year or more passes since the last clinical course, additional coursework will be required. Specific requirements for additional coursework will be determined by the chair of the Graduate Program in Nursing, the coordinator of the specialty track, and the thesis or project chair.

**Nursing Graduate Certificate Programs**

The nursing graduate certificate programs were designed for individuals who have previously acquired their master’s or doctoral degrees in nursing and wish to expand their nursing competencies or practice. Graduate certificate programs are offered in several specialty areas: Family Nurse Practitioner, Psychiatric-Mental Health Nurse Practitioner or Nurse Educator. Prior nursing degrees must be issued from institutions that hold regional accreditation and from programs that hold nursing accreditation (from either the National League for
Nursing Accrediting Commission or the Collegiate Commission on Nursing Education).

The 15-29 credit graduate certificate curriculum builds on the student’s prior graduate degree in nursing by integrating content from that degree with theory-based advanced practice nursing courses and specialty clinical practice. To be eligible for either of the nurse practitioner graduate certificate programs, the individual must already be certified as a nurse practitioner in another specialty.

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 programs include:

- Current active unencumbered licensure as an advanced practice nurse in the state of Alaska must be maintained.*
- Documentation of national certification as an advanced nurse practitioner.

There are different reasons for a license to be encumbered and some may preclude admission to the program. Students with encumbered licenses should meet with the graduate program chair to determine program eligibility.

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 PMH-NP or EDUC specialty
- March 1: Graduate certificate FNP or EDUC specialty

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).

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, rubella, 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 Internet connectivity. All students are expected to have basic computer and typing skills prior to entry into the nurse practitioner 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 a family nurse practitioner. These examinations are given nationwide throughout the year.

The Family Nurse Practitioner 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 a family nurse practitioner. 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 are already certified as advanced nurse practitioners in fields other than psychiatric-mental health. Students who successfully complete the graduate certificate program will be eligible to write the national certification for psychiatric mental health nurse practitioner-family 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 practica 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
1. Complete one of the following tracks:

   Adult Nurse Practitioner (15 credits):
   - NS A660 Family Nurse Practitioner I 6
   - NS A661 Family Nurse Practitioner II 3
   - NS A663 Family Nurse Practitioner IV 6

   Pediatric Nurse Practitioner (15 credits):
   - NS A631 Family Nurse Practitioner Focus on Women’s Health and Obstetrics I 2
   - NS A635 Family Nurse Practitioner Focus on Women’s Health and Obstetrics II 2
   - NS A662 Family Nurse Practitioner III 5
   - NS A663 Family Nurse Practitioner IV 6

   Psychiatric Mental Health Nurse Practitioner (32 credits):
   - NS A601 Advanced Pathophysiology 3
   - NS A602 Advanced Health Assessment in Primary Care 3
   - NS A610 Pharmacology for Primary Care 3
   - NS A611 Psychopharmacology 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

   Women’s Health Nurse Practitioner (15 credits):
   - NS A632 Family Nurse Practitioner Focus on Pediatrics I 2
   - NS A636 Family Nurse Practitioner Focus on Pediatrics II 2
   - NS A662 Family Nurse Practitioner III 5
   - NS A663 Family Nurse Practitioner IV 6

2. A total of 15-32 credits is required for the certificate.*

Graduate Certificate, Psychiatric-Mental Health Nurse Practitioner
1. Complete the following required courses (20 credits):
   - NS A670 Advanced Psychiatric/Mental Health Nursing I 5
   - NS A671 Advanced Psychiatric/Mental Health Nursing II 5

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 3
   - NS A641 Curriculum Development and Evaluation 3
   - NS A643 Assessment and Evaluation in Nursing Education 3
   - NS A644 Distance Education in Nursing 3
   - NS A647 Teaching Practicum in Nursing 3

2. A total of 15 credits is required for the certificate.*
   *Students need to have had an advanced pharmacology, pathophysiology and health assessment course in their original nursing master’s program; if their program did not include some or all of these courses, they may need to be taken for the graduate certificate.

FACULTY
Barbara Berner, Professor/Interim Director, AFBHB@uaa.alaska.edu
Bethany Buchanan, Term Assistant Professor, BBUCHAN@uaa.alaska.edu
Elizabeth Campbell, Assistant Professor, AFEAC@uaa.alaska.edu
Bernice Carmon, Associate Professor, AFBW@uaa.alaska.edu
Elizabeth Driscol, Term Assistant Professor, AFEMD1@uaa.alaska.edu
Thomas Hendrix, Assistant Professor, AFTH10@uaa.alaska.edu
Jill Janke, Professor/Graduate Program Chair, AFJ@uaa.alaska.edu
Cindy Jones, Assistant Professor, AFCH1@uaa.alaska.edu
Mary Logan, AFMOL@uaa.alaska.edu
Patricia Lynes-Haas, Assistant Professor, AFPL1@uaa.alaska.edu
Susan Modlin, Associate Professor, AF6M12@uaa.alaska.edu
Maureen O’Malley, Associate Professor/Interim Associate Director, AFMB@uaa.alaska.edu
Nadine Parker, Assistant Professor, AFN@uaa.alaska.edu
Sharon Peabody, Term Assistant Professor, AF5M1@uaa.alaska.edu
Elizabeth Predeger, Professor, AFEA@uaa.alaska.edu
Dianne Tarrant, Associate Professor, AFDL1@uaa.alaska.edu
Dianne Tobe, Associate Professor, AFDM1@uaa.alaska.edu
Sharly Toccano, Associate Professor, TBA
Angela Trujillo, Assistant Professor, AFAC1@uaa.alaska.edu
Shirley Valek-Wilson, Associate Professor, AF5SV@uaa.alaska.edu

SCHOOL OF SOCIAL WORK
Gordon Hartlieb Hall (GHH), Room 106, (907) 786-6900
www.uaa.alaska.edu/socialwork

Master of Social Work
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.

All students entering the program will have an official graduate studies plan tailored to meet their own educational needs. 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 MSW curriculum has two components: the foundation curriculum and the concentration curriculum. The foundation curriculum is composed of 32 semester credits and is completed in the first year of the full-time program, and the first two years of the
part-time curriculum. The foundation curriculum is sequenced to provide professional preparation for advanced generalist social work education. Students must successfully test out or complete all courses in the foundation curriculum before proceeding to the concentration curriculum. The concentration curriculum is composed of 31 credits and completed in the second year of the full-time program and the second two years of the part-time program. All students must successfully complete all courses in the concentration curriculum. Students who have earned a Bachelor of Social Work from a CSWE-accredited program within the past five years and who are judged to be ready for advanced graduate studies may be admitted with advanced placement to the concentration curriculum. Students admitted into the advanced placement option are required to take SWK A632 Direct Practice I (3 credits) and SWK A624 Foundation Research Methods (4 credits) in the summer semester and must earn a grade of C or better to proceed to the concentration curriculum in the fall.

Program Student Learning Outcomes
Students graduating with a Master of Social Work will be able to:
- Be leaders who assume multiple practice roles to address health and social issues in Alaska.
- Engage in practice consistent with the values and ethics of the social work profession.
- Utilize critical thinking to synthesize and apply a broad range of knowledge and skills.
- Demonstrate attunement, sensitivity and respect for people from diverse backgrounds.
- Differentially intervene with, and on behalf of, populations at risk or who experience discrimination, economic deprivation, and/or oppression.
- Develop and conduct research to inform practice.
- Evaluate and apply knowledge of Human Behavior in the Social Environment in practice.
- Develop and evaluate social policies that promote social and economic well-being.
- Integrate contextual knowledge into the development, implementation and evaluation of social work services in Alaska.
- Engage in planned change using theory and evidence based practice processes to provide competent and effective services in Alaska.

Admission Requirements
1. Deadline for application: January 15. This is the only application date for the year.
2. Submit the complete MSW admissions packet available through the School of Social Work.
3. Submit complete undergraduate transcripts demonstrating successful completion of a bachelor’s degree from an accredited college or university.
4. Submit UAA graduate application for admission with fee.

The MSW program reserves the right to request additional materials and/or interviews pertaining to program admission. 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.

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 who are unable to earn a grade of C or better in a required MSW course during their initial enrollment may attempt to earn a satisfactory grade one additional time if approved by their advisor and the MSW program coordinator. Students must earn a grade of B or better in all field practicum courses (SWK A639, SWK A644, SWK A645, SWK A646, SWK A647).

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 SWK A635 Advanced Generalist Integrative Seminar during spring semester of the concentration year of the program.

Graduation Requirements
1. See the beginning of this chapter for University Requirements for Graduate Degrees.
2. Successful completion of research project (SWK A698).
3. Successful completion of all required academic coursework specified on the 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 A639, SWK A644, SWK A645, SWK A646, SWK A647).

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, including 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**  16 credits
       - 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**  16 credits
       - 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

   *Advanced placement students take SWK A624 and SWK A632 in the summer prior to enrolling in the concentration curriculum.

2. Concentration Curriculum
   - **Fall — Year Two**  15 credits
     - SWK A608 Social Policy for Advanced Generalist Practice 3
     - SWK/HS A628 Program Evaluation 3
     - SWK A633 Direct Practice II 3
     - SWK A634 Organizational Practice 3
     - SWK A646 Advanced Generalist Practicum I 3
   - **Spring — Year Two**  16 credits
     - SWK A635 Advanced Generalist Integrative Seminar 3
     - SWK A647 Advanced Generalist Practicum II 4
     - SWK A698 MSW Research Project 3
     - Graduate-level Social Work electives 6

3. A minimum of 38 credits is required for the Master of Social Work. 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 or program evaluation 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 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, Clinical 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 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. Applications are accepted on an ongoing basis.

Program Student Learning Outcomes
Students graduating with a Graduate Certificate in Clinical Social Work Practice will be able to:
- Practice clinical social work within the legal and ethical standards of the profession.
- Enhance the mental health and well-being of individuals, families and groups who seek their services.
- Engage, assess, diagnose and intervene on behalf of clients guided by practice theories and empirically-supported practice knowledge.
- Maintain professional integrity in all aspects of their practice.
- Recognize practice limitations and seek appropriate clinical supervision and education to increase/enhance professional competence.
- Develop a concept and a plan for their future professional development.

Admission Requirements
Applicants for the Graduate Certificate in Clinical Social Work Practice must:
1. Be in the second semester of the foundation 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 graduate grade point average of 3.00 or higher (B average 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 A651 Social Work Practice in Addictions and Mental Health 3
   - SWK A663 Clinical Social Work with Children and Adolescents 2
   - SWK A664 Clinical Social Work with Adults 2
2. Plus completion of 8 credits from the following:
   - SWK A656 Treatment of Families (3)
   - SWK A665 Comparative Group Work (3)
   - SWK A667 Clinical Group Therapy (2)
   - SWK A672 Social Work with Families and Couples (2)
Up to 3 credits may be taken from other approved graduate level course(s) that help prepare students for clinical social work practice. Alaska Statute 08.95.990(2) defines “clinical social work” as the diagnosis of psychiatric disorders and the use of techniques of applied psychotherapy of a nonmedical nature while practicing social work. Other clinical courses that include content consistent with this definition may be approved in consultation with the clinical certificate advisor.

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.
Graduate Certificate, 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. Applications are accepted on an ongoing basis.

Program Student Learning Outcomes

Students graduating with a Graduate Certificate in Social Work Management 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.
- Design and implement financial resource development plans for social programs/social service agencies.

Admission Requirements

Applicants for the Graduate Certificate in Social Work Management must:

1. Be in the second semester of their foundation 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:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWK A634</td>
<td>Organizational Practice</td>
<td>3</td>
</tr>
<tr>
<td>SWK A654</td>
<td>Supervisory Management in Social Work</td>
<td>3</td>
</tr>
<tr>
<td>SWK A659</td>
<td>Leadership and Decision Making in Social Work</td>
<td>3</td>
</tr>
<tr>
<td>SWK A660</td>
<td>Financial Leadership for Social Work Administrators</td>
<td>3</td>
</tr>
<tr>
<td>SWK A661</td>
<td>Marketing in the Social Sector</td>
<td>2</td>
</tr>
<tr>
<td>SWK A662</td>
<td>Financial Resource Development for Social Services</td>
<td>2</td>
</tr>
</tbody>
</table>

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.

Faculty

Donna Aguiniga, Assistant Professor, dmaquiniga@uaa.alaska.edu
Mary Dallas Allen, Associate Professor, mdallen@uaa.alaska.edu
Tracey Burke, Associate Professor, tburke@uaa.alaska.edu
Patrick Cunningham, Associate Professor, pmcunningham@uaa.alaska.edu
Alexa Flanagan, Clinical Assistant Professor/BSW Field Coordinator, aflanagan@uaa.alaska.edu
Eva Kopacz, Professor/MSW Field Coordinator, ekopacz@uaa.alaska.edu
Randy Magen, Professor, magen@uaa.alaska.edu
Chad Morse, Clinical Professor/MSW Program Coordinator, AFCEM@uaa.alaska.edu
Elizabeth A. Sirles, Professor/Director, easirles@uaa.alaska.edu
Kathl Trauver, Associate Professor/BSW Program Coordinator, ktrauver@uaa.alaska.edu
Program Requirements for a CTE Graduate Certificate That Does Not Lead to a CTE Teacher Endorsement

1. 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
   - CTE A643 Teaching in Career and Technical Education 3
   - CTE A655 Curriculum and Assessment in Career and Technical Education 3

2. Complete 3 credits of electives approved by the graduate advisor. Electives may be in a technical area.

3. Total credits for graduate certificate without CTE Teaching Endorsement: 15

Program Requirements for a CTE Graduate Certificate That Leads to a CTE Teacher Endorsement

1. 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
   - CTE A643 Teaching in Career and Technical Education 3
   - CTE A655 Curriculum and Assessment in Career and Technical Education 3

2. EDSY A647 Developing Literacies Across the K-12 Continuum 1

3. EDSY A648 Developing Literacies in the Secondary Content Areas 1

4. Required Field Experiences (3 credits)
   - CTE A695 Internship (1-9) 3*

*Special Note: Significant internship experience of no less than 3 credits is required for institutional recommendation for a teaching endorsement.

5. Total credits for graduate certificate with CTE Teaching Endorsement: 17

Application Requirements

1. Basic technology skills including, but not limited to, general computer use, email, word processing, and Internet research.

2. Demonstrated writing ability. Because the Graduate Certificate in CTE 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.

3. Demonstrated evidence of content area preparation (academic preparation and/or work experience) in the teaching area for which the applicant is seeking endorsement. This must be documented in the standards-based Content Preparation Review that has been approved by an appropriate Career and Technical Education faculty advisor.

4. Courses with grades less than a C will not be considered on the Content Preparation Review or to meet certification or endorsement requirements.

Admission to the CTE Graduate Certificate program does not guarantee an internship placement (see note under Professional Field Experiences).

Academic Progress

Satisfactory progress on Alaska Teaching Standards must be demonstrated in the internship courses to remain in the CTE Teacher Endorsement option.

Professional Field Experiences

See Master of Arts in Teaching section for description of factors affecting field placements with cooperating school districts.

Background Check Requirements

See Field Placements located in the College of Education section of this chapter.

Institutional Recommendation

To obtain an institutional recommendation for teacher certification, candidates must have:

1. Completed all program courses with a minimum grade of C;
2. Maintained a cumulative 3.00 GPA in the Career and Technical Education Graduate Certificate program;
3. Achieved passing scores on the Praxis I and II examinations;
4. Earned a baccalaureate degree from a regionally accredited institution, or foreign equivalent;
5. Hold or be eligible for an Alaska Professional or Master Teacher Certification;
6. Satisfactorily completed internships; and
7. 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.

FACULTY

Sally Spieker, Assistant Professor, saspickerslaughter@uaa.alaska.edu

Master of Science, Career and Technical Education

The Master of Science, 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 Graduate 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 Graduate 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
   - CTE A643 Teaching in Career and Technical Education 3
   - CTE A655 Curriculum Assessment in Career and Technical Education 3
   *If credit was earned for CTE A411 Historical and Philosophical Foundations of Career and Technical Education, students must substitute a 3-credit, CTE 600-level course approved by the advisor for CTE A611.
3. Complete a component in human resources and leadership using one of the following courses (3 credits):
   - BA A632 Organizational Behavior and Foundations of Behavioral Science 3
   - EDL A637 Educational Leadership and Organizational Behavior (3)
   - PADM A610 Organizational Theory and Behavior (3)
4. Complete a technology education component using one of the following courses (3 credits):
   - EDET A637 Design of e-Learning (3)
   - EDET A638 Facilitation of Learning with Technology (3)
5. Complete the following research courses (9 credits):
   - EDRS A660 Fundamentals of Research in Education 2
   - EDRS A664 Developing and Writing Literature Reviews 2
   - Another research course with approval by faculty advisor 2
   - CTE A698 Individual Research (1-6) or CTE A699 Thesis (1-6)
6. Complete 9 credits of electives jointly selected with the graduate advisor. Electives may be in a technical area.
7. A total of 36 credits is required for the degree.

FACULTY
Maria Angela Dirks, Assistant Professor, madirks@uaa.alaska.edu

DIETETICS AND NUTRITION
Lucy Cuddy Hall (CUDY), Room 126, (907) 786-4728
www.uaa.alaska.edu/curricular

Graduate Certificate, Dietetic Internship
The UAA Dietetic Internship, with a concentration emphasis on Alaska Native culture and Alaska healthcare delivery systems, developmentally accredited by the American Dietetic Association (ADA) to sit for the Registered Dietitian (RD) examination. The UAA Dietetic Internship offers unique experiences as it places emphasis on awareness of the cultural diversities of Alaska and how they affect the practice of dietetics.

The UAA Dietetic Internship is a highly competitive, full-time, 40-hour-per-week program. The program begins in the fall semester and runs mid-August through 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 Student Learning 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.
- Practice communicating effectively through the development of writing, speaking, listening, and problem-solving skills.
- Integrate efficient and effective use of techniques and tools for managing foodservice systems in a variety of situations.
- Apply knowledge and skills in medical nutrition therapy in a variety of settings.
- Design interventions to combine knowledge and skills in community nutrition that enhance health and promote wellness.
- Recognize the impact of Alaska Native culture and Alaska’s unique healthcare delivery system on the practice of dietetics in Alaska.
- Apply 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
1. Baccalaureate degree (minimum) in dietetics or foods and nutrition.
2. Didactic Program in Dietetics Verification Statement within the past five years. Fulfill remedial education requirements (available upon request) if no coursework or work experiences in dietetics in five years prior to program admission.
3. GPA of 3.00 or higher (4.00 scale).
4. Evidence of ability and willingness to work productively (prior work or volunteer experience).
5. Current resume and three letters of recommendation (one must be from an employer and one must be from a professor or academic advisor).
7. Provide documentation of all necessary immunizations required to work in hospitals and other healthcare facilities.
8. Provide documentation of all necessary security background checks to meet state and federal requirements.
9. 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 University Requirements for Graduate Certificates.

**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**

Anne Bridges, Professor, AFABD@uaa.alaska.edu
TIMOTHY DOEBLER, DIRECTOR/ASSOCIATE PROFESSOR, AFTWD@uaa.alaska.edu
Carrie King, Term Associate Professor, cdking@uaa.alaska.edu
Kendra Sticka, Term Assistant Professor, AFKDS@uaa.alaska.edu
Amanda Walch, Term Assistant Professor, AFAW01@uaa.alaska.edu

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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**

The graduate program in Applied Environmental Science and Technology (AEST) is designed for students seeking careers as environmental professionals in the academic, regulatory, industrial, military or consulting sectors. The program is interdisciplinary in nature and encourages candidates to develop an understanding of environmental principles through advanced studies across biology, chemistry, geology, statistics, applied environmental science and technology, and environmental engineering.

This program offers two degree options and one graduate certificate option.

**Applied Environmental Science and Technology (AEST) Degrees**

The AEST master’s degrees are designed for those students who wish to pursue specialized advanced study and original research. AEST is an excellent preparation for both the practicing professional and the future doctoral student.

**Program Objectives**

The objective of the AEST programs are to produce graduates who:

- Have an advanced technical knowledge of environmentally related disciplines within the life sciences, physical sciences, geosciences, mathematics and environmental engineering;
- Are capable of integrating advanced technical information from different science and engineering disciplines;
- Are capable of conceiving and conducting a research project (MS-AEST option only); and
- Are capable of working in a professional environment.

**Program Student Learning Outcomes**

In keeping with the above 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 Graduate 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 should be able to demonstrate:

• Successful completion of a Bachelor of Science 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 semesters 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 by the required dates as established by the Admissions office. 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:

• Two 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:

• 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 one UAA faculty member for the M-AEST or three members, two of which must be UAA faculty members, for the MS-AEST, 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 Graduate School.

**Master of Science, Applied Environmental Science and Technology (MS-AEST)**

**Graduation Requirements**

In order to receive an MS-AEST degree, students must:

1. Satisfy all University Requirements for Graduate Degrees listed at the beginning of this chapter;
2. Present (written and orally) a thesis research proposal to the GSC at least one semester prior to graduation;
3. Complete 24 credits of coursework approved in advance by the student’s GSC, and 6 credits of thesis work. Thesis credits are accumulated under the course number AEST A699;
4. Satisfactorily complete 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.
• The thesis, as judged by the GSC, must be of sufficient quality to justify publication in a peer-reviewed journal.
• The work must demonstrate command of knowledge and skills associated with the candidate’s graduate program of study.
• The thesis format must meet general UAA requirements for format as determined by the UAA Graduate School.

The student must defend the thesis in an open oral presentation to the students’ GSC and public. The public will be excused after the presentation and the GSC will evaluate the student further to determine the student’s competency in a closed session. Students who fail to adequately defend their thesis will work with their graduate advisor to develop an action plan to correct any deficiencies noted by the GSC. This action plan may require additional coursework, research and/or independent and directed study. After completing the items identified in the corrective action plan, the student will again be evaluated by their GSC. Failure to pass a second time will result in dismissal from the program.

**Course Requirements**

MS-AEST students must take CE A461 Fundamentals of Environmental Engineering and Applied Environmental Science (completed with a grade of B or better) and AEST A666 Methods, Assessment and Communication of Basic and Applied Research during the first academic year admitted to the MS-AEST program. The remaining coursework must be drawn from two or more the core competency disciplines (at least one course from each of the selected competency disciplines must be completed with a grade of B or better): analysis (ESM, STAT or MATH), biology (Biol), chemistry (Chem), applied environmental science and technology (AEST and CE), geology (Geol), or other disciplines and courses as approved by the GSC to support the research topic of the individual student. A minimum 21 credits must be drawn from approved 600-level courses. Suggested course lists are provided below.

**Analysis**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESM A620</td>
<td>Statistics for ESM (3)</td>
</tr>
<tr>
<td>MATH A423</td>
<td>Advanced Engineering Mathematics (3)</td>
</tr>
<tr>
<td>MATH A426</td>
<td>Numerical Methods (3)</td>
</tr>
<tr>
<td>STAT A402</td>
<td>Scientific Sampling (3)</td>
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<tr>
<td>STAT A403</td>
<td>Regression Analysis (3)</td>
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<td>STAT A404</td>
<td>Analysis of Variance (3)</td>
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<td>STAT A405</td>
<td>Nonparametric Statistics (3)</td>
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<td>STAT A407</td>
<td>Time Series Analysis (3)</td>
</tr>
<tr>
<td>STAT A408</td>
<td>Multivariate Analysis (3)</td>
</tr>
<tr>
<td>STAT A601</td>
<td>Statistical Methods (3)</td>
</tr>
</tbody>
</table>
**Graduation Requirements**

**Science and Technology (M-AEST)**

- Biology
  - BIOL A478: Biological Oceanography (4)
  - BIOL A650: Advanced Microbial Ecology (3)
  - BIOL A661: Advanced Molecular Biology (3)
  - BIOL A677: Advanced Tundra and Taiga Ecosystems (3)
  - BIOL A690: Advanced Lecture Topics in Biology (1-3)
- Chemistry
  - AEST A601: Aquatic Process Chemistry (3)
  - CHEM A450: Environmental Chemistry (3)
  - CHEM A634: Advanced Instrumental Methods (5)
  - CHEM A641: Advanced Biochemistry I (3)
  - CHEM A642: Advanced Biochemistry II (3)
- Environmental Engineering
  - 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)
  - AEST A666: Methods, Assessment and Communication of Basic and Applied Research (3)
  - AEST A694: Topics as approved by advisor (3)
  - CE A641: Fundamentals of Environmental Engineering and Applied Environmental Science (3)
  - CE A645: Chemical and Physical Water and Wastewater Treatment Processes (3)
  - CE A646: Biological Treatment Processes (3)
  - CE A647: Advanced Unit Processes (3)
  - CE A662: Surface Water Dynamics (3)
  - CE A663: Ground Water Dynamics (3)
  - CE A674: Waves, Tides, and Ocean Processes for Engineers (3)
  - CE A677: Coastal Measurements and Analysis (3)
  - CE A683: Arctic Hydrology and Hydraulic Engineering (3)
  - CE A690: Selected Topics in Civil Engineering (3)
  - ENVE F651: Environmental Risk Assessment (3) (UAF Online Course)*
  - ENVE F652: Introduction to Toxicology for Engineers and Scientists (3) (UAF Online Course)*
  - ESM A450: Economic Analysis and Operations (3)
  - ESM A601: Engineers and Organizations (3)
  - ESM A605: Engineering Economy (3)
  - FM A601: Project Management Fundamentals (3)
- Geology
  - GEOL A455: Permafrost (3)
  - GEOL A460: Environmental Geochemistry (3)
  - GEOL A475: Environmental Geophysics (3)
- Thesis
  - AEST A699: AEST Thesis (1-6)

*UAF courses may be considered as resident credit. It is the student’s responsibility to check the UAF Catalog for current course content and availability.

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**Master of Applied Environmental Science and Technology (M-AEST)**

**Graduation Requirements**

In order to receive an M-AEST degree, students must:

1. Satisfy all University Requirements for Graduate Degrees listed at the beginning of this chapter;
2. Complete 30 credits of coursework approved in advance by the student’s graduate advisor; and
3. Satisfactorily complete a written comprehensive examination during the final semester prior to graduation.

The student’s advisor will administer a comprehensive examination to evaluate the candidate’s knowledge gained throughout the M-AEST program. The student will be requested by their graduate advisor to provide one course from each of the three core competency disciplines completed and the affiliated faculty or instructor contact information. The student’s advisor will construct a comprehensive examination based on questions provided by the affiliated faculty or instructors of selected courses. The students must complete the exam with a passing grade.

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 or 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.

**Course Requirements**

M-AEST students must take CE A641 Fundamentals of Environmental Engineering and Applied Environmental Science (completed with a grade of B or better) in their first year. In order to ensure that M-AEST students achieve a balanced multi-disciplinary education, at least one course must be completed with a grade of B or better in at least three of the five remaining core competency disciplines: analysis (ESM, STAT and MATH), biology (BIOL), chemistry (CHEM), applied environmental science and technology (AEST and CE) and geology (GEOL) or other disciplines and courses as approved by the GSC to support the graduate program of the individual student. A minimum 21 credits must be drawn from approved 600-level courses. Suggested course list is provided under course requirements of the MS-AEST program.

**FACULTY**

- Aaron Dotson, Assistant Professor, addotson@uaa.alaska.edu
- John Olofsson, Professor, afjao@uaa.alaska.edu
- Andy Soria, Associate Professor, jasoria@alaska.edu

**Applied Environmental Science and Technology (AEST) Certificate**

The Graduate Certificate in Environmental Regulations and Permitting is designed for those students who wish to pursue specialized advanced professional studies in specialized AEST topics.

**Graduate Certificate, Environmental Regulations and Permitting**

The UAA Graduate Certificate in Environmental Regulations and Permitting 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.

**Program Student Learning Outcomes**

Upon completion of the program, 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, policymakers, agency personnel and the public in working with federal and state laws and regulations;

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www.uaa.alaska.edu
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 policymakers, agency personnel, industry, municipalities, nongovernmental organizations and the general public) to facilitate conflict resolution potentially encountered during the regulatory and permitting process.

Admission Requirements and Related Graduate Certificate Policies

See the beginning of this chapter for Admissions Requirements for Graduate Certificates. 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 University Requirements for Graduate Certificates.

Program Requirements

Students must complete the first three courses before they may enroll in AEST A607 Environmental Permitting Project 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
Alice Bullington, Term Faculty, afazb@uaa.alaska.edu
John Olofsson, Professor, afjao@uaa.alaska.edu
Robert Reges, Adjunct Faculty

ARCTIC ENGINEERING

Engineering Building (ENGR), Room 201, (907) 786-1900
www.uaa.alaska.edu/schoolofengineering/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.

Program Student Learning Outcomes

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;
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 or perennially frozen ground 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

All students admitted to the Arctic Engineering program must have previously earned a baccalaureate degree in an engineering discipline with a cumulative undergraduate GPA of at least 3.00. Probationary admission may be granted by the Civil Engineering Department for students whose cumulative undergraduate GPA is between 2.50 and 3.00, but who have successfully completed graduate studies at the 3.00 level or better and have other evidence of their potential for success in graduate engineering studies. Probationary terms will typically call for successful completion of a pre-approved sequence of 9 credits of graduate engineering courses. 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 Graduate Degrees.

Major Requirements

1. Candidates must complete the following core courses (9 credits):
   - CE A603 Arctic Engineering* 3
   - CE A681 Frozen Ground Engineering 3
   - ME A685 Arctic Heat and Mass Transfer 3

   *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 A663 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):
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 approval of a project proposal by the student’s advisory committee:

   CE A686  Civil Engineering Project  
   The Arctic engineering project should have the following characteristics:
   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.

**FACULTY**

T. Bart Quimby, Professor, AFTBQ@uaa.alaska.edu  
Tom Ravens, Professor, AFTMR@uaa.alaska.edu  
Orson Smith, Professor, AFOPS@uaa.alaska.edu  
Zhaohui Yang, Associate Professor, AFZY@uaa.alaska.edu  
Hannele Zubeck, Professor/Chair, AFHKZ@uaa.alaska.edu

**CIVIL ENGINEERING**

*Engineering Building (ENGR), Room 201, (907) 786-1900  
www.uaa.alaska.edu/schoolofengineering*

The Master of Science in Civil Engineering (MSCE) is designed for students who wish to pursue research-oriented occupations or to eventually pursue a PhD degree, as well as to prepare for advanced professional engineering practice. The Master of Civil Engineering (MCE) is designed for students who wish to further emphasize engineering practice and prefer to substitute additional classroom education for graduate research experience.

**Civil Engineering (CE) Degrees**

The MSCE and MCE designed for those students who wish to pursue specialized advanced study and original research. CE is an excellent preparation for both the practicing professional and the future doctoral student.

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**Program Objectives**

The objectives of the UAA civil engineering graduate programs are to provide graduates with:

1. Advanced technical knowledge within one or more of the recognized sub-disciplines of civil engineering.
2. The ability to conduct advanced research, program, and
3. The ability to effectively communicate research results.

**Program Student Learning Outcomes**

In keeping with the above objectives, the expected student learning outcomes of the UAA MSCE and MCE programs 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, 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 Admission Requirements for Graduate Degrees and deadlines. All students must hold a baccalaureate degree in an engineering discipline.

**Application Procedures**

All application materials must be received by the UAA Office of Admissions by the required dates as established by the Admissions office. 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;

In addition, please submit to the School of Engineering:

- A one-page statement selecting a core competency area and discussing the applicant’s career goals.

**Master of Science, Civil Engineering (MS-CE)**

**Graduation Requirements**

In order to receive the Master of Science in Civil Engineering, students must:

1. Satisfy all University Requirements for Graduate Degrees listed at the beginning of this chapter;
2. Complete 30 credits of coursework approved in advance by the student’s graduate advisor; and
3. Satisfactorily complete thesis work approved in advance by the student’s graduate committee, of which 6 credits will be CE A699 Thesis.

**Course Requirements**

Students must complete at least three courses in one of the core competency areas of environmental, geotechnical, structures, transportation, water resources and one course in analysis all with a grade of B or better. Remaining courses can be selected from any of the following areas or as approved by student’s graduate committee. No more than one 400-level course may be included with prior approval of the student’s graduate committee.

**Environmental**

- AEST A601 Aquatic Process Chemistry (3)
- AEST A602 Water Quality Management (3)
- AEST A603 Solid Waste Management (3)
- AEST A608 Fundamentals of Air Pollution (3)
- AEST A613 Remediation (3)
Graduate Programs, School of Engineering

Graduation Requirements

Master of Civil Engineering (M-CE)

The completed thesis must meet the following requirements:

1. The work must contribute to the body of knowledge in the candidate’s field of graduate study. A literature review is required to show how the work is associated with the current state of the art in the candidate’s graduate field of study.
2. The thesis, as judged by the graduate committee, must be publishable in either peer-reviewed technical conference proceedings or a peer-reviewed journal.
3. The work must demonstrate command of knowledge and skills associated with the candidate’s program of graduate study.
4. The thesis proposal, submitted at least one semester prior to the defense, must present evidence that the above requirements will be satisfied and will generally consist of an explicit problem statement, a literature review, and one or more sections describing the research and the analytical methods that will be applied.
5. The thesis is to be defended by the student in an oral presentation to the student’s graduate committee and invited guests.

Course Requirements

Students must complete at least three courses in one of the core competency areas of environmental, geotechnical, structures, transportation, water resources and one course in analysis (as listed in Master of Science, Civil Engineering section) all with a grade of B or better. Additionally, students must complete at least one course from the project management area of study, listed below. Remaining courses can be selected from the list provided in Master of Science, Civil Engineering section or as approved by student’s graduate committee. No more than one 400-level course may be included without prior approval of the student’s graduate committee.

Project Management

- AEST A604 Environmental Law, Regulations and Permitting (3)
- ESM A601 Engineers in Organizations (3)
- ESM A608 Legal Environment for Engineering Management (3)
- ESM A610 Cost Estimating (3)
- ESM A613 Management of Technical People (3)
- PM A601 Project Management Fundamentals (3)

Project Requirement

Within the last 9 credits applicable to the degree, each student may need to complete CE A686, per the requirements of their competency area. 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 advanced technical 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 project proposal, submitted prior to enrolling in CE A686, must present evidence that the above requirements will be satisfied and will generally consist of an explicit problem statement, a literature review, and one or more sections describing the information and analytical methods to be applied.

Master of Science, Civil Engineering

<table>
<thead>
<tr>
<th>Course Requirement</th>
<th>Credits</th>
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<tbody>
<tr>
<td>CE A645 Chemical and Physical Water and Wastewater Treatment Processes (3)</td>
<td></td>
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<tr>
<td>CE A646 Biological Treatment Processes (3)</td>
<td></td>
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<tr>
<td>CE A647 Advanced Unit Processes (3)</td>
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</tbody>
</table>

Geotechnical

- CE A610 Engineering Seismology (3)
- CE A611 Geotechnical Earthquake Engineering (3)
- CE A612 Advanced Foundation Design (3)
- CE A614 Soil Strength and Slope Stability (3)

Structures

- CE A631 Structural Finite Elements (3)
- CE A633 Structural Dynamics (3)
- CE A634 Structural Earthquake Engineering (3)
- CE A637 Earthquake Resistant Structural Design (3)
- CE A639 Loads on Structures (3)
- CE A652 Advanced Steel Design (3)
- CE A654 Timber Design (3)

Transportation

- CE A623 Traffic Engineering (3)
- CE A624 Pavement Design (3)
- CE A625 Highway Engineering (3)
- CE A675 Design of Ports and Harbors (3)

Water Resources

- CE A662 Surface Water Dynamics (3)
- CE A663 Ground Water Dynamics (3)
- CE A674 Waves, Tides, and Ocean Processes for Engineers (3)
- CE A675 Design of Ports and Harbors (3)
- CE A676 Coastal Engineering (3)
- CE A677 Coastal Measurements and Analysis (3)

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)

3. Satisfactorily complete requirements for a comprehensive exam or 3 credits of CE A686 Civil Engineering Project if applicable to the chosen competency area. The following requirements apply for each individual competency area:

- **Environmental:** Students must complete 30 credit hours of coursework and a comprehensive exam. Students may opt to take up to 3 credit hours of CE A698 Individual Research with advisor approval as part of the required 30 credit hours of coursework.
- **Geotechnical:** Students must complete 27 credit hours of coursework and 3 credits of CE A686 Civil Engineering Project.
- **Structural:** Students must complete 27 credit hours of coursework, 3 credits of CE A686 Civil Engineering Project, and a comprehensive exam.
- **Transportation:** Students must complete 27 credit hours of coursework and 3 credits of CE A686 Civil Engineering Project.
- **Water Resources:** Students may choose between completing 30 credit hours of coursework and a comprehensive exam or 27 credit hours of coursework and 3 credits of CE A686 Civil Engineering Project.

Project Management

- AEST A604 Environmental Law, Regulations and Permitting (3)
- ESM A601 Engineers in Organizations (3)
- ESM A608 Legal Environment for Engineering Management (3)
- ESM A610 Cost Estimating (3)
- ESM A613 Management of Technical People (3)
- PM A601 Project Management Fundamentals (3)

Project Requirement

Within the last 9 credits applicable to the degree, each student may need to complete CE A686, per the requirements of their competency area. 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 advanced technical 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 project proposal, submitted prior to enrolling in CE A686, must present evidence that the above requirements will be satisfied and will generally consist of an explicit problem statement, a literature review, and one or more sections describing the information and analytical methods to be applied.
7. The project is to be orally presented to the student’s graduate committee and invited guests.

**FACULTY**
Osama Abaza, Professor and Chair, afao@uaa.alaska.edu
Aaron Dotson, Assistant Professor, addotson@uaa.alaska.edu
Utpal Dutta, Associate Professor, afud@uaa.alaska.edu
Scott Hamel, Assistant Professor, sehamel@uaa.alaska.edu
Robert Lang, Professor, afrjl@uaa.alaska.edu
He Liu, Professor, afhl@uaa.alaska.edu
John Olofsson, Professor, afjao@uaa.alaska.edu
T. Bart Quimby, Professor, aftbq@uaa.alaska.edu
Tom Ravens, Professor, afmr@uaa.alaska.edu
Orson P. Smith, Professor, afops@uaa.alaska.edu
Zhaohui Yang, Associate Professor, afzy@uaa.alaska.edu
Hannele Zubeck, Professor, afhzh@uaa.alaska.edu

**Civil Engineering (CE) Certificates**
These certificates are designed for those students who wish to pursue advanced professional studies in specialized CE topics of particular concern in Alaska.

**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.

**Program Student Learning Outcomes**
Upon 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 Admission Requirements for Graduate Certificates. 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 accredited institution in the United States or a foreign equivalent.

**Graduation Requirements**
See the beginning of this chapter for University Requirements for Graduate Certificates.

**Program Requirements**
Complete the following requirements (15 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE A637</td>
<td>Earthquake Resistant Structural Design</td>
<td>3</td>
</tr>
<tr>
<td>CE A639</td>
<td>Loads on Structures</td>
<td>3</td>
</tr>
</tbody>
</table>

**FACULTY**
Utpal Dutta, Associate Professor, afud@uaa.alaska.edu
He Liu, Professor, afhl@uaa.alaska.edu
T. Bart Quimby, Professor, aftbq@uaa.alaska.edu
Zhaohui Yang, Associate Professor, afzy@uaa.alaska.edu

**Graduate Certificate, Coastal, Ocean, and Port Engineering**
The UAA School of Engineering offers a cohesive sequence of courses in the theory and practice of coastal, ocean, and port engineering. The series is intended to provide specialized education to prepare graduate engineers for sustainable development and protection of coastal, ocean, and port environments for the benefit of society in Alaska, the United States, and foreign countries. The program is designed to provide students with competencies required to become a Diplomate of the Academy of Coastal, Ocean, Port, and Navigation Engineers.

**Program Student Learning Outcomes**
Upon completion of the program, students will be able to:
1. Characterize oceans, seas and estuaries in terms of physical dimensions, sediments, water chemistry, major wind patterns and currents, and wave climate;
2. Define nearshore and offshore ocean processes in terms of wind, wave and current climates and their interaction with sediments and local features of seafloor and shoreline;
3. Accomplish data collection, analyze data, and interpret analytical results to applicable to design of engineering systems;
4. Plan and design port, harbor and ocean engineering facilities suited to demands of vessels and cargo transfer operations, to safe and efficient exploration for and extraction of minerals, and to survival in extreme ocean conditions; and
5. Quantify natural physical processes or human activities responsible for coastal erosion, and design shore protection works suited to the local environmental setting.

**Admission Requirements and Related Graduate Certificate Policies**
See the beginning of this chapter for Admission Requirements for Graduate Certificates. Admission to the Coastal, Ocean and Port Engineering Graduate Certificate program requires that a student must have earned a Bachelor of Science in an engineering discipline from an ABET-accredited institution in the United States or a foreign equivalent.

**Graduation Requirements**
See the beginning of this chapter for University Requirements for Graduate Certificates.

**Program Requirements**
Complete the following five courses (15 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE A674</td>
<td>Waves, Tides, and Ocean Processes for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>CE A675</td>
<td>Design of Ports and Harbors</td>
<td>3</td>
</tr>
<tr>
<td>CE A676</td>
<td>Coastal Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CE A677</td>
<td>Coastal Measurements and Analysis</td>
<td>3</td>
</tr>
<tr>
<td>CE A678</td>
<td>Design of Ocean Engineering Systems</td>
<td>3</td>
</tr>
</tbody>
</table>

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**
Orson Smith, Professor, afops@uaa.alaska.edu
Thomas Ravens, Professor, afmr@uaa.alaska.edu

University of Alaska Anchorage 2013-2014 Catalog
www.uaa.alaska.edu
COMPUTER SCIENCE

**Social Sciences Building (SSB), Room 154, (907) 786-1744/786-4824**

[www.uaa.alaska.edu/mathematicalsciences](http://www.uaa.alaska.edu/mathematicalsciences)

**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.uaa.alaska.edu/mathematicalsciences](http://www.uaa.alaska.edu/mathematicalsciences).

**FACULTY**

David Meyers, Associate Professor, AFDFM@uaa.alaska.edu
Kenrick Mock, Associate Professor, AFKJM@uaa.alaska.edu
Frank Moore, Associate Professor, AFFWM@uaa.alaska.edu
Kirk Scott, Associate Professor, AFKAS@uaa.alaska.edu

**ENGINEERING MANAGEMENT AND SCIENCE MANAGEMENT**

**University Lake Annex (ULBA), (907) 786-1924**

[www.uaa.alaska.edu/schoolofengineering/programs/esm](http://www.uaa.alaska.edu/schoolofengineering/programs/esm)

The Engineering Management and Science Management curriculum is designed for graduate engineers and scientists who will hold executive or managerial positions in engineering, construction, industrial or governmental organizations as well as develop technology based enterprises. It includes 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**

**Program Student Learning Outcomes**

Students graduating with a Master of Science in Engineering Management or a Master of Science in Science Management will:

- Be able to form an integrated problem statement from various, often uncertain, ambiguous data; to forecast the future trends; and to recommend decisions.
- Be a contributing member of the engineering management community by examining, questioning and providing alternatives to today’s management, business and engineering challenges and issues.
- Have communication, team-building, leadership and entrepreneurship skills.
- Be able to integrate feasibility requirements with current conditions for using engineering management resources and applying technologies as well as the relative laws.
- Be able to build a system with conformity and compliance and manage risks.
- Create and develop a life-long commitment to learning and through the required design project form the skills necessary research a new topic and apply new skills. In the fast paced changing business environment this learning skill may be the most valuable to the graduate.

**Admission Requirements**

See the Admissions Requirements for Graduate 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 better in that course.

**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 area requirements:

   **Management Area (6 credits)**
   
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESM A601</td>
<td>3</td>
</tr>
<tr>
<td>PM A601</td>
<td>3</td>
</tr>
</tbody>
</table>

   And choose two courses from the following (6 credits):
   
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESM A608</td>
<td>3</td>
</tr>
<tr>
<td>ESM A613</td>
<td>3</td>
</tr>
<tr>
<td>ESM/BA A617</td>
<td>3</td>
</tr>
<tr>
<td>ESM A623</td>
<td>3</td>
</tr>
</tbody>
</table>

   **Fiscal Area (6 credits minimum):**
   
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 601</td>
<td>3</td>
</tr>
<tr>
<td>ESM A605</td>
<td>3</td>
</tr>
<tr>
<td>ESM A610</td>
<td>3</td>
</tr>
</tbody>
</table>

   **Quantitative Area (6 credits minimum):**
   
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESM A619</td>
<td>3</td>
</tr>
<tr>
<td>ESM A620</td>
<td>3</td>
</tr>
<tr>
<td>ESM A621</td>
<td>3</td>
</tr>
</tbody>
</table>

   **Elective Curriculum**

   Any ESM/PM/Engineering/Science/Business Administration or other graduate courses approved by the student’s ESM advisor.

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[www.uaa.alaska.edu](http://www.uaa.alaska.edu)
Mailing Questions:

2. To register for ESM A684 or ESM A699 students must have a 3.00 GPA or better in courses listed on their Graduate Studies Plan:

Nonthesis Option (3 credits)
Complete ESM A684 ESM Project

Thesis Option (6-9 credits)
Complete 6-9 credits of ESM A699 ESM Thesis.
Both nonthesis option (project) and thesis option require a defense.

3. A minimum of 30 credits is required for the degree without a previous master’s degree.

Questions:
School of Engineering
Engineering and Science Management (ESM) Department
(907) 786-1924
(907) 786-1935 fax
esm@uaa.alaska.edu

Mailing address:
University of Alaska Anchorage
3211 Providence Drive
Anchorage, AK 99508-4614

FACULTY
LuAnn Piccard, Assistant Professor, AFLP@uaa.alaska.edu
Hsueh-Ming Steve Wang, Associate Professor, AFHSWI@uaa.alaska.edu

PROJECT MANAGEMENT

University Center (UC), Room 155, (907) 786-1924
www.uaa.alaska.edu/schoolofengineering/programs/pm

The Master of Science degree in Project Management (MSPM) is designed to provide a rigorous background in contemporary theory and practice in project management, strengthened through the extensive application of tools, concepts and critical thinking in a case study environment. The MSPM provides students with perspectives and skills to prepare them for increasingly significant and complex project leadership roles within a broad range of public and private sector organizations: engineering, construction, oil and gas, natural resources, health care, information technology, communications, utilities, education, financial services, government, military, transportation, and others.

The MSPM degree program is accredited by the Project Management Institute (PMI) Global Accreditation Center (GAC). The structure and content of the curriculum is designed to enable students to learn, apply, and demonstrate mastery of project management theory and practice in the context of hands-on project case studies managed and integrated progressively over the end-to-end project lifecycle as well as electives that provide opportunities for advanced study and application of project management in targeted industry sectors. Additionally, students will develop and strengthen leadership, communication, teamwork, and professional responsibility traits necessary to lead and manage successful projects in a complex, global environment. The MSPM degree requires a research or project oriented capstone.

The program serves full- and part-time students. Classes are generally held during the evening and selectively on weekends. The program provides a unique, real-time distance educational environment where students from across the state and around the world can join local students and faculty in the live classroom environment. This approach also accommodates students who may need to travel regularly for their employment.

Master of Science, Project Management

Program Student Learning Outcomes
Student learning outcomes are based on the professional best practices of the Project Management Institute (PMI) Global Accreditation Center (GAC) standards and guidelines, and UAA paradigms. Students who successfully complete this program will:

1. Demonstrate the capability to successfully manage projects across a broad range of scale, complexity, scope, environments and inherent risks.

2. Demonstrate the ability to employ the full range of project management tools and techniques to best satisfy industry and agency stakeholder requirements.

3. Conduct research that significantly contributes to and expands the diverse project management body of knowledge and produces a final project and product that demonstrates academic and project management success.

4. Demonstrate the ability to plan and execute project management activities across a broad range of industry sectors and organizations, and to employ the appropriate project management tools and techniques across a wide spectrum of project types, technologies and requirements.

5. Have the skills to determine the needs and balance the interests of project stakeholders in any organizational context and within cross-cultural business environments.

6. Demonstrate effective project team leadership and team development throughout the project management life cycle.

7. Effectively apply the principles of scope management, risk management, cost planning and control, quality planning and management, resource allocation and management, time management and project scheduling, and change management in the project environment.

8. Demonstrate a facility for comprehensive and objective analysis, structured decision-making, process optimization, and problem solving in the project management environment.

9. Understand and apply the principles of cost-benefit analysis, strategic alignment, project portfolio management and project performance analysis and metrics.

10. Understand and apply project planning and execution optimization and control in the context of the triple constraint; project scope, schedule, and budget.


12. Demonstrate effective project management communications and problem-solving techniques related to project team management, project status reporting, conflict management and project stakeholder management.

Professional Program Fee

A professional program fee is required of all students in the MSPM program in addition to course tuition fees, fees, course material fees, and student activity fees. The professional program fee is a sum equal to the current level of resident graduate level tuition. Therefore, this fee is applied to either resident or non-resident tuition equally and is charged upon enrollment in PM courses. The fee contributes directly to program support.

Admission Requirements

See the Admissions Requirements for Graduate Degrees at the beginning of this chapter.

Provisional/Conditional Admission

Provisional/conditional admission to the MSPM 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 degree student will have:

1. Earned at least a bachelor’s degree in engineering, science, or equivalent areas (or 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. A grade of 3.00 (B) or higher in an undergraduate or equivalent research methods course and a statistics course that covers descriptive and inferential statistics. ESM A620 may be taken in lieu of the statistics requirement.
3. Completed a minimum of two years of appropriate project management experience in a science or engineering related field as shown by the applicant’s resume.
4. Obtained three letters of recommendation from professors, former or current employers or supervisors who are familiar with the candidate’s work experience.
5. Provided a statement of professional career objectives related to the study of project management.

**Full Admission**

Full admission to the MSPM program is offered to students who have:
1. Previously been admitted in Provisional/Conditional admission status.
2. Completed the first 9 credits of the core PM classes (PM A601, PM A602 and either PM A603 or PM A604) with a minimum 3.00 (B) in each.
3. Undergone departmental review in Phase Gate 1 and have been successfully judged to have made satisfactory progress, met performance standards and demonstrated aptitude in project management by the MSPM Admissions Committee.

**Note:** The department retains the right to remove any student from the program who fails to maintain sufficient academic performance and progress.

**Additional Requirements**

Enrolled students must have access to a personal computer and Internet connection speed the department finds acceptable. All students are expected to have basic computer and keyboarding skills prior to entry into the program, for example:

- Word processing (preferably Microsoft Word), presentation software (preferably Microsoft PowerPoint) and spreadsheet software (preferably Microsoft Excel)
- Sending and receiving e-mail with attachments
- Accessing and navigating the Internet/World Wide Web
- Understanding how to use basic software, computer, and peripheral hardware.

Remote (distance) students in the program are additionally responsible for:

- Any incremental, individual long distance or high speed Internet connection costs
- Any additional hardware (such as webcams, headsets, etc.) necessary to facilitate class participation
- Contacting the distance learning coordinator before classes start to set up and arrange for distance delivery.

**Academic Progress**

Students enrolled in the MSPM program must:

- Achieve at least a 3.00 (B) in each of the program’s required courses.
- Must receive a 3.00 (B) or better in all core classes.
- Receive no more than one 2.00 (C) grade in any elective course.
- Earn all credits, including transfer credits, within a consecutive seven-year period prior to graduation. See University Requirements for Graduate Degrees in this chapter for additional information.
- As a prerequisite for PM A686A registration, students must have a cumulative 3.00 GPA or better in courses listed on their official Graduate Studies Plans.
- As a prerequisite for PM A686A registration, students must have a cumulative 3.00 GPA or better in courses listed on their official Graduate Studies Plans.

The faculty reserves the right, where warranted by evaluation of a student’s progress and apparent knowledge, to require additional coursework or other preparation to ensure the degree candidate possesses adequate professional skills and capabilities. This includes the ability to reason and communicate effectively orally, in writing, and quantitatively.

Noncompliance with academic progress expectations will result in probation and possible dismissal from the program. See the Academic Good Standing policy in this chapter for more information.

**Course Delivery**

Students in the MSPM program can attend courses in the classroom and/or by state-of-the-art, real-time video capabilities. This format allows students from across the state and around the world to join local students and faculty in real time, in the classroom as an active course participant using readily available, off-the-shelf technology. This real-time capability also enables students who must travel during the semester to join the class via ad hoc connections from wherever they may be located (connection speed permitting). Additionally, all class sessions are recorded and posted to the UAA Learning Management System after the class session is completed so that students can review the material in the event that a class session is missed. This approach provides flexibility for students to begin and complete the program from wherever their work assignments or personal situations may take them.

**Graduation Requirements**

Complete University Requirements for Graduate Degrees at the beginning of this chapter as well as the program requirements below.

**Program Requirements**

1. Complete the following requirements
   a. **Core requirements (21 credits)**
      1) PM Overview (6 credits)
         PM A601 Project Management Fundamentals 3
         PM A602 Application of Project Management Processes 3
      2) PM Process Series (9 credits)
         PM A603 Project Initiation and Planning 3
         PM A604 Project Executing, Monitoring and Control 3
         PM A605 Operational Integration and Project Closure 3
      3) Capstone Project Demonstration of PM Mastery (6 credits)
         PM A686A Capstone Project: Initiation and Planning 3
         PM A686B Capstone Project: Executing, Controlling, and Closing 3
   b. **Electives (12 credits)**
      1) Complete an additional 12 credits of PM courses as electives
      2) A student may petition for a single elective 3 credit graduate level course from outside the program.
   c. **Departmental Review/Phase Gates**
      1) Phase Gate 1 (after completion of the first three core classes: PM A601, PM A602 and either PM A603 or PM A604) Students will be admitted provisionally/conditionally to the program until this phase gate has been successfully completed. Phase Gates are established in order to evaluate a student’s progress, performance, and their demonstrated potential to be a successful project manager.
      2) Phase Gate 2 (after completion of PM A686A) Students must receive departmental and advisory committee approval prior to enrollment in PM A686B
after the successful completion of an approved project management plan completed in PM A686A.

2. A total of 33 credits are required for degree completion.
3. An approved Graduate Studies Plan will be created, approved, and fulfilled for each student to define their individual program of study (per the requirements set forth in this chapter).
4. Local classroom and/or real time distance participation is required.

**Capstone Project**

Three credits of PM A686A and 3 credits of PM A686B, taken over two semesters, are required for the degree.

All capstone project work must meet the following requirements:

- The work must contribute to the body of knowledge in the student’s graduate field of study.
- A literature search is required to demonstrate how the work is associated with the current state of the art in the student’s graduate field of study.
- The final capstone project report, as judged by the student’s graduate committee, must be of sufficient quality to justify publication in either a peer-reviewed technical conference proceeding or a peer-reviewed journal. Publication of a manuscript in a journal or conference paper is not a requirement for graduation, but submissions are encouraged.
- The work must demonstrate command of knowledge and skills associated with the student’s graduate program of study.
- The project must have sufficient scope to clearly demonstrate the student’s advanced expertise in and mastery of project management.
- The work must require a level of effort consistent with 6 graduate level credit hours.
- The student must satisfactorily present their capstone project and be evaluated by a panel of faculty and project management practitioners.

**Questions:**

**Project Management (PM) Department**

(907) 786-1924  
(907) 786-1935 fax  
pm@uaa.alaska.edu  

**Mailing address:**

University of Alaska Anchorage  
3211 Providence Drive  
University Center 155  
Anchorage, AK 99508-4614

**FACULTY**

Roger Hull, Instructor, AFRKH@uaa.alaska.edu  
Seong Dae Kim, Assistant Professor, AFSDK1@uua.alaska.edu  
LuAnn Piccard, Assistant Professor and ESPM Interim Director, AFLP@uua.alaska.edu
ACCT - Accounting

Offered through the College of Business and Public Policy
Edward & Cathryn Rasmuson Hall (RH), Room 203, 786-4100
www.uaa.alaska.edu/cbpp

Students taking any ACCT, BA, CIS, ECON, LGOP, LOG or PADM course will be charged a single lab fee of $34 for the semester. Applies to Elmendorf Air Force Base or Fort Richardson classes only when specifically noted on UAAonline. Does not apply to Chugik-Aleut River classes.

ACCT A101 Principles of Financial Accounting I 3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A055 with minimum grade of C.
Registration Restrictions: UAA approved mathematics placement test scores may be used in lieu of prerequisite.
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 MATH A107 with minimum grade of C or MATH A172 with minimum grade of C or MATH A200 with minimum grade of C or MATH A272 with minimum grade of C.
Registration Restrictions: UAA- approved mathematics placement test scores may be used in lieu of prerequisites.
Special Note: ACCT A101 and ACCT A102 will satisfy the 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: [ACCT A101 with minimum grade of C and ACCT A102 with minimum grade of C] or ACCT A201 with minimum grade of C.
Study of the generation and analysis of accounting information and its use by managers as they engage in planning, control and decision-making activities in business and non-business organizations. Topics include product costing, cost-volume-profit analysis, profit planning, variance analysis, relevant costs for decision making and capital budgeting decisions.

ACCT A210 Income Tax Preparation 3 CR
Contact Hours: 3 + 0
Prerequisites: [or [ACCT A101 with minimum grade of C and ACCT A102 with minimum grade of C] or ACCT A201 with minimum grade of C] and CIS A110 with minimum grade of C.

Special Fees.
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.

Studies the role and importance of the Accounting Information System (AIS) within an organization, including an in-depth examination of the accounting cycle from transaction initiation through financial statement preparation and analysis. Includes manual practice sets for hands-on application. Exposure to systems documentation, internal controls, fraud process, and classic accounting frauds and scandals.

ACCT A222 Introduction to Computerized Accounting 3 CR
Contact Hours: 3 + 0
Prerequisites: [or [ACCT A101 with minimum grade of C and ACCT A102 with minimum grade of C] or ACCT A201 with minimum grade of C].

Introduction to processing accounting information using commercial accounting software. Comparison of manual to computerized recording and processing of accounting transactions. Includes maintenance of chart of accounts and master files; processing sales, receivables, cash receipts, purchases, payables, and cash payments. Preparation of financial statements and other reports in computerized software systems and spreadsheet applications.

ACCT A225 Payroll Accounting 3 CR
Contact Hours: 3 + 0
Prerequisites: [or [ACCT A101 with minimum grade of C and ACCT A102 with minimum grade of C] or ACCT A201 with minimum grade of C] and CIS A110 with minimum grade of C.

Introduction to processing payroll and employment practices. Topics covered include calculation of wages, withholding taxes, health, retirement, and other voluntary deductions and preparation of payroll tax reports. Also includes recording and posting payroll information to accounting records manually and using computerized software.

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.

Introduces students to the federal and state laws and regulations that affect payroll and employment practices. Topics covered include calculation of wages, withholding taxes, health, retirement, and other voluntary deductions and preparation of payroll tax reports. Also includes recording and posting payroll information to accounting records manually and using computerized software.

ACCT A237 Financial Accounting for Business Professionals 3 CR
Contact Hours: 3 + 0
Prerequisites: [or [ACCT A101 with minimum grade of C and ACCT A102 with minimum grade of C] or ACCT A201 with minimum grade of C].

Preparation and presentation of individual income tax returns, manually and computerized. Focus on primary and administrative sources of income tax law. Emphasis is on sources and interpretation of the tax laws and principles as well as how they apply to individuals.

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 with minimum grade of C and [COMM A111 with minimum grade of C or COMM A235 with minimum grade of C or COMM A237 with minimum grade of C or COMM A241 with minimum grade of C].
Registration Restrictions: Permission of College of Business and Public Policy Accounting Faculty Internship Coordinator; Cumulative GPA of 2.75 or higher; must be an AAS Accounting major.
Grade Mode: Pass/No Pass.
Special Fees.
Special Note: May be repeated for credit, but only 3 credits will apply to degree requirements.
Work experience in an approved bookkeeping or clerical position with supervision and training in various phases of accounting.
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 and Public Policy majors must be admitted to upper-division standing.

In-depth study of the accounting sequence, principles and rules governing financial statements and balance sheet accounts including cash; receivables; inventory; property, plant and equipment; and intangibles.

ACCT A302 Intermediate Accounting II 3 CR
Contact Hours: 3 + 0
Prerequisites: ACCT A301 with minimum grade of C.
Registration Restrictions: College of Business and 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 Individual Income Tax 3 CR
Contact Hours: 3 + 0
Prerequisites: ACCT A301 with minimum grade of C.
Registration Restrictions: College of Business and 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 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 and 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. Covers internal controls and systems documentation.

ACCT A342 Managerial Cost Accounting 3 CR
Contact Hours: 3 + 0
Prerequisites: ACCT A202 with minimum grade of C.
Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Examines the nature, objectives and procedures of cost management as applied to product and service costing, decision-making, cost planning, and control systems.

ACCT A401 Advanced Accounting 3 CR
Contact Hours: 3 + 0
Prerequisites: ACCT A302 with minimum grade of C.
Registration Restrictions: College of Business and 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 and 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 A302 with minimum grade of C and ACCT A310 with minimum grade of C.
Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

An overview of the nature of fraud and its impact on individuals and businesses. Examines fraud detection, investigation and prevention techniques. Analyzes various types of fraud, including employee embezzlement, management fraud, investment scams, vendor fraud and customer fraud. Emphasizes the need for strong internal control systems, codes of ethics, and financial statement and analysis techniques.

ACCT A430 Governmental and Not-for-Profit Accounting 3 CR
Contact Hours: 3 + 0
Prerequisites: ACCT A301 with minimum grade of C.
Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Accounting and financial reporting for governmental and not-for-profit entities, including state and local governments, the federal government, colleges and universities, and health care organizations. The fund structure provides a foundation for understanding these entities.

ACCT A452 Auditing 3 CR
Contact Hours: 3 + 0
Prerequisites: ACCT A302 with minimum grade of C and ACCT A316 with minimum grade of C.
Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing. Completion of all GER Tier 1 (basic college-level skills) courses.
Course Attributes: UAA GER Integrative Capstone.

Study of professional standards applicable to independent auditor's examination of financial statements and related expression(s) of opinion.

ACCT A495 Advanced Accounting Internship 3 CR
Contact Hours: 0 + 9
Prerequisites: ACCT A301 with minimum grade of C.
Registration Restrictions: Must be admitted to the BBA Accounting Program; permission of College of Business and Public Policy Accounting Faculty Internship Coordinator; upper-division standing; cumulative GPA of 2.75 or higher; cumulative GPA 3.0 or higher in major.

Grade Mode: Pass/No Pass.
Special Fees.

Special Note: May not be used to satisfy upper-division Accounting elective requirements. May be repeated for credit but only 6 credits will apply to degree requirements.
Integrates classroom study with work experience in an approved accounting position with supervision and training in the public and/or private sectors.

ACCT A601 Accounting Foundations for Executives 3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing

A traditional survey of accounting for the core requirement in the MBA program. Covers common financial and managerial topics with brief exposures to systems, auditing, non-profit, partnerships and joint ventures.

ACCT A650 Seminar in Executive Uses of Accounting 3 CR
Contact Hours: 3 + 0
Prerequisites: ACCT A601 with minimum grade of C and BA A603 with minimum grade of C.
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Admission to MBA program or permission of instructor.

Examines the correct use and interpretation of accounting data at the executive and board of directors level. Discusses company goals, human behaviors associated with accounting choices, and the difficulties of establishing financial controls that produce fair and informative audits. Explores misconduct, financial mismanagement, shenanigans and ethical dilemmas in financial reporting. Also examines value creation, forecasting and performance evaluations.

ADT - Automotive & Diesel Technology

Offered through the Community & Technical College
Auto & Diesel Technology Building (ADT), Room 207, 786-1485
www.uaa.alaska.edu/transportation

ADT A071 Fundamentals of Diesel Engines 2 CR
Contact Hours: 2 + 0
Offered only at Kodiak College.
Survey of different types, uses, operating conditions, and maintenance of diesel engines.

ADT A102 Introduction to Automotive Technology 3 CR
Contact Hours: 2 + 2
Special Fees.

Provides career information in the automotive and diesel industry. Covers shop safety, hand tools, fasteners, fittings, and the major automotive systems.

ADT A121 Basic Electrical Systems 3 CR
Contact Hours: 2 + 3
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 history and origins of electrical theory through the generation of electricity, diagnosis, minor repair, and general service of alternators, starters, and batteries.
Course Descriptions

ADT A122  Engine Theory and Diagnosis  3 CR
Contact Hours: 2 + 2
Prerequisites: ADT A102.
Special Fees.
Introduces students to fundamental aspects of engine design, general diagnosis, and engine-related service. Includes combustion process, engine noise, basics of exhaust emissions, vacuum/pressure, compression, intake and exhaust systems, and valve and ignition system.

ADT A131  Auto Electrical II  3 CR
Contact Hours: 2 + 2
Prerequisites: ADT A121.
Special Fees.
Theory, diagnosis and repair of automotive electrical systems, to include testing tools, schematics, and computers.

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 or concurrent enrollment.
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 A105.
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 Axles  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 18 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 PowerTrains; 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.
Introduces regulations and maintenance procedures of hydraulic and pneumatic systems on mid to heavy duty equipment.

ADT A222  Automotive Engine Performance  3 CR
Contact Hours: 2 + 2
Prerequisites: ADT A122.
Special Fees.
Introduces 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.
Introduces 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.
ADT A269  Heavy Duty Drive Trains  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 transmissions and drive trains on medium and heavy duty equipment.
ADT A295  Automotive Practicum II  3 CR
Contact Hours: 0 + 17
Prerequisites: ADT A195.
Registration Restrictions: Department approval and valid Alaska driver's license.
  Provides supervised workplace experience in industry settings. Integrates advanced level knowledge and practice to achieve skill competencies.

AEST - Applied Environmental Science & Technology

Offered through the School of Engineering
Engineering Building (ENGR), Room 201, 786-1900
www.uaa.alaska.edu/schoolofengineering

AEST A601  Aquatic Process Chemistry  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Registrants must be enrolled in the AEST, CE, or BIOL graduate programs, or gain instructor approval.
Special Fees.
An introduction to fundamental aquatic chemistry concepts frequently encountered in environmental science and engineering. An equilibrium approach with an emphasis on treatment process and natural water chemistry is employed. Both a qualitative and quantitative understanding of equilibrium calculations and the ability to apply both graphical and algebraic/numerical solution techniques to chemistry problems.

AEST A602  Water Quality Management  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Registrants must be enrolled in the AEST, CE, or BIOL graduate programs, or gain instructor approval.
Special Fees.
An assessment of the rationale, concepts, institutions, and engineering aspects of water quality management. Regulatory processes, monitoring strategies and statistics, flow and mixing characteristics, pollutant chemistry, assessment strategies, point and nonpoint source characteristics, the Total Maximum Daily Load (TMDL) process, and mitigation measures are covered.

AEST A603  Solid Waste Management  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Registrants must be enrolled in the AEST, CE, or BIOL graduate programs, or gain instructor approval.
Planning, collecting and disposing of solid waste; techniques of collection, transportation, disposal and resource recovery; solid waste environmental regulations and relationships to water, air, and land pollution; hazardous waste management.

AEST A604  Environmental Law, Regulations and Permitting  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Bachelor of Science degree in a science or engineering discipline.

  Introductory graduate level course on understanding and navigating environmental laws and regulations. Students will learn the principles of the major environmental laws in the U.S., practice interpreting regulations, and prepare permits.

AEST A605  National Environmental Policy Act  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Bachelor of Science degree in a science or engineering discipline.

  Examines the National Environmental Policy Act (NEPA) requirements, including process, roles and responsibilities of involved parties, impact analysis, alternative development, stakeholder involvement and environmental conflict resolution. Subject matter experts from State and Federal agencies, industry, environmental nongovernmental organizations and utilities will provide their perspectives on NEPA.

AEST A606  Clean Water Act  3 CR
Contact Hours: 3 + 0
Registration Restrictions: 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 and AEST A606 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
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
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 A666  Methods, Assessment and Communication of Basic and Applied Research  3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing in AEST program, Civil Engineering or instructor permission.

  An overview of the structure, methods and assessment tools needed to conduct graduate level research in environmental science and engineering fields.

  The course is designed to guide the student through the process of establishing, organizing, writing and presenting a graduate level research project conducive to a publication, thesis or proposal.

AEST A698  Individual Research  1-6 CR
Contact Hours: 1-6 + 0
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/cdi/academics/AET

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.

AET A101 Fundamentals of CADD for Building Construction 4 CR
Contact Hours: 2 + 4
Prerequisites: MATH A105 with minimum grade of C or concurrent enrollment.
Registration Restrictions: Proof of eligibility for placement into ENGL A111.
Appropriate SAT, ACT or UAA-approved Math Placement Test scores may be used in lieu of MATH A105.
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 or CM 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 or CM 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 or CM A101] and [AET A102 or CM 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 or CM 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 with minimum grade of C or CM A101 with minimum grade of C] and [AET A102 with minimum grade of C or CM A102 with minimum grade of C] and MATH A105 with minimum grade of C.
Registration Restrictions: Appropriate SAT, ACT or UAA-approved Math Placement Test scores may be used in lieu of the MATH A105 prerequisite.
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 the occupants. Emphasizes design criteria, code requirements, interpretation of construction drawings and building energy usage.

AET A143 Mechanical and Electrical Drafting 3 CR
Contact Hours: 2 + 3
Prerequisites: [AET A102 or CM 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 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 with minimum grade of C or CM A101 with minimum grade of C] and [AET A102 with minimum grade of C or CM A102 with minimum grade of C] and MATH A105 with minimum grade of C.
Registration Restrictions: Appropriate SAT, ACT or UAA-approved Math Placement Test scores may be used in lieu of the MATH A105 prerequisite.
Special Fees.

Outlines elements of civil design, including soils and soil mechanics, foundations, roads, and utilities using local, state and federal regulations. Introduces elements of construction surveying.

AET A231 Structural Technology 4 CR
Contact Hours: 2 + 4
Prerequisites: [AET A101 with minimum grade of C or CM A101 with minimum grade of C] and [AET A102 with minimum grade of C or CM A102 with minimum grade of C] and MATH A105 with minimum grade of C.
Registration Restrictions: Appropriate SAT, ACT or UAA-approved Math Placement Test scores may be used in lieu of the MATH A105 prerequisite.
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 natural forces such as gravity, wind, snow and earthquakes. Covers connection details 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.

Provides 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 A142].
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.
AGRI - Agriculture

AGRI A136 Introduction to Horticulture 3 CR
Contact Hours: 3 + 0
Offered only at Matanuska-Susitna College.
Reviews plant structure and growth; soils; plant nutrition; plant propagation; potting media; fertilizers; indoor plant care; light management; container gardening; interior landscaping; greenhouse growing and plant forcing.

AGRI A137 Organic Gardening 1-3 CR
Contact Hours: 1-3 + 0
Grade Mode: Pass/No Pass.
Introduces organic methods and materials for ecological agriculture covering soil management, crop rotations, weed control, pest management, garden planning, planting, harvesting, storage, French intensive methods, and compost.

AGRI A138 Modern Home Gardening 3 CR
Contact Hours: 3 + 0
Principles of gardening—comprehensive coverage of plants, soils and climates, the basic elements with which the gardener must deal. Practices of gardening—the manipulation of the basic elements; growing of important vegetables, herbs, perennial food plants and flowers.

AGRI A141 Home Greenhouse Gardening 1 CR
Contact Hours: 1 + 0
Grade Mode: Pass/No Pass.
Introduction to home greenhouse design and operation. Covers construction design and size, plant growth environment, pest prevention and control, water, soil and nutrient requirements, and managing greenhouse crops.

AGRI A227 Landscape Design: A Home Owner's Approach 1 CR
Contact Hours: 1 + 0
Registration Restrictions: AGRI A136 or AGRI A139 recommended.
Designed for the beginning home landscaper. Covers the first phases of landscape design including site inventory, site analysis, conceptual design, and preliminary design. Construction phasing, final design components, and additional resources will be discussed briefly.

AGRI A245 Master Gardener 3 CR
Contact Hours: 3 + 0
Offered only at Kenai Peninsula College.
Course will teach volunteers (master gardeners) to extend the gardening information and resources of cooperative extension service to area gardeners.

AIRS - Aerospace Science

AIRS A101 Foundations of the United States Air Force I 1 CR
Contact Hours: 1 + 0
Corequisite: AIRS A150.
Introduces basic military concepts. Covers key events in US Air Force history, military customs and courtesies, ethics, and communication skills.

AIRS A102 Foundations of the United States Air Force II 1 CR
Contact Hours: 1 + 0
Corequisite: AIRS A150.
Describes the organization structure of Air Force major commands and operational wings. Covers facilities and services available at Air Force installations. Introduces Air Force writing formats.

AIRS A136 Introduction to Horticulture 3 CR
Contact Hours: 3 + 0
Corequisite: AIRS A150.
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 A137 Organic Gardening 1-3 CR
Contact Hours: 1-3 + 0
Grade Mode: Pass/No Pass.
Builds upon previous (AIRS A201) coursework and examines the evolution of air and space combat technology, doctrine, and practice from the early 1960s to the present.

AIRS A141 Home Greenhouse Gardening 1 CR
Contact Hours: 1 + 0
Prerequisites: AIRS A301.
Registration Restrictions: Departmental approval
Corequisite: AIRS A150.
Special Note: This is a mandatory course for students seeking an Air Force officer 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 A150 US Air Force Leadership Laboratory 1 CR
Contact Hours: 0 + 4
Registration Restrictions: Students must be enrolled in AFROTC academic classes unless they have completed all ROTC academic courses for program completion.
Corequisites are AIRS A101 or AIRS A102 or AIRS A201 or AIRS A202 or AIRS A301 or AIRS A302 or AIRS A401 or AIRS A402.
Grade Mode: Pass/No Pass.
Special Note: This is a required course for Air Force ROTC students seeking an officer's commission. Students must be eligible for military service to take this course.
Provides practical leadership experience and military training to Air Force ROTC cadets. Includes field trips to different Air Force bases and requires weekly physical fitness training, marching and leadership exercises.

AIRS A201 Evolution of Air and Space Power I 2 CR
Contact Hours: 2 + 0
Corequisite: AIRS A150.

AIRS A202 Evolution of Air and Space Power II 2 CR
Contact Hours: 2 + 0
Corequisite: AIRS A150.

AIRS A301 US Air Force Leadership and Management I 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Departmental approval
Corequisite: AIRS A150.
Special Note: This is a mandatory course for students seeking an Air Force officer 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 A302 US Air Force Leadership and Management II 3 CR
Contact Hours: 3 + 0
Prerequisites: AIRS A301.
Registration Restrictions: Departmental approval
Corequisite: AIRS A150.
Special Note: This is a mandatory course for students seeking an Air Force officer 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 A302.
Registration Restrictions: Departmental approval
Corequisite: AIRS A150.
Special Note: This is a mandatory course for students seeking an Air Force officer commission. 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.
Registration Restrictions: Departmental approval
Corequisite: AIRS A150.
Special Note: This is a mandatory course for students seeking an Air Force officer commission. Outlines US national security goals, commitments and issues in the Middle East, Latin America and the former Soviet Union. Analyzes non-traditional military operations and covers various personnel, legal and leadership topics.
### 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](http://www.uaa.alaska.edu/native)

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**Course Attributes:** UAA GER Humanities Requirement.

**Special Fees:**

- **Introduction to reading and writing Central Yup'ik for students with oral proficiency in the Tlingit language. Students will be introduced to alphabet and phonetic classification, dialects, and a history of the Central Yup'ik writing system.**
- **Enhances cross-cultural perspectives.**

**Registration Restrictions:**

- Fluency in Central Yup'ik and instructor approval required.
- May be stacked with: AKNS A102A.

**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.

**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.

**Registration Restrictions:**

- Fluency in Alaska Native language and instructor approval required. Must be same language as AKNS A101C.
- May be stacked with: AKNS A102C.

**Registration Restrictions:**

- Prior exposure to spoken Alutiiq and instructor permission.
- students with some listening comprehension and verbal skills in Alutiiq. Students will be introduced to alphabet and phonetic classification, dialects, and a history of the Alutiiq writing system. Enhances cross-cultural perspectives.

**Crosslisted with:**

- DNCE A146.

**Special Fees:**

- May be repeated for up to 8 credits.
- beginning class in Alaska Native dance techniques involving movement, sounds/vocal music, and storytelling. Historical, cultural, and aesthetic context of dances stressed throughout class.

**Course Attributes:** UAA GER Humanities Requirement.

**Prerequisites:**

- AKNS A201.
- MUS A111 recommended.
- AKNS A201 or MUS A111 recommended.
- AKNS A201 or MUS A111 recommended.
- AKNS A201 or MUS A111 recommended.
- AKNS A201 or MUS A111 recommended.

**Registration Restrictions:**

- Fluency in Alaska Native languages and culture.
- Registration Restrictions: Fluency in Alaska Native language and instructor approval required. Must be same language as AKNS A101C.
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- Fluency in Alaska Native language and instructor approval required. Must be same language as AKNS A101C.

**Crosslisted with:**

- DNCE A146.

**Special Fees:**

- AKNS A201.
- MUS A111 recommended.
- AKNS A201 or MUS A111 recommended.
- AKNS A201 or MUS A111 recommended.
- AKNS A201 or MUS A111 recommended.

**Registration Restrictions:**

- Fluency in Alaska Native language and instructor approval required. Must be same language as AKNS A101C.
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- Fluency in Alaska Native language and instructor approval required. Must be same language as AKNS A101C.

**Special Fees:**

- Introduction to Alaska Native perspectives on kinship, time, philosophy, symbolism, spirituality, communication, justice, oral traditions, storytelling, material culture, and the relationship to the environment. Students will become familiar with the diversity of Alaska Native peoples, languages, and worldviews and how these influence contemporary and global issues.

**Crosslisted with:**

- MUS A215.

**Special Fees:**

- AKNS A201 or MUS A111 recommended.
- AKNS A201 or MUS A111 recommended.
- AKNS A201 or MUS A111 recommended.
- AKNS A201 or MUS A111 recommended.

**Registration Restrictions:**

- Fluency in Alaska Native languages and culture.
- Fluency in Alaska Native languages and culture.
- Fluency in Alaska Native languages and culture.
- Fluency in Alaska Native languages and culture.

**Special Fees:**

- AKNS A201 or MUS A111 recommended.
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**Registration Restrictions:**

- Fluency in Alaska Native languages and culture.
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- Fluency in Alaska Native languages and culture.
- Fluency in Alaska Native languages and culture.

**Special Fees:**

- Introduction to reading and writing Alutiiq language for students with some listening comprehension and verbal skills in Alutiiq. Students will be introduced to alphabet and phonetic classification, dialects, and a history of the Alutiiq writing system. Enhances cross-cultural perspectives.

**Registration Restrictions:**

- Prior exposure to spoken Alutiiq and instructor permission.
- students with some listening comprehension and verbal skills in Alutiiq. Students will be introduced to alphabet and phonetic classification, dialects, and a history of the Alutiiq writing system. Enhances cross-cultural perspectives.

**Crosslisted with:**

- DNCE A146.

**Special Fees:**

- May be repeated for up to 8 credits.
- Introduction to reading and writing Alutiiq language for students with some listening comprehension and verbal skills in Alutiiq. Students will be introduced to alphabet and phonetic classification, dialects, and a history of the Alutiiq writing system. Enhances cross-cultural perspectives.

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- Prior exposure to spoken Alutiiq and instructor permission.
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**Crosslisted with:**

- DNCE A146.

**Special Fees:**

- May be repeated for up to 8 credits.
- Introduction to reading and writing Alutiiq language for students with some listening comprehension and verbal skills in Alutiiq. Students will be introduced to alphabet and phonetic classification, dialects, and a history of the Alutiiq writing system. Enhances cross-cultural perspectives.

**Registration Restrictions:**

- Prior exposure to spoken Alutiiq and instructor permission.
- students with some listening comprehension and verbal skills in Alutiiq. Students will be introduced to alphabet and phonetic classification, dialects, and a history of the Alutiiq writing system. Enhances cross-cultural perspectives.

**Crosslisted with:**

- DNCE A146.

**Special Fees:**

- May be repeated for up to 8 credits.
- Introduction to reading and writing Alutiiq language for students with some listening comprehension and verbal skills in Alutiiq. Students will be introduced to alphabet and phonetic classification, dialects, and a history of the Alutiiq writing system. Enhances cross-cultural perspectives.
AKNS A346  Alaska Native Politics  3 CR
Contact Hours: 3 + 0
Class Standing Restriction: Must be Junior or Senior. Registration Restrictions: Upper-division standing. Crosslisted with: PS 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.

AKNS A411  Tribes, Nations, and Peoples  3 CR
Contact Hours: 3 + 0
Prerequisites: AKNS A201 or PS A102.
Crosslisted with: PS 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.

AKNS A490  Advanced Topics in Alaska Native Studies  1-3 CR
Contact Hours: 1-3 + 0
Prerequisites: AKNS A201.
Registration Restrictions: Upper-division standing Special Fees.
Special Note: Subtitle varies. May be repeated three times for credit with a different subtitle.

Examines topics on contemporary issues in Alaska Native studies at an advanced level. Course can include political, social and historical aspects of Alaska Native people and culture.

AKNS A492  Cultural Knowledge of Native Elders  3 CR
Contact Hours: 3 + 0
Registration Restrictions: AKNS A201 or upper-division standing Special Fees.
Special Note: Students enrolling in this course should have either upper-division class standing with a strong background in the social sciences or appropriate life experience, or a combination of the two prior to enrolling in this course.

This course is offered in a structured setting to provide a hands-on experiential learning encounter for the student. Elders from different Alaska Native cultures will be invited to participate and impart knowledge to the students. The course fosters an appreciation of diversity across cultures, a broader understanding of creative expression, and indigenous worldview.

AKNS A495  Alaska Native Studies Internship  1-3 CR
Contact Hours: 0 + 2-6
Prerequisites: AKNS A201.
Registration Restrictions: Instructor permission, upper division standing and knowledge of Alaska Native issues required.
Special Note: May be repeated for up to 6 credits.

This is designed as a supervised on-campus or off-campus internship which provides an opportunity for students to work in the professional environment of an Alaska Native organization. Students perform significant work and/or research and develop professional skills and networks. The internship requires a formal agreement between the student, the faculty member and the supervisor.

AMT - Aviation Maintenance Technology
Offered through the Community & Technical College
Aviation Complex (AVNC), 2811 Merrill Field Drive, 786-7200
www.uaa.alaska.edu/aviation

AMT A172  Aircraft Publications, Regulations and Records  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Formal acceptance into the AMT certificate or degree program.

Examines the government's involvement in aviation maintenance, and FAA regulations regarding aviation maintenance and approved training programs. Emphasizes the use of maintenance publications, maintenance forms and records, and technicians' privileges and limitations.

AMT A174  Fundamentals of Aircraft Electronics  3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A055.
Corequisite: AMT A174L.

Examines the theory, derivation, and application of basic DC and AC electrical concepts, definitions, and laws. Introduces passive electrical components, electrical sources, AC waveforms, schematic symbols, and electrical wiring diagrams. Explains troubleshooting fundamentals and circuit analysis of both passive and reactive components.

AMT A174L  Fundamentals of Aircraft Electronics Lab  2 CR
Contact Hours: 0 + 5
Prerequisites: MATH A055 and (AMT A170 or concurrent enrollment).
Corequisite: AMT A174.
Special Fees.

Introduces the methods of safe and accurate measurement of DC and AC electrical quantities using basic electrical test equipment. Connecting, testing, and operating a variety of DC and AC circuit components, troubleshooting defective components, observing the characteristics of electrical components in test circuits, and wiring circuits from schematic diagrams.

AMT A175  Drawing and Precision Measurement  2 CR
Contact Hours: 2 + 0
Registration Restrictions: Formal acceptance into the AMT certificate or degree program.

Examines the theory and techniques involved in making and reading aircraft drawings and blueprints. Introduces precision measurement techniques and practice, and the use of blueprint information.

AMT A176  Aircraft Materials and Processes I  2 CR
Contact Hours: 2 + 2
Prerequisites: AMT A170 or concurrent enrollment.
Registration Restrictions: Formal acceptance into the AMT certificate or degree program.
Special Fees.

Introduces aircraft cleaning, corrosion control, materials, and aircraft hardware. Covers the selection of appropriate cleaning chemicals and processes. Describes the identification, selection, and installation of aircraft hardware, fluid lines, and fittings. Examines the performance of aircraft processes such as heat treating and hardness testing.

AMT A177  Reciprocating Engine Theory  2 CR
Contact Hours: 2 + 0
Registration Restrictions: Formal acceptance into the AMT certificate or degree program.

Introduces the theory of operation and construction of the internal combustion engine. Examines the combustion processes, design rationale, cooling and lubrication of internal combustion of reciprocating engines.

AMT A178  Turbine Engine Theory  2 CR
Contact Hours: 2 + 0
Registration Restrictions: Formal acceptance into the AMT certificate or degree program.

Examines the construction and operation of turbine engines. Introduces thrust development and design and environmental factors that influence thrust, along with construction details from inlet to exhaust for representative aircraft turbine engines.

AMT A181  Aircraft Fuel Systems  3 CR
Contact Hours: 3 + 0
Prerequisites: AMT A176.
Corequisite: AMT A181L.

Examines aircraft fuels, fuel/air mixtures, basic fuel systems and fuel metering devices. Introduces the application of fuels, metering systems, tanks, valves, fuel lines, carburetors, fuel injection systems, turbochargers, and superchargers utilized in a variety of modern aircraft.

AMT A181L  Aircraft Fuel Systems Lab  1 CR
Contact Hours: 0 + 3
Prerequisites: AMT A170 and AMT A176.
Corequisite: AMT A181.
Special Fees.

Examines the identification, handling, inspection, servicing, and troubleshooting aircraft fuels, basic fuel systems, and fuel metering devices, including complex aircraft systems, tanks, valves, fuel lines, carburetors, fuel injection systems, turbo-chargers, and superchargers.
Course Descriptions

AMT A185  Aircraft Sheetmetal Structures  3 CR
Contact Hours: 3 + 0
Prerequisites: AMT A176.
Corequisite: AMT A185L.
Introduces sheetmetal, its properties, and uses in fabrication of structural and nonstructural components of aerospace vehicles. Inspection techniques are addressed along with fabrication and repair processes of bending, cutting, forming, drilling, and riveting aluminum sheetmetal parts.

AMT A185L  Aircraft Sheetmetal Structures Lab  2 CR
Contact Hours: 0 + 5
Prerequisites: AMT A170 and AMT A176.
Corequisite: AMT A185.
Special Fees.
Examines the inspection, fabrication, and repair of aircraft sheetmetal structures including the processes of bending, cutting, forming, drilling, and riveting aluminum sheetmetal parts.

AMT A186  Aircraft Non-Destructive Inspection Methods  3 CR
Contact Hours: 2 + 2
Prerequisites: AMT A170.
Special Fees.
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.

AMT A187  Aircraft Reciprocating Engine Overhaul  3 CR
Contact Hours: 3 + 0
Prerequisites: AMT A175 and AMT A177.
Corequisite: AMT A187L.
Introduces the overhaul practices for aircraft internal combustion engines. Includes disassembly, cleaning, non-destructive testing, measurement, lubrication, and assembly of engines.

AMT A187L  Aircraft Reciprocating Engine Overhaul Lab  2 CR
Contact Hours: 0 + 5
Prerequisites: AMT A170 and AMT A175.
Corequisite: AMT A187.
Special Fees.
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.

AMT A272  Aircraft Electrical Hardware and Systems  3 CR
Contact Hours: 2 + 0
Prerequisites: AMT A174 and AMT A174L.
Special Fees.
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.

AMT A273  Aircraft Fluid Power Systems  2 CR
Contact Hours: 2 + 0
Prerequisites: AMT A176.
Corequisite: AMT A273L.
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.

AMT A273L  Aircraft Fluid Power Systems Lab  2 CR
Contact Hours: 0 + 5
Prerequisites: AMT A176.
Corequisite: AMT A273.
Special Fees.
Examines the identification, installation operation, and servicing of fluid power systems and components such as fluids, seals, hoses, tubing, connections, pumps, valves, regulators, filters, reservoirs, and actuators. Analyses of system operation, inspection, and troubleshooting are included for hydraulic, pneumatic, and landing gear systems.

AMT A274  Aircraft Electronic Systems  5 CR
Contact Hours: 5 + 0
Prerequisites: AMT A174.
Corequisite: AMT A274L.
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.

AMT A274L  Aircraft Electronic Systems Lab  1 CR
Contact Hours: 0 + 3
Prerequisites: AMT A174L.
Corequisite: AMT A274.
Special Fees.
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.

AMT A279  Aircraft Turbine Engine Repair and Overhaul  3 CR
Contact Hours: 3 + 0
Prerequisites: AMT A175 and AMT A178.
Corequisite: AMT A279L.
Examination of turbine engine construction details and engine support systems. Examination of operational characteristics and the procedures and practices used to repair or overhaul typical aircraft turbine systems.

AMT A279L  Aircraft Turbine Engine Repair and Overhaul Lab  1 CR
Contact Hours: 0 + 3
Prerequisites: AMT A175 and AMT A178.
Corequisite: AMT A279.
Special Fees.
Examines practices involved in the disassembly, assembly, inspection, and repair of aircraft turbine engines. Emphasizes the use of technical data, appropriate tools and inspection devices along with special safety procedures related to the servicing, operation, and repair of turbine engines.

AMT A282  Aircraft Propeller Systems  1 CR
Contact Hours: 1 + 1
Prerequisites: AMT A177 and AMT A178.
Special Fees.
Examines the installation, operation, inspection, performance testing, and troubleshooting of aircraft propeller systems.

AMT A283  Aircraft Auxiliary Systems  3 CR
Contact Hours: 3 + 0
Prerequisites: AMT A274 and AMT A274L.
Corequisite: AMT A283L.
Examines the operation, maintenance, servicing, and troubleshooting of auxiliary systems on aircraft. Details the environmental control systems (heat, air conditioning, pressurization, oxygen), ice and rain control systems, instrumentation, fire protection, and associated indicating and warning systems of commuter and transport category aircraft.

AMT A283L  Aircraft Auxiliary Systems Lab  1 CR
Contact Hours: 0 + 3
Prerequisites: AMT A274 and AMT A274L.
Corequisite: AMT A283.
Special Fees.
Examines the operation, maintenance, servicing, inspection, and troubleshooting of auxiliary systems on aircraft. Skill building practice is provided in operating, servicing, and troubleshooting systems using system schematics, wiring diagrams, and maintenance information.

AMT A284  Aircraft Electrical Machinery  2 CR
Contact Hours: 2 + 0
Prerequisites: AMT A272.
Corequisite: AMT A284L.
Examines the construction, operation, inspection, servicing, and repair of aircraft electrical components such as electric motors, generators, alternators, voltage controls, magnets, and ignition system components.

AMT A284L  Aircraft Electrical Machinery Lab  2 CR
Contact Hours: 0 + 5
Prerequisites: AMT A272.
Corequisite: AMT A284.
Special Fees.
Application of practices in inspecting, servicing, operation, testing, and repair of electrical components such as electrical motors, DC generators, DC alternators, AC alternators, voltage regulators, reverse current relays, generator and alternator protection devices, magnets, and ignition system components.

AMT A285  Aircraft Bonded Structures  4 CR
Contact Hours: 4 + 0
Prerequisites: AMT A176.
Corequisite: AMT A285L.
Examines the theory of and techniques used in the fabrication, inspection, repair, and finishing of bonded structures, plastics, wood structures, fabric covering, honeycomb structures, and advanced composite structures.
AMT A285L Aircraft Bonded Structures Lab 1 CR
Contact Hours: 0 + 3
Prerequisites: AMT A176.
Corequisite: AMT A285.
Special Fees.
Provides practice in the fabrication, inspection, and repair of bonded structures including plastics, fabric covering, honeycomb structures, advanced composite structures, and painting.

AMT A286 Aircraft Materials and Processes II 2 CR
Contact Hours: 1 + 2
Prerequisites: AMT A176.
Corequisite: AMT A286.
Special Fees.
Examines the theory of and techniques used in the repair of aircraft steel structures, and certain aluminum, magnesium, and titanium components.

AMT 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.

AMT A287L Reciprocating Engine Installation and Operation Lab 2 CR
Contact Hours: 0 + 5
Prerequisites: AMT A181L and AMT A187L.
Corequisite: AMT A287.
Special Fees.
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.

AMT 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.

AMT A289L Turbine Engine Installation and Operation Lab 2 CR
Contact Hours: 0 + 5
Prerequisites: AMT A181L and AMT A279L.
Corequisite: AMT A289.
Special Fees.
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.

AMT 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.

AMT 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 airworthiness. 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.

AMT A369L Airframe Assembly and Inspections Lab 2 CR
Contact Hours: 0 + 5
Prerequisites: AMT A185L and AMT A272.
Corequisite: AMT A369.
Special Fees.
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 airworthiness, recording findings in maintenance records.

ANTH - Anthropology
Offered through the College of Arts and Sciences
Beatrice McDonald Hall (BMH), Room 212, 786-6840
www.uaa.alaska.edu/anthropology

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 culture and history of Alaska Natives. Includes environmental settings, linguistic subdivisions, traditional socioculural 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 Linguistic Anthropology 3 CR
Contact Hours: 3 + 0
Explores languages as communicative interaction and discourse strategies. Discusses multilingualism, sociolinguistics, language change and variation, language endangerment and revitalization, linguistic typologies, folk taxonomies, and kinship in relation to language and culture.

ANTH A211 Fundamentals of Archaeology 3 CR
Contact Hours: 3 + 0
Introduction to basic concepts, theories and methods of archaeology with overview of historical development and major findings. Prepares students for archaeological 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 Women in Cross-Cultural Perspective 3 CR
Contact Hours: 3 + 0
Surveys women in a cross-cultural perspective, exploring the nature of the relationship between gender and sex roles.

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
Prerequisites: ANTH A211.
Traces human cultural developments in the New World north of Mexico up to the time of European contact.
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 ethnographic documents.

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
Prerequisites: ANTH A202 or ANTH A211.
Cultural traditions of South American peoples, including origins, prehistory, languages, biological and cultural affinities, 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 affinities, major migrations and selected current issues.

ANTH A334 Culture and Ecology 3 CR
Contact Hours: 3 + 0
Prerequisites: ANTH A202 and ENVI A212.
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; ethnology 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
Prerequisites: ANTH A210 or LING A101.
Study of the relationship between language and culture. Includes language variation, meaning in culture, taxonomies and phonemic principles.

ANTH A365 Modern Human Biological Diversity 3 CR
Contact Hours: 3 + 0
Prerequisites: ANTH A205.
Special Note: STAT A253 strongly recommended.
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
Prerequisites: ANTH A202.
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 A211.
Special Note: ANTH A434 strongly recommended.
Critical analysis of the literature concerning the origins of the first Americans, the timing and nature of the earliest migrations across the Bering Land Bridge, and the adaptations developed by early peoples in the Americas from 14,000 to 10,000 years ago. 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.
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.
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.

ANTH A427 Ethnohistory of Alaska Natives 3 CR
Contact Hours: 3 + 0
Prerequisites: ANTH A200.
May be stacked with: ANTH A627.
Examines major changes in Alaskan Native societies from initial contact to 1940, through the integration of archaeological evidence, oral traditions, historical narratives and governmental documents.

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 A200 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.

ANTH A430 Research Methods in Cultural Anthropology 3 CR
Contact Hours: 3 + 0
Prerequisites: ANTH A202.
May be stacked with: ANTH A630.
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.
ANTH A431 Field Methods in Archaeology 1-8 CR
Contact Hours: 0 + 3-24
Prerequisites: ANTH A211. May be stacked with: ANTH A631. Special Fees. Special Note: May be repeated once for credit.

Introduction to basic techniques of archaeological survey and excavation, including archaeological data recovery and recording techniques, initial laboratory processing, and preliminary analysis of archaeological materials.

ANTH A432 Hunting and Gathering Societies 3 CR
Contact Hours: 3 + 0
Prerequisites: ANTH A202. 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.

ANTH A434 Peoples and Cultures of Northeast Asia 3 CR
Contact Hours: 3 + 0
Prerequisites: ANTH A101 or ANTH A202. Special Note: ANTH A211 is recommended. 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 affiliations, historical transformations, contemporary cultures, and current problems.

ANTH A435 Northwest Coast Cultures 3 CR
Contact Hours: 3 + 0
Prerequisites: ANTH A200. Indigenous peoples and cultures of the Northwest Coast, including prehistory, regional variations, key institutions (potlatch, art, slavery, spirituality, warfare), cultural history, ethnohistoric change and contemporary issues such as cultural revitalization, land and resources rights, and self-determination.

ANTH A436 Aleut Adaptations 3 CR
Contact Hours: 3 + 0
Prerequisites: ANTH A200. Intensive study of traditional and post-contact Aleut (Unangan) culture. Includes origins, prehistory, biological and cultural adaptations. Also considers contemporary Aleut social, economic and political status.

ANTH A437 Eskimo Adaptations 3 CR
Contact Hours: 3 + 0
Prerequisites: ANTH A200. Addresses peoples of the Arctic coastal areas of Alaska and Canada whose traditional languages are of the Inuit-Unangan language family. Students will learn about public debates over the use of the word “Eskimo” and other terms. Focuses on the Inuit and Yup’ik language areas, including the Kalaallit (Greenlanders).

ANTH A438 Tlingit and Haida Adaptations 3 CR
Contact Hours: 3 + 0
Prerequisites: ANTH A200 or ANTH A435. Comparative analysis of Tlingit and Haida adaptations to the north Pacific Coast including ecological, social, ceremonial, political and cultural characteristics over the period from prehistoric emergence to contemporary conditions in Alaska and British Columbia.

ANTH A439 Athabaskan Adaptations 3 CR
Contact Hours: 3 + 0
Prerequisites: ANTH A200. Traditional and contemporary northern Athabaskan cultures and their history in Alaska and Canada, with relevant information pertaining to Athabascans of the Pacific Northwest. Emphasis on environmental adaptations, commonalities and variations in cultural patterning, the impact of interactions with neighboring peoples and Europeans, and culture changes over time.

ANTH A445 Evolution of Humans and Disease 3 CR
Contact Hours: 3 + 0

ANTH A455 Medical Anthropology 3 CR
Contact Hours: 3 + 0
Prerequisites: ANTH A202 or ANTH A205. May be stacked with: ANTH A655. Special Note: 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 A457 Food and Nutrition: An Anthropological Perspective 3 CR
Contact Hours: 3 + 0
Prerequisites: ANTH A202 or ANTH A205. May be stacked with: ANTH A657. 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, gender, ideology and socioeconomic status.

ANTH A460 Peace, War, and Violence: An Anthropological Perspective 3 CR
Contact Hours: 3 + 0
Prerequisites: ANTH A202. Special Note: ANTH A211 recommended. A critical evaluation of the archeological and ethnographic record concerning violence, warfare, and peace-making both within and between human societies. Biological, ecological, cultural, and psychological theories of violence and warfare are considered, and the consequences of violence and warfare for human societies are assessed. Various social, political, symbolic, and ritual contexts for both peace-making and legitimization of individual and group violence are considered. Levels and types of violence in band, tribal, chiefdom, and state-level societies are considered, including ethnocide, genocide, and terrorism in contemporary global conflicts.

ANTH A470 Landscape Archaeology 3 CR
Contact Hours: 3 + 0
Prerequisites: ANTH A211. Archaeological approaches to the concepts, theories and methods of landscape archaeology, a field that engages with the diverse meanings of landscape from specific land tracts and expansive vistas to different ways of seeing the world. Course tracks historical developments and reviews core archaeological contributions to the study of space and place.

ANTH A475 Archaeological Surveying and Illustration 4 CR
Contact Hours: 2 + 4
Prerequisites: ANTH A211. Registration Restrictions: ANTH A375 recommended. Instructor permission. Special Fees. Practical instruction in archaeological mapping and in publication-quality illustration of archaeological data using hand-drawn and computer-aided techniques.

ANTH A476 Ethical Issues in Archaeology 3 CR
Contact Hours: 3 + 0
Prerequisites: ANTH A211. May be stacked with: ANTH A676. Examination of the ethical issues that confront archaeologists, and the responsibilities they have to the public, the discipline, their colleagues, and member of the cultures with whom they are working.

ANTH A480 Analytical Techniques in Archaeology 3 CR
Contact Hours: 0 + 9
Prerequisites: ANTH A211. May be stacked with: ANTH A680. Special Fees. Methods and techniques of description, classification and analysis of archaeological data. Laboratory work with archaeological specimens and data is emphasized.

ANTH A481 Museum Studies in Anthropology 3 CR
Contact Hours: 3 + 0
Prerequisites: ANTH A202 or ANTH A205 or ANTH A211. Registration Restrictions: Six credits of Anthropology and/or museum studies. May be stacked with: ANTH A681. 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 A482 Historical Archaeology 3 CR
Contact Hours: 3 + 0
Prerequisites: ANTH A211. Special Note: Offered as Demand Warrants. An examination of the field of historical archaeology, the place of historical archaeology within the larger discipline of anthropological archaeology, the history of research on historical sites, the nature of historical data, the uses of non-documentary historical data, and ethnoarchaeology.
Course Descriptions

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
Major Restriction: Must be Anthropology major. Level Restriction: Must be Graduate - UAA level. Registration Restrictions: Admission to the UAA Anthropology MA program. Special Fees.
Advanced examination of the major theories, concepts and findings in contemporary cultural anthropology covering topics such as materialism, social structure, power, symbols, practice, cognition and postmodem views as well as postcolonial and indigenous critiques and ethical concerns.

ANTH A605 Proseminar in Biological Anthropology 3 CR
Contact Hours: 3 + 0
Prerequisites: ANTH A205. Level Restriction: Must be Graduate - UAA level. Registration Restrictions: Graduate standing; admission to the UAA Anthropology MA program. Special Fees.
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
Major Restriction: Must be Anthropology major. Level Restriction: Must be Graduate - UAA level. Registration Restrictions: Admission to the UAA Anthropology MA program. Special Fees.
Survey of theoretical approaches and practice in contemporary archaeology, including archaeological data analysis and interpretation. Includes case studies, class discussions based on readings and student presentations.

ANTH A615 Advanced Applied Anthropology 3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level. Registration Restrictions: Graduate standing. May be stacked with: ANTH A415. Special Fees.
Special Note: 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.
Relates to the methods, theory and history of application of cultural anthropology to sociocultural issues and problems with an emphasis on the circumpolar north.

ANTH A620 Research Design 3 CR
Contact Hours: 3 + 0
Prerequisites: ANTH A602 and ANTH A605 and ANTH A611. Level Restriction: Must be Graduate - UAA level. Registration Restrictions: Graduate standing; admission to the UAA Anthropology MA program Special Fees.
Method and theory of research design as applied to thesis research. Class covers developing a research question, conducting a literature review, and writing a thesis prospectus.

ANTH A627 Ethnohistory of Alaska Natives 3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level. 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. Not available to students who have taken ANTH A427.
Examines major changes in Alaskan Native societies from initial contact through 1940, through the integration of archaeological evidence, oral traditions, historical narratives and governmental documents.

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.
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
Prerequisites: ANTH A211. Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing. 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.
Advanced techniques of archaeological survey and excavation, including archaeological data recovery and recording techniques, initial laboratory processing, and preliminary analysis of archaeological materials.

ANTH A645  Advanced Evolution of Humans and Disease  3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
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 required to pursue a major research project, to deliver a presentation of their research findings to the class, and to report their results in written form. Not available to students who have taken ANTH A445.
Methods, techniques and theoretical approaches to the evolution of human response to disease and evolution of disease response to humans. Interrelationships of human behavior, biology and disease.

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 A445, 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, interrelationships between biology and culture, alternative health systems, and applicability to contemporary problems.

ANTH A657  Nutritional Anthropology  3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
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, and to submit an extensive, detailed paper summarizing their findings in a rigorous analytical framework. Additional class readings may also be assigned. Not available to students who have completed ANTH A457.
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, gender, ideology and socioeconomic status.

ANTH A675  Cultural Resource Management  3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing. Special Fees.
An integrated anthropological perspective on historic preservation and the management of cultural resources in the United States. Includes the history of resource protection legislation, the design and implementation of cultural resource management projects, and applications of relevant cultural resource laws, including ethical issues.

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
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing. May be stacked with: ANTH A480.
Special Fees.
Special Note: In addition to meeting all requirements for ANTH A480, graduate students will be required to pursue a major research project, to deliver a presentation of their research findings to the class, and to report their results in written form.
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
Level Restriction: Must be Graduate - UAA level.
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.
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
Level Restriction: Must be Graduate - UAA level.
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 fauna.

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 A695 Anthropology Practicum 3 CR
Contact Hours: 0 + 9
Prerequisites: (ANTH A615 or concurrent enrollment) or (ANTH A675 or concurrent enrollment).
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Admission to the UAA Anthropology MA program.
Special Fees.
Special Note: The ANTH A615 prerequisite is designated for the Applied Cultural track in the Anthropology MA program, while the ANTH A675 prerequisite is designated for the Applied Archaeology (Cultural Resource Management) track in the Anthropology MA program.
Anthropology practicum in the public or private sector. Emphasis on the application of anthropological skills under the supervision of a professional anthropologist.

ANTH A698 Individual Research 1-9 CR
Contact Hours: 0 + 3-27
Prerequisites: ANTH A602 and ANTH A605 and ANTH A611.
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing; admission to the UAA Anthropology MA program and completion of non-thesis course requirements.
Grade Mode: Pass/No Pass.
Special Fees.
Special Note: Only 3 course credits can be used to fulfill minimum 30 credit hour requirements for graduation. Course cannot be taken until other required non-thesis coursework is completed.
Supervised field, laboratory, and/or library research that precedes thesis writing.

ANTH A699 Thesis Research 1-6 CR
Contact Hours: 0 + 3-18
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Admission to the UAA Anthropology MA program; advancement to candidacy and permission of thesis chair required.
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
www.uaa.alaska.edu/art

ART A100 Two-Dimensional Activities (Topics in Drawing, Design, or Painting) 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 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 (3-D Materials and Techniques) 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 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 (Topics in Fibers, Basketry, Weaving or Papermaking) 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 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 (Topics in Printmaking, Photography and Digital Arts) 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 in printmaking, photography, and digital arts may be offered to introduce possible areas for future concentrated study. Recommended for students seeking initial exposure to studio arts.

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, ART A305 and ART 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 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: 1 + 4
Special Fees.
Special Note: Does not apply to BA/BFA Art degrees.
Overview of history and concepts of stained glass and the application of techniques and design principles of stained glass. Development of flat and/or 3-D copper foil stained glass pieces of art.

ART A180B Intermediate Stained Glass 1 CR
Contact Hours: 0 + 2
Prerequisites: ART A180A.
Special Fees.
Special Note: Does not apply to the BA/BFA Art degrees.
Overview of contemporary history and concepts of stained glass and the application of techniques and design principles of stained glass. Development of flat and/or 3-D copper foil stained glass pieces of art.

ART A201 Beginning Handbuilt Ceramics 3 CR
Contact Hours: 0 + 6
May be stacked with: ART A301 and ART 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 ART 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 with minimum grade of C. Special Fees.
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 and ENGL A111 with minimum grade of C. 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, ART A305 and ART 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 Metalsmithing and Jewelry  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A105. May be stacked with: ART A309 and ART A409. Special Fees, Special Note: May be repeated once for credit with substantive changes in media or emphasis.
Introduction to the basic techniques, tools, 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 ART 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
Prerequisites: ART A105 with minimum grade of C. 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, ART A413 and ART 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 A111. May be stacked with: ART A315 and ART 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 A272  Beginning Fiber Structures  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A105.
May be stacked with: ART A327 and ART A472.
Special Fees.
Introduction to hand-constructed 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 ART A473.
Special Fees.
Special Note: May be repeated once for credit with substantive change in media or emphasis.

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.

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 ART 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 ART 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 and ENGL A111 with minimum grade of C.
Special Fees.

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 and ENGL A111 with minimum grade of C.
Special Fees.

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, ART A205 and ART 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 ART 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 ART 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  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A212.
May be stacked with: ART 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 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, ART A413 and ART 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 A315  Intermediate Printmaking  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A215.
Registration Restrictions: Instructor permission.
May be stacked with: ART A215 and ART 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.

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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 a 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.
Registration Restrictions: Instructor permission.
May be stacked with: ART A452.
Special Fees.
Special Note: May be repeated once for credit.
Projects focusing on applied creative approaches 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: ENGL A111 with minimum grade of C.
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: ENGL A111 with minimum grade of C.
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 and ENGL A111 with minimum grade of C.
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 and ENGL A111 with minimum grade of C.
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 and ENGL A111 with minimum grade of C.
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 and ENGL A111 with minimum grade of C.
Special Fees.
Italian Renaissance art from the early Florentine period through the High Renaissance and Mannerist periods.

ART A366  Asian Art  3 CR
Contact Hours: 3 + 0
Prerequisites: ART A262 and ENGL A111 with minimum grade of C.
Special Fees.
Visual arts of Asian culture, prehistoric to the present.

ART A367  History of Photography  3 CR
Contact Hours: 3 + 0
Prerequisites: ART A262 and ENGL A111 with minimum grade of C.
Special Fees.
Investigates the history of photography: its origins, chronology, cultural context, and the significant contributions of individual photographers.

ART A370  Intermediate Alaska Native Art  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A270.
May be stacked with: ART A270.
Special Fees.
Workshops and presentations by visiting elders/artists will be used to explore the unique methods of indigenous production and the cultural heritage of the visiting elder/artist to their projects as a point of departure to develop a personal aesthetic and creative approach to making carved objects.

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 ART 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 Tirit) 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 ART 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 ART 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. 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
Prerequisites: ENGL A111 with minimum grade of C.
Registration Restrictions: Instructor permission. Prerequisites will vary depending upon topic.
Special Fees. Special Note: May be repeated for credit in different studio topics for a maximum of 9 credits. Special Note: May be repeated once for credit.
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 ART 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 ART 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 and ENGL A111 with minimum grade of C.
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 and ENGL A111 with minimum grade of C.
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 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, ART A205 and ART 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 ART 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 ART 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  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A312.
May be stacked with: ART A312.
Special Fees. Special Note: May be repeated once for credit with substantive change in media or emphasis. 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, ART A313 and ART 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, ART A313 and ART 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 A315.
Registration Restrictions: Instructor permission.
May be stacked with: ART A215 and ART 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.
Registration Restrictions: Instructor permission.
May be stacked with: ART A352.
Special Fees.
Special Note: May be once repeated for credit.

Applied, creative and collaborative projects in 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 ART 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 ART 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 A261 and ART A262 and ENGL A111 with minimum grade of C 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.

Integrates applied knowledge and professional technical practices of visual artists. Develops the necessary communication skills to be a practicing artist. Employs effective art historical, aesthetic and critical tools to resolve and assess creative problem-solving approaches.

ART A492 Art History Seminar 3 CR
Contact Hours: 3 + 0
Prerequisites: [ART A261 or ART A262 or ART A360A or ART A360B] and ENGL A111 with minimum grade of C.

Registration Restrictions: Instructor permission
Special Fees.

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 A496 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.

Major Restriction: Must be Art major.
Registration Restrictions: Declared major in BFA in Art and approval of BFA committee.
Grade Mode: Pass/No Pass.
Special Note: Offered spring semester only.

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 4 CR
Contact Hours: 4 + 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.
ASTR A102  Elementary American Sign Language II  4 CR
Contact Hours: 4 + 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.

ASTR A201  Intermediate American Sign Language I  4 CR
Contact Hours: 4 + 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 proficiency for effective communication at the intermediate level. Students critically examine diverse cultural perspectives. Course conducted in American Sign Language.

ASTR A202  Intermediate American Sign Language II  4 CR
Contact Hours: 4 + 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
www.uaa.alaska.edu/physicsandastronomy

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.
Crosslisted with: 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/aviation

AT A053  Preventive Maintenance for Pilots and Owners  1-4 CR
Contact Hours: 0.5-2 + 2-8
Grade Mode: Pass/No Pass.
Special Fees.
For pilots/owners to gain knowledge and experience in items of aircraft and engine maintenance that they may legally perform. Beneficial to people who intend to buy airplanes.

AT A272  Aircraft Covering and Finishing  4 CR
Contact Hours: 2 + 6
Grade Mode: Pass/No Pass.
Special Fees.
Identification and application of aircraft fabrics and finishing materials. Approximately 80 percent of class time spent in lab. Students inspect, test, and repair aircraft fabrics, install fabric, and apply appropriate finishing materials to aircraft structures, wings, and flight control surfaces.

AT A281  Aviation Maintenance: 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 - Aviation Administration/Management

Offered through the Community & Technical College
Aviation Complex (AVNC), 2811 Merrill Field Drive, 786-7200
www.uaa.alaska.edu/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 (1903-1945) 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  
courses. 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  
functions and sleep, fitness and performance, vision and visual illusions,  
motivation and speech, attitudes and persuasion, training and training devices,  
documentation, displays and controls, space and layout, the aircraft cabin and its  
human payload.  
Prerequisites: ATA A102 and ATA A134.  
Registration Restrictions: Junior standing.

ATA A335  Airport Operations  3 CR  
Contact Hours: 3 + 0  
Prerequisites: ATA A102 and ATA A134.  
Registration Restrictions: Junior standing.

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.

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.

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/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, phrasing, and radio frequencies used in air-ground  
communications. Presents decoding of civil Notice to Airmen (NOTAMS) and  
operating positions in Flight Service Stations.
### Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<th>Prerequisites</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>ATC A241</strong></td>
<td>Control Tower Operations</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0</td>
<td>Prerequisites: ATC A143 and ATC A147. Explains operating techniques of ATC airport facilities in visual and instrument conditions. Includes operations of airport lighting systems, proper phraseology, separation requirements, control techniques and emergency actions.</td>
<td></td>
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</tr>
<tr>
<td><strong>ATC A241L</strong></td>
<td>Control Tower Operations Lab</td>
<td>0 CR</td>
<td>Contact Hours: 0 + 2</td>
<td>Prerequisites: ATC A241 or concurrent enrollment. Grade Mode: Pass/No Pass. Special Fees:</td>
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</tr>
<tr>
<td><strong>ATC A242</strong></td>
<td>ATC Terminal Radar Procedures</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0</td>
<td>Prerequisites: ATC A143 and ATC A144 and ATP A235. Emphasizes RADAR theory fundamentals and systems operation in air traffic control. Examines procedures of instrument traffic control in the terminal radar environment.</td>
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</tr>
<tr>
<td><strong>ATC A242L</strong></td>
<td>ATC Terminal Radar Procedures Lab</td>
<td>0 CR</td>
<td>Contact Hours: 0 + 2</td>
<td>Prerequisites: ATC A242 or concurrent enrollment. Grade Mode: Pass/No Pass. Special Fees:</td>
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</tr>
<tr>
<td><strong>ATC A243</strong></td>
<td>ATC Enroute Procedures</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0</td>
<td>Prerequisites: ATC A242. Explores procedures of instrument traffic control in RADAR and non-RADAR environments. Emphasizes longitudinal, vertical, and lateral separation of air traffic.</td>
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<tr>
<td><strong>ATC A243L</strong></td>
<td>ATC Enroute Procedures Lab</td>
<td>0 CR</td>
<td>Contact Hours: 0 + 2</td>
<td>Prerequisites: ATC A243 or concurrent enrollment. Grade Mode: Pass/No Pass. Special Fees:</td>
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<tr>
<td><strong>ATC A250</strong></td>
<td>Comprehensive Air Traffic Control Overview</td>
<td>2 CR</td>
<td>Contact Hours: 2 + 0</td>
<td>Prerequisites: ATC A241 with minimum grade of C and ATC A242 with minimum grade of C and ATC A243 with minimum grade of C and ATP A235 with minimum grade of C. Integrates concepts from all previous air traffic control classes, and examines the relationship between course material and occupational application. Contrasts academic and vocational use of knowledge, and prepares students to apply knowledge in the vocational setting.</td>
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<tr>
<td><strong>ATC A325</strong></td>
<td>Tools for Weather Briefing</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0</td>
<td>Prerequisites: ATC 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.</td>
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<tr>
<td><strong>ATC A355</strong></td>
<td>Integrated Radar Techniques</td>
<td>3 CR</td>
<td>Contact Hours: 2 + 2</td>
<td>Prerequisites: ATC A242 with minimum grade of C and ATC A242L with minimum grade of C and ATC A243 with minimum grade of C and ATC A243L with minimum grade of C. Special Fees:</td>
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<tr>
<td><strong>ATC A440</strong></td>
<td>Facility Operation and Administration</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0</td>
<td>Prerequisites: BA A361 and BA A461. Emphasizes effective operation and administration of air traffic service (ATS) facilities and conflict resolution between FAA instructions and the terms of a labor union contract. Evaluates current issues and events, and their potential impact on the National Airspace System.</td>
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### ATP - Aviation - Professional Piloting

**Offered through the Community & Technical College**

**Aviation Complex (AV/NC), 2811 Merrill Field Drive, 786-7200**

**www.uaa.alaska.edu/aviation**

<table>
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<tr>
<th>Course Code</th>
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</tr>
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<tbody>
<tr>
<td><strong>ATP A100</strong></td>
<td>Private Pilot Ground School</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0</td>
<td>Prerequisites: ENGL A109 with minimum grade of C or ENGL A111 or ENGL A211 or ENGL A212 or ENGL A213 or ENGL A214 or PRPE A108 with minimum grade of C 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 Critical Reading Score with score of 530 or SAT Verbal Score with score of 530 or SAT Verbal with score of 530 and [MATH A054 with minimum grade of C or MATH A055 or MATH A105 or MATH A107 or MATH A108 or MATH A109 or MATH A172 or MATH A200 or MATH A201 or MATH A202 or MATH A272]; Special Fees:</td>
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<tr>
<td><strong>ATP A101</strong></td>
<td>Pre-Professional Flying</td>
<td>2 CR</td>
<td>Contact Hours: 1 + 2</td>
<td>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:</td>
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<tr>
<td><strong>ATP A104</strong></td>
<td>Flying Alaska Bush</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0</td>
<td>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.</td>
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<tr>
<td><strong>ATP A116</strong></td>
<td>Instrument Ground School</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0</td>
<td>Registration Restrictions: FAA Private Pilot Certificate or equivalent. Special Fees:</td>
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<tr>
<td><strong>ATP A116</strong></td>
<td>Instrument Ground School</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0</td>
<td>Registration Restrictions: FAA Private Pilot Certificate or equivalent. Special Fees:</td>
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<tr>
<td><strong>ATP A126</strong></td>
<td>Instrument Flying</td>
<td>2 CR</td>
<td>Contact Hours: 1 + 2</td>
<td>Prerequisites: ATP A101 and (ATP A116 or concurrent enrollment). Registration Restrictions: Meet course prerequisites or Private Pilot Certificate. Departmental approval required. Special Fees:</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ATP A200</strong></td>
<td>Commercial Ground School</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0</td>
<td>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).</td>
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</tbody>
</table>

For more information, visit [www.uaa.alaska.edu/aviation](http://www.uaa.alaska.edu/aviation)
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
Prerequisites: ATP A218.
Registration Restrictions: 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 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 A225 Tailwheel Airplane Transition 1 CR
Contact Hours: 1 + 0
Prerequisites: ATP A220 with minimum grade of C.
Special Note: Open entry - Open exit.
Intended for pilots wishing to transition from tricycle gear airplanes to tailwheel airplanes.

ATP A231 Search, Survival, and Rescue 3 CR
Contact Hours: 3 + 0
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 A116.
Examines the earth's surface and mapping methods, Low, High and International En Route navigation and approach charts. Also examines advanced navigation and flight display systems technology, the theory and operation of Global Positioning System (GPS) and Automatic Dependent Surveillance-Broadcast (ADS-B) navigation equipment. Course also looks at future trends in aeronautical navigation.

ATP A235 Elements of Weather 3 CR
Contact Hours: 3 + 0
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: Departmental approval required.
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).

ATP A301 CFI Flying 2 CR
Contact Hours: 1 + 2
Prerequisites: ATP A220 and (ATP A300 or concurrent enrollment).
Registration Restrictions: FAA Commercial Pilot Certificate with Instrument Rating or equivalent. Departmental approval required. Special Fees.
Special Note: Open entry, open exit.
Fulfills Federal Aviation Administration (FAA) flight training requirements for obtaining a Certified Flight Instructor (CFI) certificate under Federal Aviation Regulations (FAR) Part 141.

ATP A305 Airplane Multiengine Land Rating 2 CR
Contact Hours: 1 + 2
Prerequisites: ATP A220 or concurrent enrollment.
Registration Restrictions: Department approval required. Special Note: Open entry, open exit.
Provides flight instruction for Professional Piloting students seeking the Federal Aviation Administration (FAA) Airplane Multiengine Land Rating.

ATP A320 Flight Dynamics 3 CR
Contact Hours: 3 + 0
Prerequisites: ATP A116 with minimum grade of C and ATP A126 with minimum grade of C and ATP A200 with minimum grade of C and ATP A235 with minimum grade of C and [MATH A107 with minimum grade of C or MATH A108 with minimum grade of C or MATH A109 with minimum grade of C or MATH A172 with minimum grade of C or MATH A200 with minimum grade of C or MATH A201 with minimum grade of C or MATH A202 with minimum grade of C or MATH A227 with minimum grade of C].
Class Standing Restriction: Must be Junior or Senior.
Registration Restrictions: Junior or Senior standing, Departmental approval required.
Describes selected physical and mathematical principles to the analysis and prediction of aircraft performance. Presents general methods for analyzing and predicting aircraft performance in all flight regimes. Builds on knowledge introduced in previous pilot ground and flight courses, aviation weather courses, and science and mathematics courses.

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 A400 ATP Ground School 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Must hold a Commercial Pilot Certificate and comply with FAR Part 61.159.
Evaluates the flight environment to justify the Go/No Go decision. Includes TERPS, ATC procedures, and attitude instrument flying. Covers CR series computer, cross-country flight planning, airplane performance, weight and balance, interpreting high-altitude weather charts and forecasts, and applicable FARs.

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. Department approval required. Special Fees.
Special Note: Open entry/Open exit. Three hours in Flight Training Device required.
Fulfills FAA Flight training requirement for obtaining an Airline Transport Pilot Certificate under FAR Part 141.

ATP A405 Additional CFI Rating 2 CR
Contact Hours: 1 + 2
Registration Restrictions: Certified Flight Instructor Certificate required. Department approval required. Special Note: Open-entry/Open-exit.
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 special fees.
Fulfills transition to turbine powered airplanes using a CE-208 Simulator; describes and analyzes the design, theory, and operation of turbine engines to include associated auxiliary systems and appliances; evaluates system malfunctions and formulates corrective action/s.
### BA - Business Administration

**Offered through the College of Business and Public Policy**  
**Edward & Cathryn Rasmussen Hall (RH), Room 203, 786-4100**  
[www.uaa.alaska.edu/cbpp](http://www.uaa.alaska.edu/cbpp)

Students taking any ACCT, BA, CIS, ECON, LGOP, LOG or PADM course will be charged a single lab fee of $34 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.

<table>
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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>BA A131</td>
<td>Personal Finance</td>
<td>3 CR</td>
<td>Introduces students to personal income and how to define and reach their financial goals. Surveys topics such as stocks, bonds, mutual funds, banking, annuities, insurance, real estate, estate planning, and taxes.</td>
</tr>
<tr>
<td>BA A166</td>
<td>Small Business Management</td>
<td>3 CR</td>
<td>Introduces business planning as a key to successful small business management. Examines practical aspects of management for starting and operating a small business. Assists students in furthering their understanding of personal finance, business planning, marketing, production and business finance.</td>
</tr>
<tr>
<td>BA A215</td>
<td>Introduction to Property Management</td>
<td>3 CR</td>
<td>Prerequisites: MATH A105 with minimum grade of C or MATH A107 with minimum grade of C or MATH A172 with minimum grade of C or MATH A200 with minimum grade of C or MATH A272 with minimum grade of C. Registration Restrictions: UAA-approved mathematics placement test scores may be used in lieu of prerequisites.</td>
</tr>
<tr>
<td>BA A225</td>
<td>Leasing in Property Management</td>
<td>3 CR</td>
<td>Prerequisites: MATH A105 with minimum grade of C or MATH A107 with minimum grade of C or MATH A172 with minimum grade of C or MATH A200 with minimum grade of C or MATH A272 with minimum grade of C. Registration Restrictions: UAA-approved mathematics placement test scores may be used in lieu of prerequisites.</td>
</tr>
<tr>
<td>BA A231</td>
<td>Fundamentals of Supervision</td>
<td>3 CR</td>
<td>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.</td>
</tr>
<tr>
<td>BA A233</td>
<td>Survey of Finance</td>
<td>3 CR</td>
<td>Surveys the discipline of finance. Topics covered are: financial markets, financial institutions, financial statements analysis, time value of money, capital budgeting, and methods of short-term and long-term financing.</td>
</tr>
<tr>
<td>BA A241</td>
<td>Business Law I</td>
<td>3 CR</td>
<td>Crosslisted with: JUST 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.</td>
</tr>
<tr>
<td>BA A242</td>
<td>Business Law II</td>
<td>3 CR</td>
<td>Prerequisites: BA A241 or JUST A241. Crosslisted with: JUST A242. Continuation of Business Law I. Covers topics such as sales and leases, negotiables, debtor-creditor relations, agency, business organizations, and property protection.</td>
</tr>
<tr>
<td>BA A260</td>
<td>Marketing Practices</td>
<td>3 CR</td>
<td>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.</td>
</tr>
<tr>
<td>BA A264</td>
<td>Personal Selling</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0 Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing. Designed for students with or without sales experience. Explores skills all individuals use to sell themselves, goods, services and ideas. Offers opportunities for students to practice selling skills that will help them become better communicators throughout life.</td>
</tr>
<tr>
<td>BA A266</td>
<td>Retailing Management</td>
<td>3 CR</td>
<td>Prerequisites: BA A151 with minimum grade of C. Introduces students to the high-tech, global growth retail industry and its vital economic role in society. Covers retailing topics for brick and mortar retailers and electronic storefronts. Includes retailing strategy, merchandise management and store management.</td>
</tr>
<tr>
<td>BA A273</td>
<td>Introduction to Statistics for Business and Economics</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0 Prerequisites: C5 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.</td>
</tr>
<tr>
<td>BA A290A</td>
<td>Alaska Native Business Practices</td>
<td>1-3 CR</td>
<td>Special Note: Subtitle varies. May be repeated for credit with a different subtitle. Introducory examination of topics and issues in Alaska Native business practices. Prominent leaders from the Native community are brought into direct classroom contact with students to discuss important business issues in rural Alaska and the larger Native community.</td>
</tr>
<tr>
<td>BA A295</td>
<td>Internship in Business Administration</td>
<td>3 CR</td>
<td>Contact Hours: 0 + 9 Registration Restrictions: Permission of faculty internship coordinator and 2.75 GPA. Grade Mode: Pass/No Pass. Special Fees. Special Note: May be repeated more than once for credit, but only 3 credits will apply to 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 an occupational work environment beyond the boundaries of the campus, enhancing self-confidence and career direction.</td>
</tr>
<tr>
<td>BA A300</td>
<td>Organizational Theory and Behavior</td>
<td>3 CR</td>
<td>Registration Restrictions: College of Business and 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>
</tr>
</tbody>
</table>
### Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Contact Hours</th>
<th>Prerequisites</th>
<th>Registration Restrictions</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA A302</td>
<td>Maintenance in Property Management</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>BA A215 with minimum grade of C and BA A225 with minimum grade of C.</td>
<td>College of Business and Public Policy majors must be admitted to upper-division standing.</td>
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<td>Presents numerous elements of property maintenance and the role managers play in operating properties. Topics include hiring practices, contractors and vendors, management, inventory management, preventive maintenance, and customer service. Students shadow property maintenance technicians to gain exposure to the industry’s pace and demand.</td>
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<tr>
<td>BA A303</td>
<td>Property Management Finance</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>BA A215 with minimum grade of C and BA A225 with minimum grade of C.</td>
<td>College of Business and Public Policy majors must be admitted to upper-division standing.</td>
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<td>Examines the basics of finance as it applies to asset management. Topics include real estate investment, budgets, performance measures and property valuations. Provides students with the tools to calculate revenue and expense management figures such as return on investment (ROI), turnover, net operating income (NOI) and cash flow.</td>
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<tr>
<td>BA A306</td>
<td>Real Estate Principles</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>ACCT A201 with minimum grade of C and [BA A131 with minimum grade of C or BA A325 with minimum grade of C] and ECON A201 with minimum grade of C and ECON A202 with minimum grade of C and [MATH A107 with minimum grade of C or MATH A172 with minimum grade of C].</td>
<td>College of Business and Public Policy majors must be admitted to upper-division standing.</td>
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<td>Surveys real estate legal analysis, private and public restrictions on ownership, deeds, title examination, contracts, title closings, leases, brokerage, appraisal, property management, commercial and residential land uses, urban and regional economics, residential and commercial property financing, and mathematical mortgage analysis.</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>ACCT A201 with minimum grade of C and [BA A131 with minimum grade of C or BA A325 with minimum grade of C] and ECON A201 with minimum grade of C and ECON A202 with minimum grade of C and [MATH A107 with minimum grade of C or MATH A172 with minimum grade of C].</td>
<td>College of Business and Public Policy majors must be admitted to upper-division standing.</td>
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<td>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 A201 with minimum grade of C and [BA A131 with minimum grade of C or BA A325 with minimum grade of C] and ECON A201 with minimum grade of C and ECON A202 with minimum grade of C and [MATH A107 with minimum grade of C or MATH A172 with minimum grade of C].</td>
<td>College of Business and Public Policy majors must be admitted to upper-division standing.</td>
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<td>Surveys all aspects of real estate finance. Topics covered are interest rates, mortgages, federal housing policies, secondary mortgage markets, leverage and property valuation, taxation, and real estate in a portfolio context.</td>
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<tr>
<td>BA A325</td>
<td>Corporate Finance</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>BA A273 with minimum grade of C.</td>
<td>College of Business and Public Policy majors must be admitted to upper-division standing.</td>
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<td>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 A343</td>
<td>Principles of Marketing</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>College of Business and Public Policy majors must be admitted to upper-division standing.</td>
<td>College of Business and Public Policy majors must be admitted to upper-division standing.</td>
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<td>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 and Public Policy majors must be admitted to upper-division standing.</td>
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<td>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 with minimum grade of C and [MATH A200 with minimum grade of C or MATH A272 with minimum grade of C].</td>
<td>College of Business and Public Policy majors must be admitted to upper-division standing.</td>
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<td>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 with minimum grade of C and [MATH A200 with minimum grade of C or MATH A272 with minimum grade of C].</td>
<td>College of Business and Public Policy majors must be admitted to upper-division standing.</td>
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<td>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 with minimum grade of C.</td>
<td>College of Business and Public Policy majors must be admitted to upper-division standing.</td>
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<td>Surveys the application of concepts drawn from contemporary behavioral science to concrete business cases and practices. Relevant concepts and tools are applied to problems encountered in marketing to various consumer groups.</td>
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<tr>
<td>BA A385</td>
<td>Intermediate Financial Management</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>BA A325 with minimum grade of C.</td>
<td>College of Business and Public Policy majors must be admitted to upper-division standing.</td>
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<td>Intermediate course in corporate finance utilizing advanced analytical techniques and concepts. Includes multifactor asset pricing models, free cash flow and corporate valuation, capital budgeting risk analysis and real options, capital structure theory, mergers, and corporate bankruptcies.</td>
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<tr>
<td>BA A395</td>
<td>Property Management Internship</td>
<td>3 CR</td>
<td>0 + 9</td>
<td>BA A215 with minimum grade of C and BA A225 with minimum grade of C.</td>
<td>College of Business and Public Policy majors must be admitted to upper-division standing.</td>
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<td>Registration Restrictions: Must be admitted to the BBA program; must be admitted to upper-division standing. Permission of the College of Business and Public Policy faculty internship coordinator; cumulative GPA of 2.75 or higher; 3.00 GPA in major.</td>
<td>Grade Mode: Pass/No Pass. Special Fees. Special Note: May be repeated, but only BBA Management majors with a concentration in Property Management and Real Estate may apply 6 credits to meeting degree requirements.</td>
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<td>Integrates classroom knowledge with supervised work experience in property management and related real estate environment.</td>
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</tbody>
</table>
BA A420  Marketing Research  3 CR  
Contact Hours: 3 + 0  
Prerequisites: BA A343 with minimum grade of C and [BA A375 with minimum grade of C or ECON A312 with minimum grade of C or ECON A429 with minimum grade of C].  
Registration Restrictions: College of Business and 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.

BA A421  Property Management Capstone  3 CR  
Contact Hours: 3 + 0  
Prerequisites: BA A215 with minimum grade of C and BA A225 with minimum grade of C and BA A302 with minimum grade of C and BA A303 with minimum grade of C.  
Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.  
Special Note: Successful completion should prepare students to sit for the National Apartment Association Certified Apartment Manager (CAM) exam.  
An in-depth evaluation of an income property including a property description, regional and neighborhood analysis, market analysis, financial data, suggested alternatives, and final conclusions.

BA A426  Financial Institutions  3 CR  
Contact Hours: 3 + 0  
Prerequisites: BA A325 with minimum grade of C.  
Registration Restrictions: College of Business and 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, savings and loan associations, credit unions, investment companies, pension funds, mutual funds, and endowments.

BA A427  International Finance  3 CR  
Contact Hours: 3 + 0  
Prerequisites: BA A325 with minimum grade of C.  
Registration Restrictions: College of Business and 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.

BA A431  Real Estate Appraisal  3 CR  
Contact Hours: 3 + 0  
Prerequisites: BA A306 with minimum grade of C.  
Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.  
Emphasizes concepts 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.

BA A432  Real Estate Law  3 CR  
Contact Hours: 3 + 0  
Prerequisites: BA A241 with minimum grade of C or JUST A241 with minimum grade of C.  
Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.  
Surveys all aspects of the real estate law. Topics covered are legal system; scope of real property; types of ownership; real estate contracts; title and insurance; financing, closing and taxation; landlord and tenants; and environmental law and regulation.

BA A447  International Marketing  3 CR  
Contact Hours: 3 + 0  
Prerequisites: BA A343.  
Registration Restrictions: College of Business and 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.

BA A451  Advanced Investment Strategies  3 CR  
Contact Hours: 3 + 0  
Prerequisites: BA A380 with minimum grade of C.  
Registration Restrictions: College of Business and 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.

BA A452  Financial Derivatives  3 CR  
Contact Hours: 3 + 0  
Prerequisites: BA A325 with minimum grade of C.  
Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.  

BA A453  Bond Market Analysis  3 CR  
Contact Hours: 3 + 0  
Prerequisites: BA A325 with minimum grade of C.  
Registration Restrictions: College of Business and 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 their management, bond portfolio management, indexing, and performance evaluation.

BA A460  Marketing Management  3 CR  
Contact Hours: 3 + 0  
Prerequisites: BA A343.  
Registration Restrictions: College of Business and 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.

BA A461  Negotiation and Conflict Management  3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: College of Business and 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.

BA A462  Strategic Management  3 CR  
Contact Hours: 3 + 0  
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 and 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.

BA A463  Promotion Management  3 CR  
Contact Hours: 3 + 0  
Prerequisites: BA A343.  
Registration Restrictions: College of Business and 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.

BA A480  Social Media Marketing  3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.  
May be stacked with: BA A680.  
Introduces students to the field of social media marketing. Surveys social media marketing processes, platforms and purposes. Reviews how social media tools can be utilized for valuable insights into consumers’ attitudes toward the company and its competitors’ brands.

BA A481  Applications in Management  3 CR  
Contact Hours: 3 + 0  
Prerequisites: BA A300.  
Registration Restrictions: College of Business and 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.

BA A487  International Management  3 CR  
Contact Hours: 3 + 0  
Prerequisites: BA A300 with minimum grade of C.  
Registration Restrictions: College of Business and 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.
BA A488  Environment of Business  3 CR
Contact Hours: 3 + 0
Major Restriction: Must be Accounting or Economics or Finance or Global Logistics Mgmt or Global Log Supply Chain Mgt or Marketing or Management or Management Information System major.
Registration Restrictions: College of Business and 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.

BA A489  Entrepreneurship and New Business Planning  3 CR
Contact Hours: 3 + 0
Prerequisites: BA A462.
Registration Restrictions: College of Business and 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.

BA A490A  Current Topics in Business  1-6 CR
Contact Hours: 1-6 + 0
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.

BA A491A  Student Managed Portfolio  3 CR
Contact Hours: 1 + 4
Prerequisites: BA A380 and (BA A451 or concurrent enrollment).
Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.
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.

BA A491B  Institutional Money Management  3 CR
Contact Hours: 1 + 4
Prerequisites: BA A491A.
Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.
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.

BA A495  Advanced Internship in Business Administration  3 CR
Contact Hours: 0 + 9
Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing; Permission of the BA Faculty Internship Coordinator; 2.75 GPA overall; 3.0 GPA in major.
Grade Mode: Pass/No Pass.
Special Fees.
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 A603  Fundamentals of Finance  3 CR
Contact Hours: 3 + 0
Prerequisites: ACCT 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 A610  Business Intelligence and Analytics  3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.
Data identification, collection, analysis and presentation of results. Basic statistical tools and models for problem analysis and data-driven decision making are presented from the perspective of a manager. Emphasis is on the appropriate selection, use and interpretation of statistical analysis for business decision making. Computer software will be intensively used to analyze business datasets.

BA A613  Applied Leadership  3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.
Students develop their leadership skills, exchange ideas and evaluate their internal image, enabling them to make positive changes in their behavior from a leadership context. Students learn theories and practices that affect organizational direction through understanding internal and external influences.

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
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.
Designed to result in students’ improved negotiation skill. An experiential class in which skills are both learned and practiced, enabling students to obtain feedback and make positive changes in their behavior in negotiation contexts.

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 Foundations of Behavioral Science  3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.
A detailed interdisciplinary study of those organizational behavior and human resource factors that contribute centrally to the firm’s success. Examines current and future developments regarding key concepts such as motivation, leadership, power and authority, organizational processes and culture, selections and placement, performance appraisal, compensation, and human development. Surveys the scientific foundations of organizational behavior, including research methods, attribution theory, social cognition, attitudes, emotion, and cooperation and competition in social groups.
BA A633 Problem Formulation and Decision Analysis 3 CR
Contact Hours: 3 + 0
Prerequisites: 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 Organizational 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.
An advanced course in marketing decision making presenting analytical techniques and concepts. Includes multivariate asset pricing models; free cash flow and corporate value; capital budgeting risk analysis and real options; working capital management, corporate structure, capital structure, market, mergers, and corporate bankruptcies.

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
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 A632.
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
Prerequisites: BA A632 and BA A635 and BA A636.
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.
Analysis of the strategic environment; formulation and implementation of strategy. Role of top management and other stakeholders in setting the organization’s fundamental direction. Structure and control system design for strategic support.

BA A656 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 A680 Social Media Strategies 3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.
May be stacked with: BA A480.
Special Note: Students may not take this course for credit at both levels.
Analyzes social media strategies: processes, platforms and purposes to gain valuable insights into consumers’ attitudes toward the company and its competitors’ brands. Provides tools for developing social media marketing plans.

BA A685 Advanced Investment Management 3 CR
Contact Hours: 3 + 0
Prerequisites: BA A632.
Registration Restrictions: Graduate standing.
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 A686 Management Simulation 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing; completion of undergraduate or graduate course in finance and accounting.
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
Contact Hours: 1-6 + 0
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.
Examines current issues, techniques, and trends affecting business and applies advanced theories to analyze and solve business problems.

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 A632.
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
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing and completion of MBA core courses.
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 environments beyond the boundaries of the campus, enhancing self-confidence and career direction.
BA A698  MBA Individual Research  3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level
Registration Restrictions: Graduate standing and completion of MBA core courses
Independent primary research project conducted under the supervision of a faculty advisor.

BA A699  Thesis  6 CR
Contact Hours: 6 + 0
Level Restriction: Must be Graduate - UAA level
Registration Restrictions: Graduate standing and 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 101P, 786-4770

www.uaa.alaska.edu/biology

**BIOL A074  Field Natural History  1-3 CR**
Contact Hours: 0 + 3-9
Grade Mode: Pass/No Pass
Special Note: May include extensive hiking and camping. Community service course.
A short course on field natural history. Classes may focus on fungi, invertebrates, fish, mammals, birds, mosses and lichens, tracking, ecosystems and/or climate.

**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. Community service course.
The study of local plants with emphasis on identification and use.

**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 Core 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: 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 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 + 0-12
Special Fees.
Special Note: May include extensive hiking and camping. Can be repeated once with a change of subtitle for a maximum of 4 credits.
Explores characteristics of animals, plants, fungi and protists of Alaska. Can include life history, habitat, ecology and behavior.

**BIOL A126  Birds in Field and Laboratory  3 CR**
Contact Hours: 1 + 6
Special Note: May include field trips involving study projects.
General biology, ecology and behavior of birds. Emphasis on characteristics, observation and recording information about birds.

**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.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Contact Hours:</th>
<th>Prerequisites:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL A178</td>
<td>Fundamentals of Oceanography</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Placement into MATH A105 or higher.</td>
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<td></td>
<td>Registration Restrictions: Concurrent enrollment in BIOL A112 or 8 hours in biology or chemistry.</td>
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<td></td>
<td>Corequisite: BIOL A240L. May be stacked with: BIOL A241.</td>
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<td></td>
<td>Special Note: Recommended for associate and baccalaureate health science programs.</td>
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<td></td>
<td>Laboratory exercises designed to illustrate principles and concepts developed in BIOL A178/GEOL A178.</td>
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<tr>
<td>BIOL A179</td>
<td>Fundamentals of Oceanography Laboratory</td>
<td>1 CR</td>
<td>0 + 3</td>
<td>Placement into MATH A105 or higher.</td>
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<tr>
<td></td>
<td>Corequisite: BIOL A271L.</td>
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<tr>
<td>BIOL A198</td>
<td>Individual Research</td>
<td>1-6 CR</td>
<td>0 + 3-18</td>
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<td>Registration Restrictions: Faculty permission required.</td>
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<td>Special Note: May be repeated once for a maximum of 6 credits.</td>
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<td></td>
<td>Lab and field investigations on specific subjects in biology. Topic for study to be approved and directed by a faculty member in biological sciences.</td>
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<tr>
<td>BIOL A200</td>
<td>Introduction to Complexity</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>MATH A107 or MATH A172.</td>
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<td></td>
<td>Prerequisites: BIOL A200.</td>
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<td>Crosslisted with: CPLX A200.</td>
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<td>Contact Hours: 3 + 0.</td>
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<tr>
<td>BIOL A240</td>
<td>Introductory Microbiology for Health Sciences</td>
<td>4 CR</td>
<td>3 + 3</td>
<td>Concurrent enrollment in BIOL A112 or 8 hours in biology or chemistry.</td>
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<tr>
<td></td>
<td>Corequisite: BIOL A240L. May be stacked with: BIOL A241.</td>
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<td></td>
<td>Special Note: Recommended for associate and baccalaureate health science programs.</td>
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<td></td>
<td>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.</td>
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<td>Students must attend lab the first week of class or they may be administratively dropped.</td>
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<td></td>
<td>General introductory microbiology covering bacterial metabolism and genetics, virology, host parasite interactions, host defense mechanisms and epidemiology.</td>
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<tr>
<td>BIOL A241</td>
<td>Lectures in Introductory Microbiology for Health Sciences</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Registration Restrictions: 8 hours in biology or chemistry or concurrent enrollment in BIOL A112.</td>
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<tr>
<td></td>
<td>Corequisite: BIOL A240. May be stacked with: BIOL A241.</td>
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<td></td>
<td>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.</td>
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<td></td>
<td>Lectures in introductory microbiology covering metabolism and genetics, virology, host parasite interactions, host defense mechanisms and epidemiology.</td>
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<tr>
<td>BIOL A242</td>
<td>Fundamentals of Cell Biology</td>
<td>4 CR</td>
<td>3 + 3</td>
<td>BIOL A115 and CHEM A105 and CHEM A105L.</td>
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<td>Corequisite: BIOL A242L.</td>
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<td>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.</td>
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<td></td>
<td>Examination of the structure, including ultrastructure, and function of cells. Isolation, composition, and biochemical properties of cell components.</td>
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<tr>
<td>BIOL A252</td>
<td>Principles of Genetics</td>
<td>4 CR</td>
<td>3 + 3</td>
<td>BIOL A115 and CHEM A105 and CHEM A105L.</td>
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<td>Corequisite: BIOL A252L.</td>
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<td>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.</td>
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<td></td>
<td>Principles of inheritance in prokaryotes and eukaryotes and physiochemical properties of genetic systems.</td>
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<tr>
<td>BIOL A271</td>
<td>Principles of Ecology</td>
<td>4 CR</td>
<td>3 + 3</td>
<td>BIOL A252 and [STAT A253 or STAT A307].</td>
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<td></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>
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<td>Basic principles in physiological, ecosystem, population and community ecology, including environmental factors and their influence on living organisms and their structure; population growth, regulation, and interactions; the nature and diversity of biological communities in the context of evolution; and ecosystem structure and function and human impacts on the global system.</td>
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<tr>
<td>BIOL A298</td>
<td>Individual Research</td>
<td>1-6 CR</td>
<td>0 + 3-18</td>
<td>Special Note: Offered Spring semesters.</td>
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<td>Contact Hours: 0 + 3-18.</td>
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<td>Registration Restrictions: Faculty permission required.</td>
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<td>Special Note: May be repeated once for a maximum of 6 credits.</td>
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<td></td>
<td>Lab and field investigations on specific subjects in biology. Topic for study to be approved and directed by a faculty member in biological sciences.</td>
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<tr>
<td>BIOL A308</td>
<td>Principles of Evolution</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>BIOL A271.</td>
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<td>Corequisites: BIOL A242. Special Note: Core course for biology majors.</td>
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<td></td>
<td>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>
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<tr>
<td>BIOL A309</td>
<td>Biogeography</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>BIOL A308.</td>
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<td>Ecological basis 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>
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<tr>
<td>BIOL A310</td>
<td>Principles of Physiology</td>
<td>4 CR</td>
<td>3 + 3</td>
<td>BIOL A242.</td>
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<td></td>
<td>Prerequisites: BIOL A242. Special Note: Satisfies physiology core curriculum requirement for biology majors.</td>
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<td>This course emphasizes the fundamental principles of cellular and system physiology of animals with emphasis on vertebrate and, in particular, human physiology.</td>
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<tr>
<td>BIOL A316</td>
<td>Introduction to Plant Physiology</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>BIOL A242.</td>
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<td></td>
<td>Special Note: Satisfies physiology core curriculum requirement for biology majors.</td>
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<td></td>
<td>Physiology of vascular plants, including growth, development, water relations, photosynthesis, material transport, and metabolism.</td>
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<tr>
<td>BIOL A331</td>
<td>Systematic Botany</td>
<td>4 CR</td>
<td>3 + 3</td>
<td>BIOL A116.</td>
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<td></td>
<td>Corequisites: BIOL A116. Special Note: Saturday field trips. Offered alternate years.</td>
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<td></td>
<td>Identification and classification of vascular plants with an emphasis on cirumpolar flora; discussion of taxonomic principles and both classical and experimental methods of taxonomic research.</td>
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<td>Special Fees. Special Note: Offered alternate fall semesters.</td>
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<td>Comparative study of structure, development, phylogenetic trends, and life histories of the major groups of algae, fungi and bryophytes.</td>
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<tr>
<td>BIOL A334</td>
<td>Biology of Vascular Plants</td>
<td>4 CR</td>
<td>3 + 3</td>
<td>BIOL A333.</td>
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<td></td>
<td>Contact Hours: 3 + 3.</td>
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<td></td>
<td>Prerequisites: BIOL A333. 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>
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<tr>
<td>BIOL A340</td>
<td>General Microbiology</td>
<td>5 CR</td>
<td>3 + 6</td>
<td>BIOL A242 and BIOL A252.</td>
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<td>Registration Restrictions: 8 additional biology credits.</td>
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<td>Corequisite: BIOL A340L. Special Note: Some additional laboratory work will be required to complete laboratory experiments.</td>
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<td>Special Note: Offered Spring semesters.</td>
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<td></td>
<td>Biology of prokaryotic and eukaryotic microorganisms and viruses, their relationships to other organisms, and to the ecosystem.</td>
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</tbody>
</table>
BIOL A365  Astrobiology  3 CR
Contact Hours: 3 + 0
Prerequisites: BIOL A115 and [PHYS A123 or PHYS A211].
Course Attributes: UAA GER Integrative Capstone.
Crosslisted with: ASTR A365.
Special Fees.

BIOL A373  Conservation Biology  3 CR
Contact Hours: 3 + 0
Prerequisites: BIOL A271 with minimum grade of C or ENVI A211 with minimum grade of C.
Registration Restrictions: Completion of all GER Tier 1 and 2 courses is required.
Course Attributes: UAA GER Integrative Capstone.
Special Fees.

BIOL A378  Marine Biology  3 CR
Contact Hours: 3 + 0
Prerequisites: BIOL A271 or ENVI A211.
Registration Restrictions: Junior standing; completion of all GER Tier 1 courses.
Course Attributes: UAA GER Integrative Capstone.

BIOL A403  Microtechnique  4 CR
Contact Hours: 2 + 6
Prerequisites: BIOL A242.
Registration Restrictions: 8 additional credits in biology; and faculty permission.
Special Fees.

BIOL A415  Comparative Animal Physiology  3 CR
Contact Hours: 3 + 0
Prerequisites: BIOL A310.
May be stacked with: BIOL A615.
Special Note: Students who complete BIOL A415 as part of their undergraduate degree cannot receive credit towards their graduate degree from BIOL A615.

BIOL A423  Ichthyology  4 CR
Contact Hours: 3 + 3
Prerequisites: BIOL A252.
Special Note: Includes field trips.

BIOL A425  Mammalogy  3 CR
Contact Hours: 3 + 0
Prerequisites: BIOL A252.
Survey of the class Mammalia, emphasizing systematics, morphology, physiology, ecology, evolution, behavior and conservation.

BIOL A426  Ornithology  4 CR
Contact Hours: 3 + 3
Prerequisites: BIOL A271.
Special Note: Includes field trips.

BIOL A427  Invertebrate Zoology  4 CR
Contact Hours: 3 + 3
Prerequisites: BIOL A252.
Special Note: Includes field trips.

BIOL A430  Marine Mammal Biology  4 CR
Contact Hours: 3 + 3
Prerequisites: BIOL A271.
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.

BIOL A441  Animal Behavior  4 CR
Contact Hours: 3 + 3
Prerequisites: BIOL A271 and [STAT A253 or STAT A307].

BIOL A445  Plant-Herbivore Ecology  4 CR
Contact Hours: 3 + 3
Prerequisites: BIOL A271.

BIOL A450  Microbial Ecology  3 CR
Contact Hours: 3 + 0
Prerequisites: BIOL A340.
May be stacked with: BIOL A650.

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.

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 C].
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.
Special Fees.

BIOL A401  Animal Behavior  4 CR
Contact Hours: 3 + 3
Prerequisites: BIOL A271.

BIOL A415  Comparative Animal Physiology  3 CR
Contact Hours: 3 + 0
Prerequisites: BIOL A310.

BIOL A423  Ichthyology  4 CR
Contact Hours: 3 + 3
Prerequisites: BIOL A252.

BIOL A426  Ornithology  4 CR
Contact Hours: 3 + 3
Prerequisites: BIOL A271.
Special Note: Includes field trips.

University of Alaska Anchorage 2013-2014 Catalog
www.uaa.alaska.edu
Biol A461 Molecular Biology 3 CR
Contact Hours: 3 + 0
Prerequisites: Biol A252.
May be stacked with: Biol A461.
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 3 CR
Contact Hours: 0 + 6
Prerequisites: Biol A461 with minimum grade of C or concurrent enrollment.
May be stacked with: Biol A461L.
Special Fees.
A practical implementation of the theory learned in Biol A461, which includes in vitro DNA techniques, gene expression analysis and genomics. Students will also learn experimental design, proposal writing, and oral and written presentation skills.

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.
Cross-listed 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 immunochemical 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.
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 A690.
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 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 Experimental Design and Statistics 3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing, permission of instructor.
Special Note: Graduate students in the subdisciplines of Ecology, Physiology, and Evolutionary Ecology are required to take this course during their first year of graduate study.

Study of the concepts of experimental design and statistics of particular relevance to ecological, environmental, evolutionary, and physiological research in biology. Students directly apply the course content to the design and development of their own graduate research proposals as part of the course.

Biol A604 Experimental Design for Cell/Molecular Biologists 3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing and permission of instructor.

Exploration of the concepts of experimental design and their application in the development and assessment of cell/molecular biological research. Students directly apply the course content to the development of their own graduate research proposals as part of the course.

Biol A605 Graduate Proseminar in Sciences 3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing, permission of instructor.

The proseminar is a required course designed for graduate students in biology and other sciences and focuses on the range of current research methods and the writing, teaching, critical and analytical skills necessary for successful graduate study.

Biol A606 Advanced Analysis and Interpretation 3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing, permission of instructor.

The course will cover advanced analytical techniques applying frequentist and Bayesian approaches. Topics will include applications of meta-analysis, data reduction, data mining, and pattern, non-parametric and descriptive statistics.

Biol A610 Microscopic Anatomy 3 CR
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 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 program director and faculty.
Crosslisted 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.
Crosslisted 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
Level Restriction: Must be Graduate - UAA level.
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.
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; naso- 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.

Integrate 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.
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: Graduate 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; geomicrobiology; symbioses.

BIOL A651  Advanced Applied Microbiology  3 CR
Contact Hours: 3 + 0
Prerequisites: BIOL A340.
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. Microbially based foods and beverages, bioinsecticides, bioremidiation.

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.
Croslisted with: BIOM 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-myotendinal 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 unique characteristics will be emphasized.

BIOL A661L  Advanced Molecular Biology Laboratory  3 CR
Contact Hours: 0 + 6
Prerequisites: BIOL A661 with minimum grade of C.
May be stacked with: BIOL A461L.

A practical implementation of the theory learned in BIOL A661, which includes in vitro DNA techniques, gene expression analysis and genomics. Students will also learn and practice experimental design, proposal writing, and oral and written presentation skills; lead research groups; and learn mentorship skills.

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 A667  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.

BIOL A680  Ecological Genetics and Qualitative Microevolution  3 CR
Contact Hours: 3 + 0
Prerequisites: BIOL A308 or BIOL A489.
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing, permission of instructor.

An advanced and in-depth examination of the primary forces and processes involved in shaping genetic variation in natural populations (mutation, drift, selection, migration, recombination, mating patterns, population size and population subdivision), methods of measuring genetic variation in nature, and experimental tests of important ideas in population genetics and microevolution theory.
Course Descriptions

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 A490L.  
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 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 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.  

BIOL A698  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.  
Special Fees.  
Special Note: May be repeated for a maximum of 12 credits in combination with BIOL A699; total for both courses not to exceed 12 credits towards M.S. degree.  
Thesis specific research for the M.S. degree in biological sciences. Topic for study to be approved and directed by a faculty member in the biological sciences.  

BIOL A699  Thesis  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.  
Special Note: May be repeated for a maximum of 12 credits in combination with BIOL A698; total for both courses not to exceed 12 credits towards M.S. degree.  
Planning, preparation, and completion of thesis for the M.S. degree in the biological sciences.  

BIOM - Biomedical Program  
Offered through the College of Health  
Health Sciences Building (HSB), Room 301, 786-4789  
www.uaa.alaska.edu/wwwami  

BIOM A490  Selected Lecture Topics in Biomedicine  1-3 CR  
Contact Hours: 1-3 + 0  
Class Standing Restriction: Must be Junior or Senior.  
Registration Restrictions: Junior or senior standing.  
Special Note: See schedules for specific subtitles to be offered. Course may be repeated for credit up to three times only with change in subtitle.  
Detailed coverage of a selected lecture topic in biomedicine.  

BIOM A610  Microscopic Anatomy  3 CR  
Contact Hours: 2 + 3  
Registration Restrictions: Admission to the WWAMI Biomedical Program.  
Grade Mode: Pass/No Pass.  
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.  
Crosslisted 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 visceras 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.  
Crosslisted 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.  

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, autoimmunity, 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 (Head, Neck, Ear, Nose, and Throat) 4 CR
Contact Hours: 3 + 3
Registration Restrictions: Admission to the WWAMI Biomedical Program.
Grade Mode: Pass/No Pass.
Crosstimed 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.
Crosstimed 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.
Crosstimed 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.
Crosstimed 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 patients’ 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.
Crosstimed 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-myoendelial junction and joints; musculoskeletal trauma and healing; pathophysiology of clinical manifestations of other degenerative, inflammatory, metabolic, nutritional and congenital disorders; and physical examinations.

BIOM A690 Selected Topics in Medical Science 1-3 CR
Contact Hours: 1-3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Admission to WWAMI Biomedical Program; or graduate level and approval of WWAMI Biomedical Program Director 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, 786-1487
www.uaa.alaska.edu/culinary

CA A101 The Hospitality Industry: Careers, Trends, and Practices 2 CR
Contact Hours: 2 + 0
Prerequisites: ENGL A111 with minimum grade of C and MATH A055 with minimum grade of C.
Major Restriction: Must be Culinary Arts and Hospitality or Hospitality Restaurant Mgt major.
Registration Restrictions: Must be a declared Culinary Arts Major or Hospitality Restaurant Management Major. Appropriate SAT, ACT or UAA-approved Math Placement Test scores may be used in lieu of MATH A055.
Explores myriad career titles and opportunities in the hospitality industry and reviews emerging labor trends.

CA A103 Culinary Skill Development Laboratory 4 CR
Contact Hours: 2 + 8
Prerequisites: CA A101 with minimum grade of C and CA A104 with minimum grade of C and CA A107 with minimum grade of C and CA A110 with minimum grade of C.
Major Restriction: Must be Culinary Arts and Hospitality or Hospitality Restaurant Restaurant Management Major.
Registration Restrictions: Must be a declared Culinary Arts Major or Hospitality Restaurant Management Major. Must have current Serv-Safe certification.
Corequisite: CA A111.
Special Fees.
Introduces and provides student with a comprehensive theoretical and practical foundation in commercial kitchen practices.

CA A104 Sanitation 2 CR
Contact Hours: 2 + 0
Prerequisites: ENGL A111 with minimum grade of C and MATH A055 with minimum grade of C.
Major Restriction: Must be Culinary Arts and Hospitality or Hospitality Restaurant Mgt major.
Registration Restrictions: Must be a declared Culinary Arts Major or Hospitality Restaurant Management Major. Appropriate SAT, ACT or UAA-approved Math Placement Test scores may be used in lieu of MATH A055.
Focuses on sanitation principles, concepts, methods, codes and regulations current to the foodservice industry. Prepares students to take Serv-Safe national certification exam.

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
Prerequisites: ENGL A111 with minimum grade of C and MATH A055 with minimum grade of C.
Major Restriction: Must be Culinary Arts and Hospitality or Hospitality Restaurant Mgt major.
Registration Restrictions: Must be a declared Culinary Arts Major or Hospitality Restaurant Management Major. Appropriate SAT, ACT or UAA-approved Math Placement Test scores may be used in lieu of MATH A055.
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
Prerequisites: ENGL A111 with minimum grade of C and MATH A055 with minimum grade of C.
Major Restriction: Must be Culinary Arts and Hospitality or Hospitality Restaurant Mgt major.
Registration Restrictions: Must be a declared Culinary Arts Major or Hospitality Restaurant Management Major. Appropriate SAT, ACT or UAA-approved Math Placement Test scores may be used in lieu of MATH A055.
Covers foodservice industry purchasing practices and standards.
CA A111  Bakery Skill Development Laboratory  4 CR
Contact Hours: 2 + 8
Prerequisites: CA A101 with minimum grade of C and CA A104 with minimum grade of C and CA A110 with minimum grade of C and DN A101 with minimum grade of C.
Major Restriction: Must be Culinary Arts and Hospitality or Hospitality Restaurant Mgt major.
Registration Restrictions: Must be a declared Culinary Arts Major or Hospitality Restaurant Management Major.
Corequisite: CA A103.
Special Fees.
Introduces and provides student with a comprehensive theoretical and practical foundation in commercial baking practices.

CA A114  Beverage Management  3 CR
Contact Hours: 3 + 0
Major Restriction: Must be Culinary Arts and Hospitality or Hospitality Restaurant Mgt major.
Registration Restrictions: Must be a declared Culinary Arts Major or Hospitality Restaurant Management Major. Must be 21 years or older.
Special Fees.
Note: Students are prepared to take alcohol server exam 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 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 A223  Catering Management  2 CR
Contact Hours: 1 + 4
Prerequisites: CA A101 with minimum grade of C and CA A103 with minimum grade of C and CA A104 with minimum grade of C and CA A107 with minimum grade of C and CA A110 with minimum grade of C and CA A111 with minimum grade of C.
Special Fees.
Introduces fundamental concepts of catering management, planning and production.

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
Covers supervisory and management responsibilities within foodservice operations.

CA A295  Foodservice Internship  3 CR
Contact Hours: 1 + 15
Prerequisites: CA A103 with minimum grade of C and CA A111 with minimum grade of C.
Major Restriction: Must be Culinary Arts and Hospitality major.
Registration Restrictions: Must be declared Culinary Arts Major.
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 consultation with faculty mentor.

CA A320  Foodservice Operations  3 CR
Contact Hours: 3 + 0
Prerequisites: CA A104 with minimum grade of C and CA A105 with minimum grade of C and CA A107 with minimum grade of C and DN A101 with minimum grade of C.
Provides theoretical and conceptual learning in foodservice operations. Emphasizes managing revenue and expense, determining sales forecasts, managing food and beverage costs, 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 560 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.uaa.alaska.edu/schooolengineering

CE A152  Introduction to Civil Engineering  1 CR
Contact Hours: 1 + 0
Prerequisites: ENGR A151 with minimum grade of C.
Introduces students to the roles, responsibilities and capabilities of civil engineers within various subdisciplines such as structural, geotechnical, transportation, environmental and water resources engineering. Introduction to the body of knowledge developed by American Society of Civil Engineers (ASCE).

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.
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.
Course Descriptions

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 region engineering problems and modern solutions as a basis for more detailed study.

CE A405 Transportation Engineering I 3 CR
Contact Hours: 3 + 0
Prerequisites: ES A210 with minimum grade of C.

Introduction to planning and engineering of transportation systems and their functions, components and operation. Those systems include highways, airports, erects, and water transportation with emphasis for highways regarding planning and traffic operations.

CE A406 Transportation Engineering II 3 CR
Contact Hours: 3 + 0
Prerequisites: CE A405 with minimum grade of C and 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 regarding geometrical and pavement design.

CE A414 Soil Strength and Slope Stability 3 CR
Contact Hours: 3 + 0
Prerequisites: CE A435 with minimum grade of C.

Major Restriction: Must be Civil Engineering major.
Registration Restrictions: Senior in Civil Engineering or instructor permission. May be stacked with: CE A614.

Advanced knowledge of soil shear strength properties; analysis of slope stability, including seismic stability and design of slope stabilization; case histories study and applications to cold regions engineering problems.

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.
Special Fees.

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 A334 with minimum grade of C and ES A331 with minimum grade of C.

May be stacked with: CE A624.
Special Fees.

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 A426 Traffic Modeling and Simulation 3 CR
Contact Hours: 3 + 0
Prerequisites: CE A405 with minimum grade of C and ES A302 with minimum grade of C.

Registration Restrictions: Instructor permission. May be stacked with: CE A626.

Introduces concepts of traffic flow simulation, modeling of driver behavior and application of traffic simulation in Intelligent Transportation Systems (ITS).

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.

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 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.

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, subsurface exploration, and frost action.

CE A437 Project Planning 1 CR
Contact Hours: 1 + 0
Class Standing Restriction: Must be Senior.
Registration Restrictions: Senior standing in Civil Engineering.

Introduces the basics in civil engineering project planning and analysis. Defines problem statement and develops goals, objectives; generates alternatives and criteria for evaluation and implementation of civil engineering projects.

CE A438 Design of Civil Engineering Systems 3 CR
Contact Hours: 3 + 0
Prerequisites: CE A344 or CE A405 or CE A422 or CE A432 or CE A433 or CE A442.

Class Standing Restriction: Must be Senior.
Registration Restrictions: Senior standing Course Attributes: UAA GER Integrative Capstone.

Integrative capstone course for civil engineering students to collaborate in multidisciplinary teams to design a complex civil engineering system that meets client needs while protecting public health and safety. Students apply knowledge and skills learned in their undergraduate curriculum.

CE A441 Fundamentals of Environmental Engineering and Applied Environmental Science 3 CR
Contact Hours: 3 + 0
Prerequisites: CHEM A106 with minimum grade of C and CHEM A106L with minimum grade of C and MATH A200 with minimum grade of C.

May be stacked with: CE A641.
Special Fees.

Introduction to the fundamental theory, analysis and regulations of environmental engineering and applied environmental science. Topics include environmental chemistry, drinking water and wastewater treatment, air pollution and solid waste management.

CE A442 Environmental Systems Design 3 CR
Contact Hours: 3 + 0
Prerequisites: CE A441 with minimum grade of C and ES A341 with minimum grade of C.

Design of systems commonly used in environmental engineering practice with an emphasis on water and wastewater treatment. Design of unit processes and operations will be performed for both potable water and wastewater treatment. Selection of system components, design and performance calculations and complete engineering reports are required.

CE A445 Chemical and Physical Water and Wastewater Treatment Processes 3 CR
Contact Hours: 3 + 0
Prerequisites: CE A442 with minimum grade of C.

May be stacked with: CE A645.
Special Fees.

The theory and design of chemical and physical unit processes utilized in the treatment of water and wastewater. Advanced theory of common unit processes including sedimentation, flotation, precipitation, disinfection, filtration and aeration will be explored in association with current peer-reviewed literature. Appropriate design considerations will be evaluated.
CE A446  Biological Treatment Processes  3 CR  
Contact Hours: 3 + 0  
Prerequisites: CE A442 with minimum grade of C.  
May be stacked with: CE A646.  
Special Fees.  
The theory and design of aerobic and anaerobic process for the treatment of wastewater including activated sludge, various surface film reactors, sludge digestion and disposal, and nutrient removal.  

CE A447  Advanced Unit Processes  3 CR  
Contact Hours: 3 + 0  
Prerequisites: CE A442 with minimum grade of C or CE A445 with minimum grade of C.  
May be stacked with: CE A647.  
Special Fees.  
The theory and design of advanced unit processes with emphasis on emerging disinfectants, ozone and ultraviolet light disinfection, advanced oxidation sorbents, and membranes; application of these innovative technologies in the drinking water and wastewater arena.  

CE A451  Advanced Structural Analysis  3 CR  
Contact Hours: 3 + 0  
Prerequisites: CE A431 with minimum grade of C.  
Registration Restrictions: MATH A314 is recommended  
May be stacked with: CE A651.  
Introduction of the Direct Stiffness Method (Matrix Analysis Method) with computer solutions for two-dimensional and three-dimensional linear-elastic frame and truss structures. Topics include shear deformations, elastic supports and connections, support settlements, thermal loads, and energy formulations of force-displacement relationships.  

CE A452  Advanced Steel Design  3 CR  
Contact Hours: 3 + 0  
Prerequisites: CE A432 with minimum grade of C.  
May be stacked with: CE A652.  
Advanced structural design in steel, including building code requirements and standard practice for the design of steel structures and connections.  

CE A454  Timber Design  3 CR  
Contact Hours: 3 + 0  
Prerequisites: CE A431 with minimum grade of C.  
May be stacked with: CE A654.  
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 A461  Hydraulic Analysis and Design  3 CR  
Contact Hours: 3 + 0  
Prerequisites: ES A341 with minimum grade of C.  
May be stacked with: CE A661.  
This course presents analysis and design techniques for hydraulic facilities including water storage, conveyance, and pumping systems. Industry-standard computer software for hydraulic design will also be introduced.  

CE A462  Surface Water Dynamics  3 CR  
Contact Hours: 3 + 0  
Prerequisites: ES A341 with minimum grade of C.  
May be stacked with: CE A662.  
Open channel flow theory including: steady and unsteady flow, water surface profiles and the impact of hydraulic structures; sediment transport under open channel flow.  

CE A464  Hydrologic Analysis and Design  3 CR  
Contact Hours: 3 + 0  
Prerequisites: ES A341 with minimum grade of C.  
Presents fundamental concepts of hydrologic cycle, including precipitation, snow cover, evaporation, and groundwater hydraulics. Explains techniques of statistical hydrology and the usage of simulation models. The design of simple hydraulic structures will also be introduced.  

CE A475  Design of Ports and Harbors  3 CR  
Contact Hours: 3 + 0  
Prerequisites: ES A341 with minimum grade of C.  
Registration Restrictions: Senior standing in BS Civil Engineering program.  
May be stacked with: CE A675.  
Introduction to planning and design of port and harbor facilities.  

CE A476  Coastal Engineering  3 CR  
Contact Hours: 3 + 0  
Prerequisites: ES A341 with minimum grade of C.  
May be stacked with: CE A676.  
Application of linear and nonlinear wave theory to the study of coastal processes and the design of coastal structures; wave transformation processes including wind generation, refraction and diffraction.  

CE A479  Sediment Transport and Coastal Processes  3 CR  
Contact Hours: 3 + 0  
Prerequisites: ES A341 with minimum grade of C.  
May be stacked with: CE A679.  
Investigation of sediment transport and coastal processes on beaches and in riverine/estuarine environments. Study of underlying hydrodynamic principles and engineering practices that are used to understand and solve sediment transport and coastal problems.  

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 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 approval.  
Special Fees.  
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.  
Prepresents 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 A614  Soil Strength and Slope Stability  3 CR  
Contact Hours: 3 + 0  
Prerequisites: CE A435 with minimum grade of C.  
Registration Restrictions: Graduate standing or instructor permission.  
May be stacked with: CE A414.  
Advanced knowledge of soil shear strength properties; analysis of slope stability, including seismic stability and design of slope stabilization; case histories study and applications to cold regions engineering problems.  

CE A623  Traffic Engineering  3 CR  
Contact Hours: 2 + 2  
Prerequisites: CE A402 with minimum grade of C.  
May be stacked with: CE A423.  
Special Fees.  
Traffic engineering studies and analyses, traffic flow theory, traffic control systems design, signalization, and capacity analyses.
Course Descriptions

CE A624 Pavement Design 3 CR
Contact Hours: 2 + 2
Prerequisites: CE A334 with minimum grade of C and ES A331 with minimum grade of C.
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.
May be stacked with: CE A424.
Special Fees.
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.
Geometrical and structural design, construction, and maintenance of highway facilities and associated economic, social, and environmental consequences.

CE A626 Traffic Modeling and Simulation 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Instructor’s permission and graduate standing
May be stacked with: CE A426.
Introduces concepts of traffic flow simulation, modeling of driver behavior, and application of traffic simulation in Intelligent Transportation Systems (ITS).

CE A627 Advanced Traffic Flow Theory 3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Instructor’s permission or graduate standing
The course presents the different theories of traffic flow, statistical distributions of traffic flow parameters, traffic stream models, various car-following models, and traffic flow models for intersections. The class also presents the methods to analyze traffic performance using shock waves and queueing analysis.

CE A631 Structural Finite Elements 3 CR
Contact Hours: 3 + 0
Prerequisites: CE A431 with minimum grade of C.
Fundamental equations for different finite elements as well as computer modeling of engineering structures using these elements are examined. Basic finite elements for truss, beam, frame and triangular plane elements are discussed in detail. The use of finite element software to solve a variety of structural engineering problems is discussed. The results of actual analysis are critically examined in class.

CE A633 Structural Dynamics 3 CR
Contact Hours: 3 + 0
Prerequisites: CE A431 with minimum grade of C and MATH A302 with minimum grade of C.
Special Fees.
Introduces the theory of structural dynamics, including single and multiple-degree-of-freedom systems subjected to earthquake and other dynamic excitations, with emphasis on application to analysis and design of civil engineering structures.

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 structures 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 A633 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 A641 Fundamentals of Environmental Engineering and Applied Environmental Science 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing in Civil Engineering or enrolled in AEIST.
May be stacked with: CE A441.
Special Fees.
Introduction to the fundamental theory, analysis and regulations of environmental engineering and applied environmental science. Topics include environmental chemistry, drinking water and wastewater treatment, air pollution and solid waste management.

CE A645 Chemical and Physical Water and Wastewater Treatment Processes 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing in Civil Engineering or instructor permission.
May be stacked with: CE A445.
Special Fees.
The theory and design of chemical and physical unit processes utilized in the treatment of water and wastewater. Advanced theory of common unit processes including sedimentation, flotation, precipitation, disinfection, filtration and aeration will be explored in association with current peer-reviewed literature. Appropriate design considerations will be evaluated.

CE A646 Biological Treatment Processes 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing in Civil Engineering or Applied Environmental Science and Technology.
May be stacked with: CE A446.
Theory and design of aerobic and anaerobic process for the treatment of wastewater including activated sludge, various surface film reactors, sludge digestion and disposal, and nutrient removal.

CE A647 Advanced Unit Processes 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing in Civil Engineering or instructor permission.
May be stacked with: CE A447.
Special Fees.
The theory and design of advanced unit processes with emphasis on emerging disinfectants, ozone and ultraviolet light disinfection, advanced oxidation, sorbents, and membranes; application of these innovative technologies in the drinking water and wastewater arena.

CE A651 Advanced Structural Analysis 3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing or instructor approval.
May be stacked with: CE A451.
Introduction of the Direct Stiffness Method (Matrix Analysis Method) with computer solutions for two-dimensional and three-dimensional linear-elastic frame and truss structures. Topics include shear deformations, elastic supports and connections, support settlements, thermal loads, and energy formulations of force-displacement relationships.

CE A652 Advanced Steel Design 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing or instructor approval.
May be stacked with: CE A452.
Advanced structural design in steel, including building code requirements and standard practice for the design of steel structures and connections.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
<th>Contact Hours</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE A654</td>
<td>Timber Design</td>
<td>3</td>
<td>3 + 0</td>
<td>Essentials of structural design in timber including building code requirements and standard practice for the design of basic structural elements, connections and shearwall lateral force resisting systems. May be stacked with CE A454.</td>
</tr>
<tr>
<td>CE A662</td>
<td>Surface Water Dynamics</td>
<td>3</td>
<td>3 + 0</td>
<td>Essentials of geohydrology, hydraulics of flow through porous media, well hydraulics, ground water pollution, and ground water resources development.</td>
</tr>
<tr>
<td>CE A663</td>
<td>Ground Water Dynamics</td>
<td>3</td>
<td>3 + 0</td>
<td>Essentials of geohydrology, hydraulics of flow through porous media, well hydraulics, ground water pollution, and ground water resources development.</td>
</tr>
<tr>
<td>CE A674</td>
<td>Waves, Tides, and Ocean Processes for Engineers</td>
<td>3</td>
<td>3 + 0</td>
<td>Essentials of geohydrology, hydraulics of flow through porous media, well hydraulics, ground water pollution, and ground water resources development.</td>
</tr>
<tr>
<td>CE A675</td>
<td>Design of Ports and Harbors</td>
<td>3</td>
<td>3 + 0</td>
<td>Essentials of geohydrology, hydraulics of flow through porous media, well hydraulics, ground water pollution, and ground water resources development.</td>
</tr>
<tr>
<td>CE A676</td>
<td>Coastal Engineering</td>
<td>3</td>
<td>3 + 0</td>
<td>Essentials of geohydrology, hydraulics of flow through porous media, well hydraulics, ground water pollution, and ground water resources development.</td>
</tr>
<tr>
<td>CE A677</td>
<td>Coastal Measurements and Analysis</td>
<td>3</td>
<td>3 + 0</td>
<td>Essentials of geohydrology, hydraulics of flow through porous media, well hydraulics, ground water pollution, and ground water resources development.</td>
</tr>
<tr>
<td>CE A678</td>
<td>Design of Ocean Engineering Systems</td>
<td>3</td>
<td>3 + 0</td>
<td>Essentials of geohydrology, hydraulics of flow through porous media, well hydraulics, ground water pollution, and ground water resources development.</td>
</tr>
<tr>
<td>CE A679</td>
<td>Sediment Transport and Coastal Processes</td>
<td>3</td>
<td>3 + 0</td>
<td>Essentials of geohydrology, hydraulics of flow through porous media, well hydraulics, ground water pollution, and ground water resources development.</td>
</tr>
<tr>
<td>CE A681</td>
<td>Frozen Ground Engineering</td>
<td>3</td>
<td>3 + 0</td>
<td>Essentials of geohydrology, hydraulics of flow through porous media, well hydraulics, ground water pollution, and ground water resources development.</td>
</tr>
<tr>
<td>CE A682</td>
<td>Ice Engineering</td>
<td>3</td>
<td>3 + 0</td>
<td>Essentials of geohydrology, hydraulics of flow through porous media, well hydraulics, ground water pollution, and ground water resources development.</td>
</tr>
<tr>
<td>CE A683</td>
<td>Arctic Hydrology and Hydraulic Engineering</td>
<td>3</td>
<td>3 + 0</td>
<td>Essentials of geohydrology, hydraulics of flow through porous media, well hydraulics, ground water pollution, and ground water resources development.</td>
</tr>
<tr>
<td>CE A684</td>
<td>Arctic Utility Distribution</td>
<td>3</td>
<td>3 + 0</td>
<td>Essentials of geohydrology, hydraulics of flow through porous media, well hydraulics, ground water pollution, and ground water resources development.</td>
</tr>
<tr>
<td>CE A685</td>
<td>Civil Engineering Project</td>
<td>3</td>
<td>3 + 0</td>
<td>Essentials of geohydrology, hydraulics of flow through porous media, well hydraulics, ground water pollution, and ground water resources development.</td>
</tr>
<tr>
<td>CE A686</td>
<td>Cold Regions Pavement Design</td>
<td>3</td>
<td>3 + 0</td>
<td>Essentials of geohydrology, hydraulics of flow through porous media, well hydraulics, ground water pollution, and ground water resources development.</td>
</tr>
<tr>
<td>CE A689</td>
<td>Selected Topics in Civil Engineering</td>
<td>3</td>
<td>3 + 0</td>
<td>Essentials of geohydrology, hydraulics of flow through porous media, well hydraulics, ground water pollution, and ground water resources development.</td>
</tr>
<tr>
<td>CE A690</td>
<td>Individual Research</td>
<td>1-6</td>
<td>1-6 + 0</td>
<td>Essentials of geohydrology, hydraulics of flow through porous media, well hydraulics, ground water pollution, and ground water resources development.</td>
</tr>
<tr>
<td>CE A691</td>
<td>Thesis</td>
<td>1-6</td>
<td>1-6 + 0</td>
<td>Essentials of geohydrology, hydraulics of flow through porous media, well hydraulics, ground water pollution, and ground water resources development.</td>
</tr>
</tbody>
</table>
CED - Community Education

Offered through the Community & Technical College
University Center (UC), Room 141, 786-6400
www.uaa.alaska.edu/ctc

CED A119  Community Awareness Workshop on Domestic Violence and Sexual Assault  4 CR
Contact Hours: 3 + 2
Grade Mode: Pass/No Pass.
Offered only at Kenai Peninsula College.
Introduces Women’s Resource and Crisis Center services, domestic violence and sexual assault issues, and basic skills necessary for victim advocacy.

CED A125  Yoga: Study and Practice  1 CR
Contact Hours: 0.5 + 1
Grade Mode: Pass/No Pass.
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.

CED A126W  Yoga for Educators  1 CR
Contact Hours: 1 + 0
Grade Mode: Pass/No Pass.
Integrates Yoga techniques and strategies into the P-12 curriculum and applies yoga-based practices for enhanced learning/productivity and personal health/wellness.

CED A133  Beginning Fly Fishing  1 CR
Contact Hours: 1 + 0
Grade Mode: Pass/No Pass.
Introduces the basics of fly fishing, including selection of equipment, types of line, flies, and techniques geared toward local lakes and streams.

CED A150  Basic Japanese Cooking  1 CR
Contact Hours: 1 + 0
Grade Mode: Pass/No Pass.
An introduction to the foods, utensils, and techniques used in Japanese cooking.

CED A157  The Art and History of Brewing  1 CR
Contact Hours: 1 + 0
Registration Restrictions: Must be 21 or older to enroll.
Introduces the basics of the brewing process, the styles of beer, their historical and regional origins, and their presentation and pairing with food. Includes field trips to local breweries.

CED A160  Appreciating Opera  1 CR
Contact Hours: 1 + 0
Introduces the major eras, composers and styles of opera.

CED A171  Log Cabin Construction  1-3 CR
Contact Hours: 1 + 1-6
Applies techniques and skills of log cabin construction. Covers planning and organization, estimating cost, and major phases of log building construction including foundation, floor, walls, roof, windows, doors and trim.

CED A172  Woodworking  3 CR
Contact Hours: 1 + 4
Develops skills and techniques in woodworking. Includes construction of items of personal choice.

CED A185  Presenting Art Lessons K-12  1 CR
Contact Hours: 1 + 0
Grade Mode: Pass/No Pass.
Provides guidelines and information for artists and community members who want to present art experiences in classroom settings. Includes effective classroom and materials management, and guidance for working with schools and teachers in residency type situations. Participants need prior familiarity with art concepts. This is not an art methods course.

CED A231  Grant Proposal Writing  1 CR
Contact Hours: 1 + 0
Grade Mode: Pass/No Pass.
Offered only at Kenai Peninsula College.
Presents an overview of funding sources and references, and provides an in-depth description of the components of a grant proposal.

CEL - Civic Engagement & Learning

Offered through the College of Health
Consortium Library (LIB), Room 211G, 786-4062
www.uaa.alaska.edu/engage

CEL A292  Introduction to Civic Engagement  3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Social Sciences Requirement.
Introduces students to types of civic engagement in a democracy, practices of registration and inquiry, and public issues of ethics, environmental sustainability, community building and human and civil rights through readings, reflections and community inquiry.

CEL A390  Special Topics in Civic Engagement  1-3 CR
Contact Hours: 1-3 + 0
Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses.
Special Note: May be repeated for credit with a change of subtitle up to a maximum of 9 credits.
Variable topics course addressing current issues in civic engagement, a field of study which prepares students to be active, effective, and ethical citizens in their professional and personal lives. Topics of local, national, and international interest will be included.

CEL A392  Advanced Civic Engagement: Community Inquiry and Action  3 CR
Contact Hours: 3 + 0
Prerequisites: CEL A292 with minimum grade of C.
Examines concepts of community leadership and principles of practice for healthy communities. Community-based research and civic-minded engagement practices are addressed through action research.

CEL A395  Civic Engagement Internship  3-9 CR
Contact Hours: 0.1 + 6-27
Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses and instructor approval.
Internship in which student gains intensive experience applying principles of civic engagement and major-disciplinary knowledge and skills to a community-identified problem. Students are encouraged to do their internships in rural Alaskan or international communities.

CEL A450  Civic Engagement Capstone  3 CR
Contact Hours: 2 + 2
Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) and GER Tier II and instructor approval.
Course Attributes: UAA GER Integrative Capstone.
Integration of major and GER coursework through an individual civic engagement project.

CHEM - Chemistry

Offered through the College of Arts and Sciences
ConocoPhillips Integrated Sciences Building (CPSB), Room 101Q, 786-1238
www.uaa.alaska.edu/chemistry

CHEM A005  Contemporary Chemistry  3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A055 with minimum grade of C or MATH A105 with minimum grade of C or MATH A107 with minimum grade of C.
Introductory course for students with little or no chemistry background. Covers units of measurement, matter, atoms, periodic table, nomenclature, equations, oxidation-reduction, solutions, calculations, and problem solving.
Course Descriptions

CHEM A103 Survey of Chemistry 3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A105 with minimum grade of C or MATH A107 with minimum grade of C or MATH A108 with minimum grade of C or MATH A109 with minimum grade of C or MATH A200 with minimum grade of C.
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: This is an introductory course designed for health science majors and assumes prior knowledge of college preparatory high school chemistry and algebra. CHEM A103L is the laboratory component of this course and requires a separate registration.

CHEM A104 Introduction to Organic Chemistry and Biochemistry 3 CR
Contact Hours: 3 + 0
Prerequisites: CHEM A103 with minimum grade of C 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. Unless prior arrangements are made with the instructor, any student who does not attend the first scheduled meeting for this lab may be administratively dropped and a student on a waiting list will be added in their place. Any fees resulting from either of these drop procedures or any late registration procedure will be the responsibility of the student.

CHEM A105 General Chemistry I 3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A105 with minimum grade of C or MATH A107 with minimum grade of C or MATH A108 with minimum grade of C or MATH A109 with minimum grade of C or MATH A200 with minimum grade of C.
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.

CHEM A106 General Chemistry II 3 CR
Contact Hours: 3 + 0
Prerequisites: CHEM A105 with minimum grade of C 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. Unless prior arrangements are made with the instructor, any student who does not attend the first scheduled meeting for this lab may be administratively dropped and a student on a waiting list will be added in their place. Any fees resulting from either of these drop procedures or any late registration procedure will be the responsibility of the student.

CHEM A106L General Chemistry II Laboratory 1 CR
Contact Hours: 0 + 3
Prerequisites: CHEM A105L with minimum grade of C and CHEM A106 with minimum grade of C 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. Unless prior arrangements are made with the instructor, any student who does not attend the first scheduled meeting for this lab may be administratively dropped and a student on a waiting list will be added in their place. Any fees resulting from either of these drop procedures or any late registration procedure will be the responsibility of the student.

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.

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Course Descriptions

CHEM A311 Physical Chemistry: A Biological Orientation
Contact Hours: 3 + 0
Prerequisites: CHEM A106 with minimum grade of C and MATH A200 with minimum grade of C.
   - Designed 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 A312 Quantitative Analysis
Contact Hours: 3 + 6
Prerequisites: CHEM A106 with minimum grade of C and CHEM A106L with minimum grade of C.
   - Special Note: Pregnant students should be aware that they will be using chemicals in this course that are teratogenic and may cause harm to unborn children.
   - General principles of chemical analysis, including introduction to volumetric, gravimetric and instrumental methods, theory, problems, and laboratory.

CHEM A321 Organic Chemistry I
Contact Hours: 3 + 0
Prerequisites: CHEM A106 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
Contact Hours: 3 + 0
Prerequisites: CHEM A321 with minimum grade of C.
   - Continuation of CHEM A321. Includes the study of spectroscopic techniques for structure determination, and the chemistry of alcohols, ethers, epoxides, thiols, sulfides, carbonyl compounds, amines, carbohydrates and amino acids. Emphasizes nomenclature, physical properties, synthetic methods and reaction mechanisms.

CHEM A323L Organic Chemistry Laboratory
Contact Hours: 0 + 6
Prerequisites: CHEM A106L with minimum grade of C and CHEM A321 with minimum grade of C and (CHEM A322 with minimum grade of C or concurrent enrollment).
   - 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. Unless prior arrangements are made with the instructor, any student who does not attend the first scheduled meeting for this lab may be administratively dropped and a student on a wait list will be added in their place. Any fees resulting from either of these drop procedures or any late registration procedure will be the responsibility of the student. Pregnant students should be aware that they will be using chemicals in this course that are teratogenic and may cause harm to unborn children.
   - 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.

CHEM A331 Physical Chemistry I
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
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
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 A405 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 CHEM A332. Selected laboratory and computational experiments in thermodynamics, electrochemistry, transport phenomena, molecular and atomic structure.

CHEM A434 Instrumental Methods
Contact Hours: 3 + 6
Prerequisites: CHEM A312 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
Contact Hours: 3 + 0
Prerequisites: BIOL A115 with minimum grade of C and CHEM A322 with minimum grade of C.
   - Special Note: Students who complete CHEM A441 as part of their undergraduate degree cannot receive credit toward their graduate degree from CHEM A441.
   - A study of the structure and function of amino acids, proteins, carbohydrates, nucleic acids, lipids and membranes.

CHEM A442 Principles of Biochemistry II
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 toward 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
Contact Hours: 0 + 6
Prerequisites: CHEM A441 with minimum grade of C and (CHEM A442 with minimum grade of C or concurrent enrollment).
   - Special Fees.
   - Laboratory course designed to provide instruction in modern biochemical laboratory techniques.

CHEM A450 Environmental Chemistry
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.
   - This course examines the origin and evolution of the environment, energy, mineral resources, solid wastes, recycling, air and water pollution, and the effects of foreign substances on living systems. The relationships among these problems will be demonstrated and quantitative chemical principles applied.

CHEM A453 Advanced Inorganic Chemistry
Contact Hours: 3 + 6
Prerequisites: CHEM A253 with minimum grade of C and CHEM A332.
   - Special Fees.
   - A study of the structure, properties, reactions, and bonding of main group, d and f elements with emphasis on metals and solid state chemistry.

CHEM A456 Nonlinear Dynamics and Chaos
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 PHYS A456.
   - Course Attributes: UAA GER Integrative Capstone.
   - Special Fees.
   - 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.
CHEM A641 Advanced Biochemistry I 3 CR
Contact Hours: 3 + 0
Prerequisites: CHEM A312 with minimum grade of C.
May be stacked with: CHEM A434.
Special Fees.
Special Note: Not available for credit to students who have completed CHEM A441.
Lectures are concurrent with CHEM A434. A study of techniques in operating new and specialized instruments for qualitative and quantitative analysis and analytical methods of an advanced nature. Topics are appropriate for students in chemistry and allied fields. Graduate students will be required to develop an instrumental method, to submit a research paper summarizing their findings, including designs for future experiments on the subject and to give a seminar on the topic.

CHEM A642 Advanced Biochemistry II 3 CR
Contact Hours: 3 + 0
Prerequisites: CHEM A441.
Registration Restrictions: Graduate standing
May be stacked with: CHEM A442.
Special Note: Not available for credit to students who have taken CHEM A442.
In depth study of the bioenergetics and the metabolic pathways of amino acids, proteins, carbohydrates, nucleic acids, lipids, and membranes.

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 A460, 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.

CHIN A201 Second Year Chinese I 4 CR
Contact Hours: 4 + 0
Prerequisites: CHIN A102.
Course Attributes: UAA GER Humanities Requirement.
Special Fees.
Intermediate course for students with basic knowledge of Chinese. Enhances listening, speaking, reading and writing skills for effective communication at the second year level. Students critically examine diverse cultural perspectives. Course conducted in Chinese.

CHIN A202 Second Year Chinese II 4 CR
Contact Hours: 4 + 0
Prerequisites: CHIN A201.
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/cmt/Academics/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.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
<th>Prerequisites/Additional Restrictions</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIOS A101B</td>
<td>Keyboarding B: Business Documents I</td>
<td>1 CR</td>
<td>Contact Hours: 1 + 0 or 0 + 3</td>
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<td>Prerequisites: CIOS A101A.</td>
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<td>Special Fees.</td>
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<td>Special Note: Credit will not be counted for both CIOS A101 and (CIOS A101A and CIOS A101B and CIOS A101C).</td>
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<td>Introduces keyboarding of memos, personal and business letters, and envelopes in a word processing program and continues to develop keyboarding speed and accuracy.</td>
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<tr>
<td>CIOS A101C</td>
<td>Keyboarding C: Business Documents II</td>
<td>1 CR</td>
<td>Contact Hours: 1 + 0 or 0 + 3</td>
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<td>Prerequisites: CIOS A101B.</td>
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<td>Special Fees.</td>
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<td>Special Note: Credit will not be counted for both CIOS A101 and (CIOS A101A and CIOS A101B and CIOS A101C).</td>
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<td>Introduces keyboarding of simple reports and tables in a word processing program and continues to develop keyboarding speed and accuracy.</td>
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<tr>
<td>CIOS A102</td>
<td>Keyboarding Skill Building</td>
<td>1 CR</td>
<td>Contact Hours: 0 + 3</td>
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<td>Prerequisites: CIOS A101A.</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: May be repeated with only 1 credit in each semester.</td>
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<td>Emphasizes development of keyboarding speed and accuracy.</td>
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<tr>
<td>CIOS A103</td>
<td>Introduction to Personal Computers</td>
<td>1 CR</td>
<td>Contact Hours: 1 + 0 or 0 + 3</td>
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<td>Prerequisites: CIOS A113 and CIOS A130A.</td>
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<td>Special Fees.</td>
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<td>Introduces personal computers to novice users. Includes basics of start-up and using the mouse to perform Windows operations.</td>
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<tr>
<td>CIOS A108</td>
<td>Digital Design Fundamentals</td>
<td>1 CR</td>
<td>Contact Hours: 1 + 0 or 0 + 3</td>
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<td>Prerequisites: CIOS A113 and CIOS A130A.</td>
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<td>Special Fees.</td>
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<td>Introduces design fundamentals as they apply to using desktop publishing, image editing, and web design applications to communicate through online or print media.</td>
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<tr>
<td>CIOS A113</td>
<td>Operating Systems: MS Windows</td>
<td>1 CR</td>
<td>Contact Hours: 1 + 0 or 0 + 3</td>
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<td>Special Fees.</td>
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<tr>
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<td>Introduces the MS Windows operating system. Includes file and disk management, the control panel, desktop, utilities, MS Windows setup, and maintenance.</td>
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<tr>
<td>CIOS A115</td>
<td>10-Key for Business Calculations</td>
<td>2 CR</td>
<td>Contact Hours: 0 + 6</td>
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<td>Registration Restrictions: Proof of placement into MATH A055.</td>
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<td>Special Fees.</td>
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<td></td>
<td>Introduces the 10-key touch control method to solve business-related calculations while developing speed and accuracy.</td>
</tr>
<tr>
<td>CIOS A116</td>
<td>Business Calculations</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0 or 0 + 9</td>
</tr>
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<td></td>
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<td></td>
<td>Prerequisites: MATH A054 with minimum grade of C or ASSET Numerical Skills with score of 43.</td>
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<td>Special Fees.</td>
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<td>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.</td>
</tr>
<tr>
<td>CIOS A118</td>
<td>Payroll Procedures</td>
<td>2 CR</td>
<td>Contact Hours: 2 + 0 or 0 + 6</td>
</tr>
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<td>Special Fees.</td>
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<tr>
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<td></td>
<td>Introduces payroll procedures including calculating various types of payroll, keeping payroll records, federal laws, and reporting procedures.</td>
</tr>
<tr>
<td>CIOS A120A</td>
<td>Bookkeeping Software Applications I: QuickBooks</td>
<td>1 CR</td>
<td>Contact Hours: 1 + 0 or 0 + 3</td>
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<td>Prerequisites: CIOS A101A and CIOS A113.</td>
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<td>Special Fees.</td>
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<td>Special Note: Knowledge of bookkeeping principles is recommended.</td>
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<tr>
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<td></td>
<td>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.</td>
</tr>
<tr>
<td>CIOS A125A</td>
<td>Electronic Communications I: MS Outlook</td>
<td>1 CR</td>
<td>Contact Hours: 1 + 0 or 0 + 3</td>
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<td>Prerequisites: CIOS A101A and CIOS A113.</td>
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<td>Special Fees.</td>
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<tr>
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<td></td>
<td></td>
<td>Introduces electronic communication and time management features of Microsoft Outlook.</td>
</tr>
<tr>
<td>CIOS A130A</td>
<td>Word Processing I: MS Word</td>
<td>1 CR</td>
<td>Contact Hours: 1 + 0 or 0 + 3</td>
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<td>Prerequisites: CIOS A101A or concurrent enrollment.</td>
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<td>Special Fees.</td>
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<td></td>
<td></td>
<td>Introduces fundamentals, concepts, and applications of word processing.</td>
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<td></td>
<td>Students learn basic commands needed to create, format, edit, and print documents.</td>
</tr>
<tr>
<td>CIOS A135A</td>
<td>Spreadsheets I: MS Excel</td>
<td>1 CR</td>
<td>Contact Hours: 1 + 0 or 0 + 3</td>
</tr>
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<td>Prerequisites: (CIOS A101A or concurrent enrollment) and (CIOS A113 or concurrent enrollment).</td>
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<td>Special Fees.</td>
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<tr>
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<td></td>
<td>Introduces fundamental concepts in the design and use of spreadsheets.</td>
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<td>Includes basic commands, formulas and functions, and inserting of charts, objects, and hyperlinks.</td>
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<tr>
<td>CIOS A140A</td>
<td>Databases I: MS Access</td>
<td>1 CR</td>
<td>Contact Hours: 1 + 0 or 0 + 3</td>
</tr>
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<td></td>
<td>Prerequisites: CIOS A101A and CIOS A113.</td>
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<td>Special Fees.</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Introduces the fundamentals and concepts of creating a relational database including tables, queries, forms, and reports.</td>
</tr>
<tr>
<td>CIOS A146</td>
<td>Internet Concepts and Applications</td>
<td>2 CR</td>
<td>Contact Hours: 1 + 2 or 0 + 4</td>
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<td>Prerequisites: CIOS A101A and CIOS A113.</td>
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<td>Special Fees.</td>
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<td></td>
<td>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.</td>
</tr>
<tr>
<td>CIOS A150A</td>
<td>Presentations: MS PowerPoint</td>
<td>2 CR</td>
<td>Contact Hours: 1 + 2 or 0 + 4</td>
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<td></td>
<td>Prerequisites: CIOS A101A and CIOS A113.</td>
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<td>Special Fees.</td>
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<tr>
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<td></td>
<td>Covers presentation software and design techniques for creating professional presentations. Incorporates tools for enhancing presentations with various objects.</td>
</tr>
<tr>
<td>CIOS A152A</td>
<td>Digital Imaging Concepts and Applications: Photoshop</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0</td>
</tr>
<tr>
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<td></td>
<td></td>
<td>Prerequisites: (CIOS A108 or concurrent enrollment) and (CIOS A130A or concurrent enrollment) and (CIOS A146 or concurrent enrollment).</td>
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<td>Special Fees.</td>
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<td></td>
<td>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.</td>
</tr>
<tr>
<td>CIOS A153A</td>
<td>Website Design: HTML</td>
<td>1 CR</td>
<td>Contact Hours: 1 + 0 or 0 + 3</td>
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<td></td>
<td></td>
<td>Prerequisites: CIOS A146.</td>
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<td>Special Fees.</td>
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<tr>
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<td></td>
<td>Introduces designing web pages and documents using Hypertext Markup Language (HTML). Emphasizes sound design principles and the use of CSS for formatting and layout.</td>
</tr>
<tr>
<td>CIOS A153B</td>
<td>Website Design: Dreamweaver</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Prerequisites: CIOS A130A and CIOS A146 and [(CIOS A152A or concurrent enrollment) or (CIOS A156 or concurrent enrollment)].</td>
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<td>Special Fees.</td>
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<tr>
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<td></td>
<td>Introduces fundamentals of web design using the Dreamweaver application.</td>
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<td></td>
<td>Emphasizes sound design principles and the use of CSS for formatting and layout.</td>
</tr>
<tr>
<td>CIOS A154A</td>
<td>Desktop Publishing I: PageMaker</td>
<td>1 CR</td>
<td>Contact Hours: 1 + 0 or 0 + 3</td>
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<td>Prerequisites: CIOS A101A.</td>
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<td>Special Fees.</td>
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<tr>
<td></td>
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<td></td>
<td>Introduces fundamentals and concepts of desktop publishing and design elements used to create a variety of documents for publication, including flyers, brochures, and newsletters.</td>
</tr>
</tbody>
</table>
### Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
<th>Contact Hours</th>
<th>Prerequisites</th>
<th>Special Fees</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIOS A154B</td>
<td>Desktop Publishing I: MS Publisher</td>
<td>1 CR</td>
<td>0 + 3</td>
<td>CIOS A101A</td>
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<td>Special Fees</td>
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<tr>
<td></td>
<td>Introduces fundamentals and concepts of desktop publishing and design elements used to create a variety of documents for publication, including flyers, brochures, and newsletters.</td>
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<td></td>
<td>Introduces proofreading techniques applied to business communication. Develops skills in proofreading for content, usage, grammar, punctuation, and spelling.</td>
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<tr>
<td>CIOS A156</td>
<td>Web Graphics: Fireworks</td>
<td>1 CR</td>
<td>0 + 3</td>
<td>CIOS A101A, A146</td>
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</tr>
<tr>
<td></td>
<td>Introduces an alphabetic shorthand system designed for fast note taking or dictation.</td>
<td></td>
<td></td>
<td>Special Fees</td>
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<tr>
<td></td>
<td>Introduces filing terminology, techniques, and ARMA (American Records Management Association) filing rules as they apply to alphabetic, numeric, subject, and geographic filing systems.</td>
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<tr>
<td>CIOS A160</td>
<td>Business English</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>CIOS A101A, A161A</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Special Fees.</td>
<td>Introduces the concepts and skills for creating and optimizing web graphics such as animated GIFs, slices, and image maps.</td>
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<tr>
<td>CIOS A161A</td>
<td>Proofreading</td>
<td>2 CR</td>
<td>0 + 3</td>
<td>CIOS A101A</td>
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<tr>
<td></td>
<td>Registration Restrictions: Proof of placement into ENGL A111 and keyboarding skills of 30 net words per minute or higher.</td>
<td></td>
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<td>Special Fees</td>
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<tr>
<td></td>
<td>Introduces proofreading techniques applied to business communication.</td>
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<tr>
<td>CIOS A162A</td>
<td>Shorthand</td>
<td>3 CR</td>
<td>0 + 3</td>
<td>CIOS A101A</td>
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<tr>
<td></td>
<td>Introduces an alphabetic shorthand system designed for fast note taking or dictation.</td>
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<td></td>
<td>Special Fees</td>
<td></td>
</tr>
<tr>
<td>CIOS A164</td>
<td>Filing</td>
<td>1 CR</td>
<td>0 + 3</td>
<td>CIOS A101A</td>
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<tr>
<td></td>
<td>Introduces filing terminology, techniques, and ARMA (American Records Management Association) filing rules as they apply to alphabetic, numeric, subject, and geographic filing systems.</td>
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<td>Special Fees</td>
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<tr>
<td>CIOS A165</td>
<td>Office Procedures</td>
<td>3 CR</td>
<td>0 + 3</td>
<td>CIOS A101A, A130A</td>
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<tr>
<td></td>
<td>Introduces the duties and responsibilities of office employees in the following areas: mail, records management, office communications, reprographics, travel, meetings, conferences, and employment procedures.</td>
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<td></td>
<td>Special Fees</td>
<td></td>
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<tr>
<td>CIOS A190</td>
<td>Selected Topics in Office Technology</td>
<td>1-3 CR</td>
<td>0 + 3</td>
<td>CIOS A101A</td>
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<td></td>
<td>Covers various topics in office technology. Course content is determined by specific student or industry needs.</td>
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<td>Special Fees</td>
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<tr>
<td>CIOS A201A</td>
<td>Document Processing</td>
<td>3 CR</td>
<td>0 + 3</td>
<td>CIOS A101A</td>
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<tr>
<td></td>
<td>Applies keyboarding and word processing skills to letters, mail merges, tabulations, reports, business forms, and other office documents while building speed and accuracy.</td>
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<td>Special Fees</td>
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<tr>
<td>CIOS A207</td>
<td>Machine Transcription</td>
<td>1 CR</td>
<td>0 + 3</td>
<td>CIOS A101B, A101C, A161A</td>
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<tr>
<td></td>
<td>Applies word processing and proofreading skills to create quality documents using transcription equipment. Designed for students with no previous transcription experience.</td>
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<td>Special Fees</td>
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<tr>
<td>CIOS A208</td>
<td>Medical Transcription</td>
<td>3 CR</td>
<td>0 + 9</td>
<td>CIOS A101B, A101C, A161A</td>
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<tr>
<td></td>
<td>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.</td>
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<td>Special Fees</td>
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<tr>
<td>CIOS A209A</td>
<td>Legal Transcription</td>
<td>1-3 CR</td>
<td>0 + 3-9</td>
<td>CIOS A160, A201A</td>
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<td></td>
<td>Registration Restrictions: Prerequisite or demonstrated equivalent skill and speed of 45 wpm.</td>
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<td>Special Fees</td>
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<td></td>
<td>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.</td>
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<td>Special Fees</td>
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<tr>
<td>CIOS A220A</td>
<td>Bookkeeping Software Applications II:</td>
<td>2 CR</td>
<td>2 + 0</td>
<td>CIOS A120A</td>
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<td></td>
<td>QuickBooks</td>
<td></td>
<td>0 + 6</td>
<td>Prerequisites</td>
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<td></td>
<td>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.</td>
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<tr>
<td>CIOS A230A</td>
<td>Word Processing II: MS Word</td>
<td>2 CR</td>
<td>2 + 0</td>
<td>CIOS A130A</td>
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<tr>
<td></td>
<td>Prerequisites: CIOS A120A.</td>
<td></td>
<td>0 + 6</td>
<td>Special Fees</td>
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<tr>
<td></td>
<td>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.</td>
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<td>Special Fees</td>
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<tr>
<td>CIOS A235A</td>
<td>Spreadsheets II: MS Excel</td>
<td>2 CR</td>
<td>2 + 0</td>
<td>CIOS A130A</td>
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<td>Prerequisites: CIOS A135A.</td>
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<td>0 + 6</td>
<td>Special Fees</td>
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<td>Applies 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.</td>
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<td>Special Fees</td>
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<tr>
<td>CIOS A240A</td>
<td>Databases II: MS Access</td>
<td>2 CR</td>
<td>2 + 0</td>
<td>CIOS A140A</td>
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<td></td>
<td>Prerequisites: CIOS A140A.</td>
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<td>0 + 6</td>
<td>Special Fees</td>
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<td>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.</td>
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<td>Special Fees</td>
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<tr>
<td>CIOS A241</td>
<td>Integrated Applications</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>CIOS A230A, A235A, A240A</td>
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<tr>
<td></td>
<td>Prerequisites: CIOS A240A.</td>
<td></td>
<td>0 + 9</td>
<td>Special Fees</td>
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<td>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, word organization, time management, and teamwork skills.</td>
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<td>Special Fees</td>
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<tr>
<td>CIOS A251A</td>
<td>Desktop Publishing Concepts and Applications: InDesign</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>CIOS A108, A130A</td>
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<tr>
<td></td>
<td>Prerequisites: CIOS A108 or concurrent enrollment.</td>
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<td>0 + 9</td>
<td>Special Fees</td>
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<td></td>
<td>Applies fundamental digital design techniques and the utilization of desktop publishing software to generate professional publications.</td>
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<td>Special Fees</td>
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<tr>
<td>CIOS A254B</td>
<td>Desktop Publishing II: MS Publisher</td>
<td>2 CR</td>
<td>2 + 0</td>
<td>CIOS A154B</td>
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<tr>
<td></td>
<td>Prerequisites: CIOS A154B.</td>
<td></td>
<td>0 + 6</td>
<td>Special Fees</td>
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<td>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.</td>
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<td>Special Fees</td>
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CIOS A255 Multimedia Applications 3 CR
Contact Hours: 3 + 0
Prerequisites: CIOS A130A 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, workplace trends, workplace ethics, 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 an 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 A230A. 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
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.

CIOS 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 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 A280.

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.
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, BCIS students may register with instructor approval.

Presents an overview of systems analysis concepts and computer-based tools for use in the analysis of business information systems. Directed toward the development of communication skills needed for determining business system requirements and conveying those requirements to developers and system stakeholders. Concepts and tools will be applied to community-based, student-led projects.

CIS A326  Information Age Literacy  3 CR
Contact Hours: 3 + 0
Prerequisites: COMM A111 or COMM A241.
Registration Restrictions: Completion of all 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 and Public Policy baccalaureate degree.

Analyzes 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 and 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.

CIS A350  Advanced Web Page Development for Business Applications  3 CR
Contact Hours: 3 + 0
Prerequisites: CIS A210 with minimum grade of C or CS A109 with minimum grade of C or CS A110 with minimum grade of C or CSCE A201 with minimum grade of C or CSE A205 with minimum grade of C.
May be stacked with: CIS A250.
Special Note: Students may apply no more than 3 credits from CIS A250 or CIS A350 toward graduation requirements.

Focuses on advanced features of designing and developing web pages for business applications using the most recent versions of Hypertext Markup Language (HTML) and Cascading Style Sheets (CSS). Includes concepts related to best practices for managing design processes, selecting service providers, prototyping, testing and accessibility compliance. Also includes basic client-side programming for web pages using current scripting techniques such as JavaScript and jQuery.

CIS A361  Advanced Contemporary Business Applications Development  3 CR
Contact Hours: 3 + 0
Prerequisites: CIS A210 with minimum grade of C.
Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Develops business applications using contemporary technologies and programming languages at an advanced level. Designs user interfaces and integrates them with other platforms such as spreadsheets and databases.

CIS A365  Object-Oriented Programming  3 CR
Contact Hours: 3 + 0
Prerequisites: CIS A210 with minimum grade of C.
Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Covers basic concepts of Object-Oriented (OO) programming languages. Some of the more recent 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 A375  E-Training Design and End-User Support  3 CR
Contact Hours: 2 + 2
Prerequisites: CIS A110.
Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.
Special Note: This course requires 30 hours of lab.

Analyzes and applies the theories and strategies associated with technology-based workplace training and consulting. Course projects advance and integrate competencies in communications skills and computer technical skills obtained in prior courses.

CIS A376  Management Information Systems  3 CR
Contact Hours: 3 + 0
Prerequisites: CIS A280 with minimum grade of C or CIS A305 with minimum grade of C or COMM A241 with minimum grade of C.
Registration Restrictions: Completion of all Tier 1 GER courses and junior standing. BBA students must be admitted to upper-division standing.
Course Attributes: UAA GER Integrative Capstone.

Focuses on developing understanding of the role of Information Systems (IS) to achieve business goals and objectives. Emphasizes developing students’ skills to become informed participants in the formation and implementation of IS requirements.

CIS A385  Multimedia Authoring  3 CR
Contact Hours: 2 + 2
Prerequisites: CIS A110.
Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.
Special Note: This course requires 30 hours of lab.

Provides opportunities for the exploration of multimedia authoring using a variety of authoring tools. Stresses design theory and the integration of multimedia forms into a coherent business product.
### 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 and Public Policy majors must be admitted to upper-division standing.
- **Special Note:** May be repeated with change of subtitle/topic. Maximum of 9 elective credits may be used for the BBA MIS degree. Check course schedule for specific titles being offered.
- **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 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.
- **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 A60  Web Development in the .Net Environment  3 CR

- **Contact Hours:** 3 + 0
- **Prerequisites:** CIS A210 with minimum grade of C and [CIS A250 with minimum grade of C or CIS A385 with minimum grade of C or JPC A345 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.
- **Special Note:** Assumes previous programming experience with HTML and CSS. Development of data-driven web applications within the .Net environment. Uses ASP.Net and C# as the development environment.

### 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. Students working in small teams integrate and apply MIS concepts and skills, conduct independent research, develop an implementable system for a community organization, and present written and oral reports.**

### CIS A490  Advanced Topics in Management Information Systems  3 CR

- **Contact Hours:** 3 + 0
- **Prerequisites:** CIS A210 with minimum grade of C.
- **Registration Restrictions:** College of Business and Public Policy majors must be admitted to upper-division standing.
- **Special Note:** May be repeated with change of subtitle/topic. Maximum of 9 elective credits may be used for the BBA MIS degree. Check course schedule for specific titles being offered.
- **Study of advanced current issues, techniques and trends in management information systems (MIS). Students will be required to conduct research.**

### 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:** CIS A361 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.
- **Special Note:** May be taken more than once for credit. Maximum of 3 credits may be used to meet degree requirements.
- **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).**

### CIS A692  Management Information Systems Seminar  3 CR

- **Contact Hours:** 3 + 0
- **Level Restriction:** Must be Graduate - UAA level.
- **Registration Restrictions:** Graduate standing.
- **Analysis of current and future implications of information systems (IS) and emerging technologies for managers and decision makers. Focuses on the interaction of technology with business organizations including e-commerce, enterprise IS, and globalization issues.**
CM - Construction Management

Offered through the Community and Technical College
University Center (UC), Room 130, 786-6465
www.uaa.alaska.edu/cdt

CM A101 Fundamentals of CADD for Building Construction 4 CR
Contact Hours: 2 + 4
Prerequisites: MATH A105 with minimum grade of C or concurrent enrollment.
Registration Restrictions: Proof of eligibility for placement into ENGL A111.
Appropriate SAT, ACT or UAA-approved Math Placement Test scores may be used in lieu of MATH A105.
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.
Prerequisites: CM A201.
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: [AET A101 or CM A101] and [AET A102 or 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: [AET A101 with minimum grade of C or CM A101 with minimum grade of C] and [AET A102 with minimum grade of C or CM A102 with minimum grade of C] and MATH A105 with minimum grade of C.
Registration Restrictions: Appropriate SAT, ACT or UAA-approved Math Placement Test scores may be used in lieu of the MATH A105 prerequisite.
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, interpretation of construction drawings and building energy usage.

CM A163 Building Construction Cost Estimating 3 CR
Contact Hours: 2 + 2
Prerequisites: [AET A101 or CM A101] and [AET A102 or CM A102] and MATH A105.
Special Fees.
Prepares methods and techniques for preparing accurate cost estimates for building construction projects. Emphasizes quantity takeoffs, unit pricing, productivity factors, bidding and negotiation procedures, and cost reporting.

CM A201 Construction Project Management I 3 CR
Contact Hours: 3 + 0
Prerequisites: [AET A101 or CM A101] and [AET A102 or 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.
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 versus 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 Construction Civil Technology 4 CR
Contact Hours: 2 + 4
Prerequisites: [AET A101 with minimum grade of C or CM A101 with minimum grade of C] and [AET A102 with minimum grade of C or CM A102 with minimum grade of C] and MATH A105 with minimum grade of C.
Registration Restrictions: Appropriate SAT, ACT or UAA-approved Math Placement Test scores may be used in lieu of the MATH A105 prerequisite.
Special Fees.
Outlines elements of civil design and construction, including soils and soil properties, roads, earthwork, and utilities using local, state and federal regulations. Students will also be introduced to construction surveying.

CM A231 Structural Technology 4 CR
Contact Hours: 2 + 2
Prerequisites: CM A201 and MATH A105.
Special Fees.
Examines the properties and classifications of soils encountered and used in construction. Includes soil testing, soil stress analysis, embankment construction, and excavation works and supports.

CM A233 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 A122 and PHYS A123L.
Special Fees.
Examines the properties and classifications of soils encountered and used in construction. Includes soil testing, soil stress analysis, embankment construction, and excavation works and supports.
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: ACCT A202 and 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 A445.
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 A60  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
Prerequisites: CM A295.
Special Fees.
Special Note: Four hundred hours of department-approved work experience may be substituted for the prerequisite.
Provides career development and exploration through work experience in the field by placement in a construction management home or field office. Intern will perform duties directly related to construction management functions.

CNT - Computer & Network Technology
Offered through the Community and Technical College
University Center (UC), Room 130, 786-6426
www.uaa.alaska.edu/cnot

CNT A160  PC Operating Systems  3 CR
Contact Hours: 2 + 3
Special Fees.
Develops basic understanding of command line, desktop, and server operating systems. Includes computer programming, architecture, and hardware necessary to understand the operating system interactions.

CNT A162  PC Architecture and Building  3 CR
Contact Hours: 2 + 2
Special Fees.
Develops skills required to evaluate, install and troubleshoot available software and hardware computer equipment. Covers basic hardware associated with microcomputer operation, including, but not limited to, motherboards, CPUs, chipsets, memory, buses, expansion slots and resource allocations. Includes PC disassembly, assembly, software installations, safety and maintenance.

CNT A163  Introduction to Networking  1 CR
Contact Hours: 1 + 0.5
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 + 0.5
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 A168  Computer User Support and Help Desk  3 CR
Contact Hours: 3 + 0
Overview of user support systems and help desk functions in an enterprise environment. Examines user support from the perspective of end users and develops skills for ethical customer services, critical thinking, troubleshooting and decision-making. Includes identifying typical problems and needs assessment for installation, training and documentation.

CNT A170  CCNA 1 Network Fundamentals  4 CR
Contact Hours: 3 + 2.5
Registration Restrictions: Appropriate score on reading placement test is required.
Special Fees.
Covers networking fundamentals and develops basic skills in installing, addressing and troubleshooting local area networks. Topics include cabling, Ethernet technologies, management devices, protocols, sub-netting, network device selection, installation, troubleshooting, network models and basic Cisco device configuration.

CNT A180  PC Peripherals, Storage and A+ Certification  4 CR
Contact Hours: 3 + 2
Special Fees.
Covers PC operating systems, peripheral devices, auxiliary storage devices and the interfaces used to connect them to the personal computer. Also covers the fundamental topics necessary to prepare for the CompTIA A+ Certification exams.

CNT A183  Local Area Networks  3 CR
Contact Hours: 2 + 2
Prerequisites: CNT A160 and CNT A162.
Special Fees.
Practices 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 A210  PC Technician Fundamentals  3 CR
Contact Hours: 3 + 0
Prerequisites: CIS A105.
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.
Introduces the principles of developing, installing, maintaining and troubleshooting Peer-to-Peer, Local Area, and Wide Area Networks. Designed to serve the needs of advanced computer end-users interested in mastering broad, vendor-independent networking concepts. Provides students with the knowledge and experience required to pass the CompTIA Network + Exam.

CNT A240  Industry PC Configuration Essentials  2 CR
Contact Hours: 1 + 2
Prerequisites: CNT A170 with minimum grade of C or CNT A183 with minimum grade of C or CNT A212 with minimum grade of C.
Special Fees.
Introduces personal computer configuration essentials. Includes installation, configuration and support of personal computers in a mixed enterprise environment.

CNT A241  Administering and Supporting Industry Network Infrastructure  3 CR
Contact Hours: 2 + 2
Prerequisites: CNT A240 with minimum grade of C.
Special Fees.
Provides an introduction to network infrastructure in a mixed enterprise environment.
### CNT A242  Industry Network Directory Configuration  3 CR  
Contact Hours: 2 + 2  
Prerequisites: CNT A241 with minimum grade of C.  
Special Fees.  
Provides an introduction for installing, configuring and deploying application services in an enterprise-networked environment.

### CNT A243  Industry Application Infrastructure  3 CR  
Contact Hours: 2 + 2  
Prerequisites: CNT A241 with minimum grade of C or CNT A242 with minimum grade of C.  
Provides an introduction for application support and deployment in an enterprise-networked environment.

### CNT A244  Designing Secure Windows Networks  3 CR  
Contact Hours: 2 + 2  
Prerequisites: CNT A242.  
Provides 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.

### CNT A246  Windows Network Infrastructure Design  2 CR  
Contact Hours: 1 + 2  
Prerequisites: CNT A242.  
Provides students with the knowledge and skills to design a Microsoft Windows networking services infrastructure design that supports the network applications required for the needs of an organization.

### CNT A261  CCNA 2 Router Fundamentals and Protocols  4 CR  
Contact Hours: 3 + 2.5  
Prerequisites: CNT A170.  
Special Fees.

### CNT A262  Computer Technical Support  2 CR  
Contact Hours: 1.5 + 2  
Prerequisites: CNT A165.  
Develops skills necessary for evaluating and implementing various technical support functions, including hardware and software needs assessments, training development, preventive maintenance, and effective communication and documentation.

### CNT A264  Introduction to Information Security  3 CR  
Contact Hours: 3 + 0  
Prerequisites: CNT A212 or CNT A261.  
Provides students with an understanding of the core concepts that relate to the practice of network security. This course will help prepare students for the CompTIA Security+ exam.

### CNT A270  CCNA 3 Switching and Wireless  4 CR  
Contact Hours: 3 + 2.5  
Prerequisites: CNT A261.  
Special Fees.

### CNT A271  CCNA 4 WAN Access  4 CR  
Contact Hours: 3 + 2  
Prerequisites: CNT A270.  
Special Fees.

### CNT A275  Information Technology Project Management  2 CR  
Contact Hours: 1 + 2  
Prerequisites: CNT A262 with minimum grade of C.  
Registration Restrictions: Satisfactory completion of 12 CNT credit hours with a minimum grade of C.  
Introduces information technology project management fundamentals.  
Develops skills required to work with stakeholders and information technology processes. Develops skills in leadership and team participation. Includes IT project planning, design, team skills, proposals, implementation, reporting and completion.

### CNT A276  Individual Technical Project  1-3 CR  
Contact Hours: 0 + 3-5-10  
Prerequisites: CNT A261.  
Special Note: Faculty permission and working knowledge of CNT topics required.  
Covers development, implementation and completion of a project based on a relevant technological issue. Student works closely with faculty to produce and end product and report.

### CNT A280  Server Operating Systems  3 CR  
Contact Hours: 2 + 3  
Prerequisites: CNT A261 and [CNT A183 or CNT A212].  
Special Fees.

### CNT A282  Industry Workplace Experience  1-3 CR  
Contact Hours: 0 + 3-5-10  
Registration Restrictions: Faculty permission.  
Grade Mode: Pass/No Pass.  
Special Note: Requires instructor permission and successful completion of 12 credits in the CNT program.  
Provides supervised workplace experience in industry settings. Integrates advanced-level knowledge and practice to demonstrate skill competencies.

### CNT A290  Selected Topics in Information Technology  1-4 CR  
Contact Hours: 1-4 + 0-12  
Special Note: Prerequisites vary by topic. May be repeated with a change in subtitle.  
Covers various intermediate to advanced topics in information technology.

### CNT A390  Selected Topics in Computer and Networking Technology  1-4 CR  
Contact Hours: 1-4 + 0-12  
Special Note: Prerequisites vary by topic. May be repeated with a change in subtitle.  
Offers selected topics in computers and networking pertaining to state-of-the-art technology and trends. Course content is determined by current trends, new technologies, and student and employer needs.

### COMM - Communication

**Offered through the College of Arts and Sciences**

[www.uaa.alaska.edu/communication](http://www.uaa.alaska.edu/communication)

### Communication and Discourse Studies

**Administration/Humanities Building (ADM), Room 262, 786-4390**

[www.uaa.alaska.edu/cds](http://www.uaa.alaska.edu/cds)

### Communication and Human Behavior

**Social Sciences Building (SSB), Room 352, 786-4345**

[www.uaa.alaska.edu/chb](http://www.uaa.alaska.edu/chb)

### COMM A101  Introduction to Human Communication  3 CR  
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.

### COMM A111  Fundamentals of Oral Communication  3 CR  
Contact Hours: 3 + 0  
Prerequisites: 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 A215 or ENGL A214 or [Accuplacer-Reading Comp with score of 080 and Accuplacer-Sentence Skills with score of 090] 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 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].  
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.  
Course Attributes: UAA GER Oral Communication Requirement.  
Special Fees.

Special Note: Students who qualify for placement in ENGL A111 or have already completed ENGL A111 are qualified for this course.

Survey of communication principles, theories, and skills including interpersonal communication, small group communication, and public speaking. Students develop oral communication skills through practice in a variety of individual activities, group activities, and individual and group presentations.
COMM A235 Small Group Communication 3 CR
Contact Hours: 3 + 0
Prerequisites: 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 080 and Accuplacer-Sentence Skills with score of 090] 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 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].
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.
Course Attributes: UAA GER Oral Communication Requirement.

COMM A236 Interpersonal Communication 3 CR
Contact Hours: 3 + 0
Prerequisites: 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 080 and Accuplacer-Sentence Skills with score of 090] 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 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].
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.
Course Attributes: UAA GER Oral Communication Requirement.

COMM A241 Public Speaking 3 CR
Contact Hours: 3 + 0
Prerequisites: 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 080 and Accuplacer-Sentence Skills with score of 090] 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 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].
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.
Course Attributes: UAA GER Oral Communication Requirement.

COMM A242 Small Group Communication 3 CR
Contact Hours: 3 + 0
Prerequisites: 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 080 and Accuplacer-Sentence Skills with score of 090] 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 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].
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.
Course Attributes: UAA GER Oral Communication Requirement.

COMM A243 Intercultural Communication 3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A101 or COMM A111 or COMM A235 or COMM A237 or COMM A238.
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.

COMM A320 Argumentation and Debate 3 CR
Contact Hours: 3 + 0
Prerequisites: 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.

COMM A330 Nonverbal Communication 3 CR
Contact Hours: 3 + 0
Prerequisites: COMM A111 or COMM A235 or COMM A237 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.

COMM A341 Advanced Public Speaking 3 CR
Contact Hours: 3 + 0
Prerequisites: 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.

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 history, 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 University Honors College  
Edward and Cathryn Rasmunson Hall (RH), Room 115, 786-1086  
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 School of Engineering  
Engineering Building (ENGR), Room 201, 786-1900  
www.uaa.alaska.edu/schoolofengineering  

CS A101  Introduction to Computer Science  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 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 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.  
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.  
Registration Restrictions: If prerequisite is not satisfied, appropriate SAT or ACT scores or approved UAA placement test required.  
Introduction to the syntax and semantics of the Visual Basic .NET programming language with an emphasis on writing programs to solve problems.

CS A320  Operating Systems  3 CR  
Contact Hours: 3 + 0  
Prerequisites: CSCE A202.  
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.

CS A342  Networks  3 CR  
Contact Hours: 3 + 0  
Prerequisites: CSCE A248 and CSCE A311 and MATH A231.  
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.

CS A413  Computer and Data Security  3 CR  
Contact Hours: 3 + 0  
Prerequisites: CSCE A202 or CSCE A211.  
Fundamentals of computer and data security. Emphasizes the importance of proper data processing practices and management.

CS A448  Computer Architecture  3 CR  
Contact Hours: 3 + 0  
Prerequisites: CSCE A230 and CSCE A248 and CSCE A311.  
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.

CS 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.

CS A671  Advanced Software Engineering  3 CR  
Contact Hours: 3 + 0  
Prerequisites: CSCE 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.

CS 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.

CSCE - Computer Science & Computer Systems Engineering  
Offered through the School of Engineering  
Engineering Building (ENGR), Room 201, 786-1900  
www.uaa.alaska.edu/schoolofengineering  

CSCE A201  Computer Programming I  4 CR  
Contact Hours: 3 + 2  
Prerequisites: MATH A105 with minimum grade of C or concurrent enrollment) or (MATH A107 with minimum grade of C or concurrent enrollment) or (MATH A108 with minimum grade of C or concurrent enrollment) or (MATH A109 with minimum grade of C or concurrent enrollment) or (MATH A201 with minimum grade of C or concurrent enrollment) or (MATH A202 with minimum grade of C or concurrent enrollment).  
An introduction to object-oriented computer programming techniques and problem solving. This course covers basic syntax; sequential, branching, and iterative execution; objects, methods, inheritance, polymorphism, and encapsulation; arrays and linked lists; and recursion.
Course Descriptions

CSCE A202 Object-Oriented Programming 3 CR
Contact Hours: 3 + 0
Prerequisites: CSCE A201 with minimum grade of C.
In-depth coverage of object-oriented programming in the Java programming language. Topics include: Inheritance, abstraction, interfaces, references, polymorphism, dynamic binding, class hierarchies, container classes, random access file Input/Output (I/O), serializability, graphical applications, event handling, Unified Modeling Language (UML), and object-oriented design.

CSCE A211 Computer Programming II 4 CR
Contact Hours: 3 + 2
Prerequisites: CSCE A201 with minimum grade of C.
Coverage of object-oriented programming in C++ that includes real-world applications built using objects, classes, inheritance, hierarchies, polymorphism, recursion, event processing and exception handling.

CSCE A241 Computer Hardware Concepts 4 CR
Contact Hours: 3 + 3
Prerequisites: CSCE A201 with minimum grade of C or CSCE A205 with minimum grade of C.
Crosslisted with: EE A241.
Analysis and design of electronic devices used as building blocks for construction of simple combinational and sequential digital systems. Presents formats for data storage, number systems and alphanumeric codes, and methods of implementing logical and arithmetic operations within computers. Relates hardware components’ capabilities and limitations to design requirements for computer processing, memory and control functions.

CSCE A248 Computer Organization and Assembly Language Programming 3 CR
Contact Hours: 3 + 0
Prerequisites: CSCE A211 with minimum grade of C and [CSCE A241 with minimum grade of C or EE A241 with minimum grade of C].
Organization and operation of a computer’s processor, including registers, memory, input/output (I/O), and control. Assembly language programming with emphasis placed on hardware/software interface and computer design.

CSCE A302 Object-Oriented Design Patterns 3 CR
Contact Hours: 3 + 0
Prerequisites: CSCE A202 with minimum grade of C.
Introduction to design patterns as solutions to recurring problems in developing object-oriented software. The course will include a detailed examination of significant design patterns and selected programming projects in a current object-oriented language.

CSCE A305 Android Programming 3 CR
Contact Hours: 3 + 0
Prerequisites: CSCE A202 with minimum grade of C.
Covers Android development concepts and programming. Topics include development environments, design issues, interface and input/output (I/O), code development, and publication.

CSCE A311 Data Structures and Algorithms 3 CR
Contact Hours: 3 + 0
Prerequisites: CSCE A211 with minimum grade of C and MATH A231 with minimum grade of C.
Special Fees.
Representation and organization of digital information in the form of efficient and effective data structures, manipulation of data structures in a procedural fashion, and the analysis and evaluation of various algorithms. The following topics will be covered: Abstract Data Types (ADT), arrays, tables, linked lists, stacks, queues, trees, sorting, searching, graphs, hashing, spanning trees, disjoint sets, and heaps.

CSCE A320 Operating Systems 3 CR
Contact Hours: 3 + 0
Prerequisites: CSCE A311 with minimum grade of C.
An introductory course on operating systems. Topics covered include all aspects of resource management and abstraction required to support application programs including: basic security, processes and threads, processor scheduling, synchronization, memory management, virtual memory, virtual machines, device drivers and Input/Output (I/O), and file systems.

CSCE A331 Programming Language Concepts 3 CR
Contact Hours: 3 + 0
Prerequisites: CSCE A248 with minimum grade of C and CSCE A311 with minimum grade of C.
Study of the theoretical foundations needed to design and implement modern programming languages, including syntax, type systems, semantics, and memory structures. Comparison of several programming languages in different paradigms such as procedural, functional, logic, and scripting languages. Programming assignments will be given in each language studied.

CSCE A342 Digital Circuits Design 3 CR
Contact Hours: 3 + 0
Prerequisites: CSCE A241 with minimum grade of C or EE A241 with minimum grade of C.
Digital system design using integrated circuits and field-programmable gate arrays (FPGAs). Design and discussion of data path and control units, finite state machines, and timing analysis. Digital circuit simulation and electronic schematic creation.

CSCE A351 Automata, Algorithms and Complexity 3 CR
Contact Hours: 3 + 0
Prerequisites: CSCE A311 with minimum grade of C and MATH A231 with minimum grade of C.
Study of the theory of computing and algorithm analysis and design. Topics include context-free grammars and parsing, finite automata and regular languages, pushdown automata and context-free grammars, deterministic and non-deterministic Turing machines, decidability and computability in the algorithm domain, the course provides and introduction to analysis and complexity of algorithms, searching/sorting algorithms, mathematical algorithms, and graph theoretic algorithms. Introduction to complexity theory.

CSCE A360 Database Systems 3 CR
Contact Hours: 3 + 0
Prerequisites: CSCE A202 with minimum grade of C or CSCE A211 with minimum grade of C.
Application of data modeling, relational database concepts and design, normalization theory, and structured query language. Study of underlying data structures and implementations of data processing architectures.

CSCE A365 Computer Networks 3 CR
Contact Hours: 3 + 0
Prerequisites: CSCE A211 with minimum grade of C and [STAT A253 with minimum grade of C or STAT A307 with minimum grade of C].
Network architectures, layered protocols, Internet protocols and network service interfaces. Emphasis on design and implementation of networking hardware, including routers, bridges, switches, hubs and repeaters. Local networks, addressing, routing, flow control, queuing, routing protocols and packet loss.

CSCE A385 Computer Graphics 3 CR
Contact Hours: 3 + 0
Prerequisites: CSCE A311 with minimum grade of C and MATH A201 with minimum grade of C.
Introduction to computer graphics. Topics include polygon and ray trace rendering of objects in scenes; render languages and Application Programming Interfaces (APIs); theory for generation of pixel values in a render buffer with consideration of color, lighting, shading, texture, surfaces, hidden surfaces and materials; and the viewpoint, method of projections and mathematics for rendering and viewing objects.

CSCE A395 Internship in Computing 3 CR
Contact Hours: 0 + 9
Prerequisites: CSCE A211 with minimum grade of C.
Registration Restrictions: Faculty approval
Grade Mode: Pass/No Pass.
Special Note: May be taken up to three times, but only 3 credits may be applied toward CS or CSE major requirements.
Application of computer science or computer engineering skills in a professional work setting.

CSCE A401 Software Engineering 3 CR
Contact Hours: 3 + 0
Prerequisites: CSCE A311 with minimum grade of C.
Extends the ideas of software design and development from the introductory programming sequence to encompass the problems encountered in large-scale programs. Topics include software lifecycle models for developing large systems, advanced issues in object-oriented programming, design patterns, software development tools, project management principles and principles of interface design.

CSCE A411 Artificial Intelligence 3 CR
Contact Hours: 3 + 0
Prerequisites: CSCE A311 with minimum grade of C.
Introduction to the basic concepts of artificial intelligence (AI). Topics include intelligent agents; heuristic, local and adversarial search; first-order logic and knowledge of representation; and machine learning.

CSCE A412 Evolutionary Computing 3 CR
Contact Hours: 3 + 0
Prerequisites: CSCE A311 with minimum grade of C.
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.
CSCE A415  Machine Learning  3 CR  
Contact Hours: 3 + 0  
Prerequisites: CSCE A311 with minimum grade of C.  
In-depth survey of basic and advanced concepts of machine learning. Topics include  
linear discrimination; supervised, unsupervised, and semi-supervised learning;  
multi-layer perceptrons; maximum-margin methods; Monte Carlo methods; and  
reinforcement learning.  

CSCE A431  Compilers  3 CR  
Contact Hours: 3 + 0  
Prerequisites: CSCE A248 with minimum grade of C and [CSCE A331 with  
minimum grade of C or CSCE A351 with minimum grade of C].  
Programming language translation from a high-level object-oriented language  
assemble code. Lexical analysis, semantic analysis and code generation. Finite  
state automata, flow graphs, directed graphs, parsers, parse trees and regular  
expressions. Optimizations to improve code efficiency when executed as a low-  
level language.  

CSCE A442  VLSI Circuit Design  3 CR  
Contact Hours: 3 + 0  
Prerequisites: CSCE A342 with minimum grade of C and EE A204 with minimum  
grade of C.  
Analysis and design of digital very large scale integration (VLSI) circuits  
including area restrictions, delay minimization and power minimization.  
Simulation of VLSI logic in software. Complementary metal-oxide semiconductor  
(CMOS) design rules, physical design, power consumption, clocking strategies  
and transistor theory. Engineering VLSI simulation project at the end of the course.  

CSCE A445  Computer Design and Simulation  4 CR  
Contact Hours: 3 + 3  
Prerequisites: CSCE A248 with minimum grade of C and CSCE A311 with  
minimum grade of C.  
Advanced study through simulation of computer organization including  
processor, memory and input/output (I/O) system organization. Key elements  
include memory hierarchy and caching, computer arithmetic, instruction sets,  
addressing, interrupts, processor pipelines, I/O interconnection, and memory  
management including demand paging and translation lookaside buffer (TLB)  
cache. Students learn metrics used to measure system performance and evaluate  
engineering tradeoffs made in design.  

CSCE A446  Digital Media and Interactive Systems  3 CR  
Contact Hours: 3 + 0  
Prerequisites: CSCE A320 with minimum grade of C and CSCE A365 with  
minimum grade of C.  
Introduces digital media systems for digital cinema and digital cable/Internet  
media creation, delivery, and interactive systems. Topics covered include  
digital audio and video encoding and decoding, transport, multiplexing, broadband  
and baseband transmission, real-time requirements, and interactive on-demand  
systems for video and video games. The historical progression from traditional  
alog and video to digital formats are covered, including cable; web/mobile  
Internet Protocol Television (IPTV) and media; Advanced Television Systems  
Committee (ATSC) standards; over-the-air, interactive on-demand digital video;  
and digital video gaming.  

CSCE A448  Computer Architecture  3 CR  
Contact Hours: 3 + 0  
Prerequisites: CSCE A248 with minimum grade of C.  
A quantitative approach to computer architecture and parallelism, which  
addresses both the software and hardware aspects of parallelism in modern  
computing systems. Specific emphasis will be placed on instruction-level, thread-  
level, data-level, task-level and request-level parallelism, and developing parallel  
application code in assembler and high-level languages for systems such as  
graphics processing units (GPUs).  

CSCE A450  Robotics  3 CR  
Contact Hours: 3 + 0  
Prerequisites: CSCE A241 with minimum grade of C and CSCE A311 with  
minimum grade of C and CSCE A365 with minimum grade of C.  
Introduces robotics with embedded systems. Controlling mobile robots,  
sensors and motors with autonomous and user-controlled operations. Different  
types of robots, including aerial, underwater and automotive robots. Real-time  
image processing and neural networks including genetic algorithms will be  
covered.  

CSCE A460  Advanced Database Systems  3 CR  
Contact Hours: 3 + 0  
Prerequisites: CSCE A360 with minimum grade of C.  
In-depth treatment of relational theory, non-relational database models,  
transaction processing, concurrency control, and administration of databases in  
practice. Course includes an applied project of significant scope.  

CSCE A462  Data Mining  3 CR  
Contact Hours: 3 + 0  
Prerequisites: CSCE A360 with minimum grade of C.  
Application of rule-based, free-based and statistical techniques for data  
classification, clustering and association. Evaluation and analysis of data mining  
results.  

CSCE A465  Computer and Network Security  3 CR  
Contact Hours: 3 + 0  
Prerequisites: CSCE A365 with minimum grade of C.  
Analysis of computer and network attack techniques and methods to defend  
against them including firewalls, virtual private networks, network intrusion  
detection and denial of service. Course includes coverage of malware, packet  
 sniffers, wireless networks, cellular networks and wired networks.  

CSCE A470  Computer Science and Engineering  
Capstone Project  3 CR  
Contact Hours: 3 + 0  
Prerequisites: CSCE A365 with minimum grade of C and ENGL A212 with  
minimum grade of C and [CSCE A351 with minimum grade of C and CSCE  
A401 with minimum grade of C] or [CSCE A311 with minimum grade of C  
and CSCE A342 with minimum grade of C and CSCE A448 with minimum grade of  
C] or and (PHIL A305 with minimum grade of C or concurrent enrollment).  
Class Standing Restriction: Must be Senior.  
Registration Restrictions: Senior standing and completion of GER Tier 1 (basic  
college-level skills) courses  
Course Attributes: UAA GER Integrative Capstone.  
Application of computer science and computer engineering concepts,  
principles and practices to develop a research, applied software development,  
or computer engineering project. The student will analyze, design, document,  
implement and deliver a presentation and written report of a research project  
or software/hardware system of moderate complexity under the supervision of  
the instructor and/or other faculty. Includes a discussion of ethical, professional  
and contemporary issues in technology and the impact of computing technology  
in a global and societal context.  

CSCE A485  Computer and Machine Vision  3 CR  
Contact Hours: 3 + 0  
Prerequisites: [PHYS A124 with minimum grade of C or PHYS A212 with  
minimum grade of C] and CSCE A320 with minimum grade of C.  
Introduces computer vision and machine vision. Topics covered include  
differences between computer and machine vision, image capture and processing,  
filtering, thresholding, edge detection, shape analysis, shape detection, pattern  
matching, digital image stabilization, stereo ranging, 3D models from images, real-  
time vision systems, and recognition of targets. Applications include inspection,  
surveillance, search and rescue, and machine vision navigation.  

CSCE A490  Topics in Computer Science and Computer  
Systems Engineering  3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: Faculty permission  
Special Note: May be repeated for credit with a change in subtitle/topic.  
Advanced topics in computer science or computer systems engineering not  
taught in other CSCE course offerings.  

CSCE A495  Computing Internship Project  3 CR  
Contact Hours: 0 + 9  
Prerequisites: CSCE A311 with minimum grade of C.  
Registration Restrictions: Instructor approval  
Grade Mode: Pass/No Pass.  
Special Note: May be taken up to three times, but only 3 credits may be applied  
toward CS or CSE major requirements.  
Application of computer science or computer engineering skills in a  
professional work setting. The student will analyze, design, develop and document  
a realistic computing project of moderate complexity under the supervision of a  
qualified professional who has agreed in advance to undertake this role.  

CSCE A498  Individual Research  1-3 CR  
Contact Hours: 1-3 + 0  
Class Standing Restriction: Must be Junior or Senior.  
Registration Restrictions: Upper-division standing and faculty permission.  
Special Note: May be repeated up to a maximum of 6 credits.  
Students will engage in an independent research project under the supervision  
of a faculty member. The result will be a paper or presentation prepared to  
presentation standards.
CSE - Computer Systems Engineering

Offered through the School of Engineering
Engineering Building (ENGR), Room 201, 786-1900
www.uaa.alaska.edu/schoolofengineering

CSE A102 Introduction to Computer Systems 1 CR
Contact Hours: 1 + 0
Introduction to hardware, operating systems, networking, security, storage, maintenance and related topics in computer systems. This course prepares students for applications across a wide range of computer systems for use in Geomatics and GIS courses as well as basic system management in field situations for Geomatics/GIS applications.

CSE A205 Introduction to C Programming for Engineers 3 CR
Contact Hours: 3 + 0
Prerequisites: CSE A205.
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 A225 Assembly Language Programming for Engineers using Xilinx 3 CR
Contact Hours: 3 + 0
Prerequisites: CSE A205.
Organization and operation of a computer's processor, including registers, I/O and control. Assembly language programming with emphasis placed on engineering applications and design using Xilinx architecture.

CSE A315 Design of Computer Engineering Systems 3 CR
Contact Hours: 3 + 0
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.
Course Attributes: UAA GER Integrative Capstone.
Special Fees: Capstone course in which computer systems engineering students design a computer component or system starting with the initial design specification to the implementation and testing. Students apply knowledge and skills learned in their undergraduate curriculum.

CTE - Career & Technical Education

Offered through the Community & Technical College
University Center (UC), Room 130, 786-6945
www.uaa.alaska.edu/cte

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 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 A425 Developing Programs of Study 1 CR
Contact Hours: 1 + 0
Class Standing Restriction: Must be Junior or Senior.
Registration Restrictions: Junior or senior standing. May be stacked with: CTE A425.
Special Note: May not be repeated for credit at a different level.
Develops understanding of programs of study through analysis of the national Career Clusters model and its application to program development and curriculum mapping. Generates a plan of study and an implementation plan for one career pathway through a sequenced process. This course addresses best practices and is recommended for educators designing programs of study to meet state career and technical education guidelines.

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 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 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 A625 Developing Programs of Study 1 CR
Contact Hours: 1 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing. May be stacked with: CTE A425.
Special Note: May not be repeated for credit at a different level.
Develops understanding of programs of study through analysis of the national Career Clusters model and its application to program development and curriculum mapping. Generates a plan of study and an implementation plan for one career pathway through a sequenced process. This course addresses best practices and is recommended for educators designing programs of study to meet state career and technical education guidelines.

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: 2 + 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.
Course Descriptions

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 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 and Sciences
Administration/Humanities Building (ADM), Room 101, 786-4355
www.uaa.alaska.edu/english

Graduate-level CWLA courses are offered through the College of Arts and Sciences
Administration/Humanities Building (ADM), Room 270, 786-4394
www.uaa.alaska.edu/cwla

CWLA A259 Short Format: Introduction to Creative Writing 1 CR
Contact Hours: 1 + 0
Special Note: May be repeated twice for elective credit.
Introduction to one creative writing genre in short one-credit workshops.

CWLA A260 Introduction to Creative Writing 3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A111 with minimum grade of C.
Special Note: May be repeated once for elective credit.
Introduction to creative writing in multiple genres. Reading fiction, nonfiction, and poetry; analysis of stylistic features; participation in writing workshop; and production of written exercises and texts.

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.

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.

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.

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.

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.

CWLA A352 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.

CWLA A362 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.

CWLA A372 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.

CWLA A382 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.
Introduction to techniques of writing drama for stage and screen, with instructor-guided peer critique of each student’s work.

CWLA A452 Advanced Writers’ Workshop: Poetry 3 CR
Contact Hours: 3 + 0
Prerequisites: CWLA A352 with minimum grade of C or CWLA A362 with minimum grade of C or CWLA A372 with minimum grade of C or CWLA A382 with minimum grade of C.
Registration Restrictions: Prior completion of CWLA A352 and ENGL A351 recommended.
Special Note: May be repeated once for elective credit.
Practice in writing poetry, with instructor-guided peer critique of each student’s work.

CWLA A462 Advanced Writers’ Workshop: Fiction 3 CR
Contact Hours: 3 + 0
Prerequisites: CWLA A352 with minimum grade of C or CWLA A362 with minimum grade of C or CWLA A372 with minimum grade of C or CWLA A382 with minimum grade of C.
Registration Restrictions: Prior completion of CWLA A362 and [ENGL A361 or ENGL A363] recommended.
Special Note: May be repeated once for elective credit.
Advanced practice in writing fiction in an intensive workshop format.
Course Descriptions

CWLA A472 Advanced Writers' Workshop: Nonfiction 3 CR
Contact Hours: 3 + 0
Prerequisites: CWLA A352 with minimum grade of C or CWLA A362 with minimum grade of C or CWLA A372 with minimum grade of C or CWLA A382 with minimum grade of C.
Registration Restrictions: Prior completion of CWLA A372 and ENGL A371 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.

CWLA A482 Advanced Writers' Workshop: Drama and Screenwriting 3 CR
Contact Hours: 3 + 0
Prerequisites: CWLA A352 with minimum grade of C or CWLA A362 with minimum grade of C or CWLA A372 with minimum grade of C or CWLA A382 with minimum grade of C.
Registration Restrictions: CWLA A382 and [ENGL A381 or ENGL A383] 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.

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 the Alaska Quarterly Review. Students assigned to AQR will learn how to produce, manage and edit a nationally recognized literary journal.

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 with the features editor of "Anchorage Daily News." 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 Note: May be repeated twice for degree credit with a change in subtitle.
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 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 College of Health
Allied Health Sciences Building (AHS), Room 160, 786-6929
www.uaa.alaska.edu/alliedhealth

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.
Introduces 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 Office Administration 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Instructor approval
Special Fees.
Provides entry-level foundation of dental reception and practice management as it pertains to dental assisting. Introduces dental front-office skills and dental services management.
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.
Introduces 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 materials. Includes the physical and chemical properties of restorative materials.

DA A195A Clinical Practicum I 1 CR
Contact Hours: 0 + 6
Registration Restrictions: Instructor approval
Grade Mode: Pass/No Pass.
Special Fees.
Provides beginning dental assisting experiences in a clinical setting.

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.

DH - Dental Hygiene

Offered through the College of Health
Allied Health Sciences Building (AHS), Room 160, 786-6929
www.uaa.alaska.edu/alliedhealth

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 3 CR
Contact Hours: 2 + 3
Prerequisites: DA A110 with minimum grade of C and DA A110L with minimum grade of C and DH 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 and current 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, fluoride application and use of mechanized debridement.

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.
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 A302 Advanced Instrumentation for Dental Hygienists 1 CR
Contact Hours: 0 + 2
Prerequisites: DH A222 with minimum grade of C and DH A295D with minimum grade of C.
Registration Restrictions: Departmental approval and current BLS certification.
Special Fees.
Provides instruction in advanced instrumentation techniques and root planing used in dental hygiene therapeutic treatment. Explores root anatomy through drawings and carvings.

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 28340, 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 anesthetics. Analyzes pharmacology, administration techniques, medical contraindications, and management complications accompanying administration and monitoring of nitrous oxide.

DH A311 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.
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 A360 Restorative Techniques for Dental Auxiliaries 5 CR
Contact Hours: 1 + 12
Prerequisites: DA A110 with minimum grade of C and [DA A150 with minimum grade of C or DH A204 with minimum grade of C].
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 techniques, with emphasis on Class I and Class II restorations. Emphasizes Class III and IV and multiple-surface posterior restorations towards the end of the course. Applies restorative-function skills in the clinical situation under direct supervision of clinical faculty.

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 Fees.
Discusses emerging trends, standards, and theories in dental hygiene. Explores opportunities for clinical application.

DH A392 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.
Registration Restrictions: Departmental approval
Corequisite: DH A395C.
Special Fees.
Provides discussion and evaluation of clinical experiences in Clinical Practicum III. 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.
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 moderate to advanced 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 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 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.

DH A495B Instructional Practicum in Dental Hygiene 1-4 CR
Contact Hours: 0 + 2-8
Prerequisites: DH A321 with minimum grade of C and DH A395C with minimum grade of C.
Registration Restrictions: Instructor permission, departmental approval, and cardiopulmonary resuscitation certification.
Special Note: Placement availability may be limited. May be repeated twice for a maximum of 4 credits.
Emphasizes practical teaching experience in laboratory or clinical sessions. Combines classroom preparation, presentation of material, competency assessment, and lecture correlation under the supervision of program faculty.
DH A495E  Rural Practicum in Dental Hygiene  1-3 CR
Contact Hours: 0 + 3-9
Registration Restrictions: AAS in Dental Hygiene; departmental approval; current cardiopulmonary resuscitation certification.
Grade Mode: Pass/No Pass.
Special Note: May be repeated twice for a maximum of 3 credits.
Applies dental hygiene skills in the rural clinical situation under the supervision of clinical faculty. Emphasizes dental needs of rural communities.

DLS - Disability & Long Term Support

Offered through the College of Health
UAA Center for Human Development
2702 Gambell St., Suite 103, 272-8270
www.uaa.alaska.edu/centerforhumandevelopment

DLS A200  Introduction to Children's Behavioral Health  3 CR
Contact Hours: 2 + 2
Registration Restrictions: Department approval.
Special Fees.
Special Note: Course includes a 40-hour practicum.
Assists students in developing core skills in the children’s behavioral health field. Course covers ethics and ethical practices, self-care, confidentiality, mandatory reporting, overview of child and adolescent development, building and maintaining therapeutic relationships, boundaries, culturally responsive interventions, communication, and additional behavioral health topics impacting treatment outcomes for children and adolescents.

DLS A204  Person-Centered Planning  3 CR
Contact Hours: 2 + 2
Registration Restrictions: Department approval.
Special Fees.
Special Note: Course requires a 30-hour practicum portfolio project.
Fundamentals of the Person-Centered Planning process, including tools and facilitation techniques. Emphasizes Wrap-Around Supports as applied to families and children.

DLS A205  Teaching Social Skills to Youth in Children’s Behavioral Health  4 CR
Contact Hours: 2 + 4
Prerequisites: DLS A200.
Registration Restrictions: Department approval.
Special Fees.
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 nonaversive interventions for challenging and problematic behaviors with children. 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.
Special Fees.
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 nonaversive 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
Registration Restrictions: Department approval.
Special Fees.
Students will differentiate between types of trauma that children can experience and how trauma may affect their treatment outcomes. Students will learn safe and supportive trauma-informed interventions, as well as strategies to reduce the effects of caregiver fatigue. Course includes a 30-hour practicum.

DMS - Diagnostic Medical Sonography

Offered through the College of Health
Allied Health Science Building (AHS), Room 165, 786-6976
www.uaa.alaska.edu/alliedhealth/academics/mis/dms

DMS A103  Patient Care in Sonography  2 CR
Contact Hours: 2 + 0
Registration Restrictions: Department approval
Introduces general patient care and communication skills used working in sonography. Includes clinical procedures and techniques, infection control, and safety.

DMS A105  Principles and Instrumentation I  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Department approval
Introduces the physical principles of sound waves, acoustic parameters, ultrasound transducers, instrumentation, equipment operation, and the methods of image formation and storage.

DMS A107  Abdominal Sonography I  2 CR
Contact Hours: 2 + 0
Registration Restrictions: Department approval
Introduces the anatomy and physiology of abdominal vasculature, organs, systems and structures. Includes normal sonographic appearance of anatomy.

DMS A109  OB and Gyn Sonography I  2 CR
Contact Hours: 2 + 0
Registration Restrictions: Department approval
Introduces the embryology, anatomy and physiology of the female reproductive system and developing fetus. Includes normal sonographic appearance of anatomy.

DMS A205  Principles and Instrumentation II  2 CR
Contact Hours: 2 + 0
Prerequisites: DMS A105 with minimum grade of C.
Registration Restrictions: Department approval
Discusses advanced imaging, Doppler principles, image artifacts, quality assurance programs and biologic effects.

DMS A207  Abdominal Sonography II  2 CR
Contact Hours: 2 + 0
Prerequisites: DMS A107 with minimum grade of C.
Registration Restrictions: Departmental approval
Discusses the pathologic conditions of abdominal vasculature, organs, systems and structures. Includes sonographic findings and scanning protocols.

DMS A209  OB and Gyn Sonography II  2 CR
Contact Hours: 2 + 0
Prerequisites: DMS A109 with minimum grade of C.
Registration Restrictions: Department approval
Discusses the pathologic conditions of the female reproductive system and fetal development. Includes sonographic findings and scanning protocols.

DMS A211  Small Parts Sonography  2 CR
Contact Hours: 2 + 0
Registration Restrictions: Departmental approval
Introduces the anatomy, physiology and pathologic conditions of superficial structures and small parts. Includes normal sonographic appearance of anatomy, sonographic findings and scanning protocols.

DMS A213  Vascular Technology  2 CR
Contact Hours: 2 + 0
Registration Restrictions: Departmental approval
Introduces the anatomy, physiology, hemodynamics and pathologic conditions of the cardiovascular system. Includes normal sonographic appearance of anatomy, sonographic findings and scanning protocols.

DMS A215  Breast Sonography  2 CR
Contact Hours: 2 + 0
Registration Restrictions: Departmental approval
Introduces the anatomy, physiology and pathologic conditions of breast tissue. Includes normal sonographic appearance of anatomy, sonographic findings and scanning protocols.

DMS A217  Fundamentals of Sonography Lab  2 CR
Contact Hours: 0 + 4
Prerequisites: DMS A205 with minimum grade of C and DMS A207 with minimum grade of C and DMS A209 with minimum grade of C and DMS A211 with minimum grade of C and DMS A213 with minimum grade of C and DMS A215 with minimum grade of C.
Registration Restrictions: Departmental approval
Special Fees.
Provides students the opportunity to apply didactic knowledge using sonographic equipment in a supervised laboratory environment.

DMS A221  Pediatric Sonography  1 CR
Contact Hours: 1 + 0
Registration Restrictions: Departmental approval
Introduces the anatomy, physiology and pathologic conditions for neonatal and pediatric patients. Includes normal sonographic appearance of anatomy, sonographic findings and scanning protocols.
DN - Dietetics & Nutrition

Offered through the Community & Technical College
Lucy Cuddy Hall (CUDY), Room 126, 786-1276
www.uaa.alaska.edu/culinary

DN A100 The Profession of Dietetics 1 CR
Contact Hours: 1 + 0
Major Restriction: Must be Dietetics or Pre-Major Dietetics major.
Registration Restrictions: Course restricted to pre-dietetics and Dietetics majors only.
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 A151 Nutrition Through the Life Cycle 3 CR
Contact Hours: 3 + 0
Introduces nutritional needs and dietary recommendations through the life cycle: newborn, infants, toddlers, preschool and school-age children, adolescents, adults and the elderly. Covers common childhood, adolescent, adult and elderly conditions and corresponding nutrition interventions.

DN A155 Survey of Alaska Native Nutrition 3 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] or [CHEM A104 or concurrent enrollment] or [CHEM A108 or concurrent enrollment] and [ENGL A111 with minimum grade of C or ENGL A119 with minimum grade of C].

DN A215 Sports Nutrition 3 CR
Contact Hours: 3 + 0
Prerequisites: BIOL A111 with minimum grade of C and BIOL A112 with minimum grade of C.

DN A225 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.

DN A260 Food Science 3 CR
Contact Hours: 3 + 0
Prerequisites: DN A255 with minimum grade of C.

DN A301 Nutrition Assessment 3 CR
Contact Hours: 3 + 0
Prerequisites: DN A203 with minimum grade of C and [MATH A107 with minimum grade of C or MATH A108 with minimum grade of C or MATH A109 with minimum grade of C or MATH A172 with minimum grade of C or MATH A200 with minimum grade of C] and [PSY A111 with minimum grade of C or SOC A101 with minimum grade of C].

DN A305 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].

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].

DN A330 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].

Course Descriptions

DMS A295A Clinical Practicum I 8 CR
Contact Hours: 1 + 36
Prerequisites: DMS A217 with minimum grade of C.
Registration Restrictions: Departmental approval
Grade Mode: Pass/No Pass.
Special Fees:
Provides supervised clinical ultrasound experience in a health care facility. Students will observe, assist with and perform a variety of sonographic examinations.

DMS A295B Clinical Practicum II 8 CR
Contact Hours: 0 + 36
Prerequisites: DMS A295A with minimum grade of P.
Registration Restrictions: Departmental approval
Corequisite: DMS A392.
Grade Mode: Pass/No Pass.
Provides continued supervised clinical ultrasound experience in a health care facility. Students will perform a variety of sonographic examinations.

DMS A392 Pathophysiology Seminar 2 CR
Contact Hours: 2 + 0
Prerequisites: DMS A295A with minimum grade of P and RADT A231 with minimum grade of C.
Registration Restrictions: Departmental approval
Corequisite: DMS A295B.
Provides continued discussion of disease pathogenesis. Includes student presentation of case studies with correlation of sonographic, clinical and other diagnostic testing information.

DMS A395 Clinical Practicum III 10 CR
Contact Hours: 1.5 + 40
Prerequisites: DMS A295B with minimum grade of P.
Registration Restrictions: Departmental approval
Grade Mode: Pass/No Pass.
Provides continued supervised clinical ultrasound experience in a health care facility. Students will perform a variety of sonographic examinations.

Chapter 13 Page 410
DN A312 Nutrition Communication and Counseling 3 CR
Contact Hours: 3 + 0
Prerequisites: DN A203 with minimum grade of C and JPSY A111 with minimum grade of C or SOC A101 with minimum grade of C.
Major Restriction: Must be Dietetics or Nutrition or Pre-Major Dietetics major.
Registration Restrictions: Complete all Tier I GER courses (basic college-level skills) with a minimum grade of C; declared pre-dietetics, Dietetics, or Nutrition majors.

Provides theory and practice in nutrition communication and counseling including behavior modification techniques, processes of cognitive change, and cross-cultural counseling. Provides practice in nutrition education materials development and delivering nutrition education to groups.

DN A315 World Food Patterns 3 CR
Contact Hours: 3 + 0
Prerequisites: DN A101 with minimum grade of C or DN A203 with minimum grade of C.
Registration Restrictions: Completion of all GER Tier 1 (basic college-level skills) courses with a minimum grade of C.

Explores the global role of food, including therapeutic uses of food and nutrition, in humans. Examines regional and ethnic influences on food selection and preparation.

DN A350 Foodservice Systems and Quantity Foods 3 CR
Contact Hours: 3 + 0
Prerequisites: DN A225 with minimum grade of C.
Major Restriction: Must be Dietetics or Hospitality Restaurant Mgt or Nutrition or Pre-Major Dietetics major.
Registration Restrictions: Completion of all Tier 1 GER (basic college-level skills) courses with a minimum grade of C.

Integrates the role of Medical Nutrition Therapy into the treatment of pathological conditions. Applies the Nutrition Care Process in common medical conditions such as overweight and obesity, gastrointestinal tract disorders, cardiovascular diseases, cancer, psychiatric conditions, and pulmonary diseases.

DN A402 Medical Nutrition Therapy II 3 CR
Contact Hours: 3 + 0
Prerequisites: DN A401 with minimum grade of C.
Major Restriction: Must be Dietetics major.
Registration Restrictions: Completion of all Tier I GER (basic college-level skills) courses with grade of C or better.

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 A415 Community Nutrition 3 CR
Contact Hours: 3 + 0
Prerequisites: [DN A145 with minimum grade of C and DN A147 with minimum grade of C or DN A151 with minimum grade of C] and DN A203 with minimum grade of C and DN A315 with minimum grade of C.
Major Restriction: Must be Dietetics or Hospitality Restaurant Mgt or Nutrition or Pre-Major Dietetics major.
Registration Restrictions: Complete all GER Tier 1 (basic college-level skills) courses with a minimum grade of C; restricted to pre-dietetics, Dietetics, Nutrition, and Hospitality & Restaurant Management majors.
Course Attributes: UAA GER Integrative Capstone.

Applies nutrition principles to populations in various community environments and stages of life cycle, with consideration given to interrelated health, social, and economic concerns. Examines public policy related to nutrition concerns of target populations, and the marketing and management of community nutrition programs.

DN A420 Research Methods in Nutrition and Dietetics 3 CR
Contact Hours: 3 + 0
Prerequisites: DN A203 with minimum grade of C and STAT A252 with minimum grade of C.
Major Restriction: Must be Dietetics or Nutrition or Pre-Major Dietetics major.
Registration Restrictions: Complete all GER Tier I (basic college-level skills) courses with a minimum grade of C. Course is restricted to pre-dietetics, Dietetics, and Nutrition majors.

Practitioners in nutrition and dietetics. Addresses research designs commonly used, principles of evidence-based practice, evidence analysis procedures, translation research and outcomes research methodology.

DN A450 Dietetic Management 3 CR
Contact Hours: 3 + 0
Prerequisites: DN A350 with minimum grade of C.
Major Restriction: Must be Dietetics major.
Registration Restrictions: Completion of all GER Tier 1 (basic college-level skills) courses with a minimum grade of C. Restricted to Dietetics majors.

Covers management and leadership in dietetic practice. Discusses current issues affecting practice, including human resources, outcome management, accreditation, quality assurance and entrepreneurship.

DN A475 Advanced Nutrition 3 CR
Contact Hours: 3 + 0
Prerequisites: BIOL A111 with minimum grade of C and BIOL A112 with minimum grade of C and BIOL A315 with minimum grade of C and CHEM A321 with minimum grade of C and CHEM A441 with minimum grade of C and DN A203 with minimum grade of C.

Practitioners in nutrition and dietetics. Addresses research designs commonly used, principles of evidence-based practice, evidence analysis procedures, translation research and outcomes research methodology.

DN A490 Current Topics in Dietetics and Nutrition 1-6 CR
Contact Hours: 0-6 + 0-18
Prerequisites: DN A401 with minimum grade of C and DN A407 with minimum grade of C.

Examines current topics in dietetics and nutrition. Choice of topics resulting from special demands of the industry or special faculty expertise.

DN A492 Senior Seminar in Dietetics 2 CR
Contact Hours: 1 + 3
Prerequisites: DN A100 with minimum grade of C and DN A203 with minimum grade of C and DN A301 with minimum grade of C and DN A350 with minimum grade of C.
Major Restriction: Must be Dietetics major.
Registration Restrictions: Departmental approval. Dietetics major.

Requires students to apply prior learning to a practice setting. Explores current practice issues in the profession of dietetics, preparing students for supervised practice.

DN A692A Seminar: Current Issues in Dietetics Clinical and Community Nutrition 2 CR
Contact Hours: 8 + 0
Registration Restrictions: Bachelor’s degree that satisfies didactic program in dietetics (DPP) requirements set by the American Dietetic Association. Current immunizations are required for specific internship sites.
Corequisites: DN A695C and DN A695D.

Special Fees.
Seminar in current dietetics and clinical and community nutrition issues/ topics intended for dietetic interns. Provides theoretical and conceptual learning along with practicum coursework, necessary to meet American Dietetic Association accreditation standards and to prepare future dieticians for professional practice as Registered Dieticians.
DN A692B Seminar: Current Issues in Dietetics 1 CR
Community Nutrition and Foodservice Administration
Contact Hours: 4 + 10
Registration Restrictions: Bachelor’s degree that satisfies didactic program in dietetics (DUP) requirements set by the American Dietetic Association. Current immunizations are required for specific internship sites.
Corequisite: DN A695E and DN A695F.
Special Fees.
Seminar in current dietetics, community nutrition, foodservice administration issues/topics intended for dietetics interns. Provides theoretical and conceptual learning along with practicum coursework, necessary to meet American Dietetic Association accreditation standards and to prepare future dietitians for professional practice as Registered Dietitians.

DN A699C Practicum in Clinical Nutrition 4 CR
Contact Hours: 0 + 22
Registration Restrictions: Bachelor’s degree that satisfies didactic program in dietetics (DUP) 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 (DUP) 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 A699E Advanced Practicum in Community Nutrition 2 CR
Contact Hours: 0 + 16
Registration Restrictions: Bachelor’s degree that satisfies didactic program in dietetics (DUP) 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 (DUP) 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
www.uaa.alaska.edu/theatreanddance

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 position 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: 0.5 + 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 partnership dance or for overall development of movement skills. Specific dances will be examined in their historical and cultural contexts in order to find a closer connection to their movement forms.

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.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNCE A170</td>
<td>Dance Appreciation</td>
<td>3 CR</td>
<td>General 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.</td>
</tr>
<tr>
<td>DNCE A262</td>
<td>Theory and Improvisation</td>
<td>3 CR</td>
<td>Development of improvised movement material. Elements of time, space and dynamics studied through assignments that focus on movement analysis and performance. Students apply improvisational techniques that are expected to be employed as part of the compositional and choreographic process.</td>
</tr>
<tr>
<td>DNCE A120</td>
<td>Fundamentals of Ballet II</td>
<td>2 CR</td>
<td>Designed to address key concepts of dance making with a focus on improvisation, composition and choreographic process. Class work focuses on learning and refining works of choreography while also examining the social, political or cultural forces that influence performance works.</td>
</tr>
<tr>
<td>DNCE A223</td>
<td>Fundamentals of Modern II</td>
<td>2 CR</td>
<td>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.</td>
</tr>
<tr>
<td>DNCE A224</td>
<td>Dance for Musical Theatre II</td>
<td>2 CR</td>
<td>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.</td>
</tr>
<tr>
<td>DNCE A321</td>
<td>Intermediate Modern I</td>
<td>2 CR</td>
<td>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.</td>
</tr>
<tr>
<td>DNCE A361</td>
<td>Approaches to Dance Composition</td>
<td>3 CR</td>
<td>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.</td>
</tr>
<tr>
<td>DNCE A245</td>
<td>Dances of the West African Diaspora II</td>
<td>2 CR</td>
<td>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.</td>
</tr>
<tr>
<td>DNCE A253</td>
<td>Beginning Tap II</td>
<td>1 CR</td>
<td>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.</td>
</tr>
</tbody>
</table>
### ECON - Economics

**Offered through the College of Business and Public Policy**

**Edward & Cathryn Rasmuson Hall (RH), Room 203, 786-4100**

**www.uaa.alaska.edu/cbpp**

Students taking any ACCT, BA, CIS, ECON, LGOP, LOG, or PADM course will be charged a single lab fee of $34 for the semester. Applies to Elmendorf Air Force Base or Fort Richardson classes only when specifically noted on UAOnline. Does not apply to Chugiak-Eagle River classes.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON A123</td>
<td>Introduction to Behavioral Economics</td>
<td>3 CR</td>
</tr>
<tr>
<td>ECON A201</td>
<td>Principles of Macroeconomics</td>
<td>3 CR</td>
</tr>
<tr>
<td>ECON A202</td>
<td>Principles of Microeconomics</td>
<td>3 CR</td>
</tr>
<tr>
<td>ECON A210</td>
<td>Environmental Economics and Policy</td>
<td>3 CR</td>
</tr>
<tr>
<td>ECON A211</td>
<td>The Economics of Fish</td>
<td>3 CR</td>
</tr>
<tr>
<td>ECON A290</td>
<td>Special Topics in Economics</td>
<td>3 CR</td>
</tr>
<tr>
<td>ECON A300</td>
<td>The Economy of Alaska</td>
<td>3 CR</td>
</tr>
<tr>
<td>ECON A312</td>
<td>Econometrics for Business and Economics</td>
<td>3 CR</td>
</tr>
<tr>
<td>ECON A315</td>
<td>Urban and Regional Economics</td>
<td>3 CR</td>
</tr>
<tr>
<td>ECON A321</td>
<td>Intermediate Microeconomics</td>
<td>3 CR</td>
</tr>
</tbody>
</table>

**Contact Hours:**

- ECON A123: 3 + 0
- ECON A201, ECON A202: 3 + 0
- ECON A210: 3 + 0
- ECON A211: 3 + 0
- ECON A290: 3 + 0
- ECON A300: 3 + 0
- ECON A312: 3 + 0
- ECON A315: 3 + 0
- ECON A321: 3 + 0

**Prerequisites:**

- ECON A123: UAA GER Social Sciences Requirement.
- ECON A201, ECON A202: Minimum one year of high school algebra required.
- ECON A210: Minimum one year of high school algebra required.
- ECON A211: Minimum one year of high school algebra required.
- ECON A290: Any ACCT, BA, CIS, ECON, LGOP, LOG, or PADM course.
- ECON A300: College of Business and Public Policy BBA majors.
- ECON A312: [BA A273 with minimum grade of C or STAT A307 with minimum grade of C or STAT A308 with minimum grade of C] and [ECON A201 with minimum grade of C or ECON A202 with minimum grade of C].
- ECON A321: ECON A201 with minimum grade of C and ECON A202 with minimum grade of C and [MATH A200 with minimum grade of C or MATH A272 with minimum grade of C].

**Contact Restrictions:**

- ECON A123: Junior or senior standing.
- ECON A201, ECON A202: Minimum one year of high school algebra required.
- ECON A211: Minimum one year of high school algebra required.
- ECON A290, ECON A300: Junior or senior standing.
- ECON A312: ECON A201 and ECON A202.
- ECON A315: Minimum one year of high school algebra required.
- ECON A321: ECON A201 with minimum grade of C and ECON A202 with minimum grade of C and [MATH A200 with minimum grade of C or MATH A272 with minimum grade of C].

**Special Fees:**

- ECON A123: Special Fees.
- ECON A201, ECON A202: Special Fees.
- ECON A210: Special Fees.
- ECON A290: Special Fees.
- ECON A300, ECON A312, ECON A315, ECON A321: Special Fees.

**Course Attributes:**

- UAA GER Integrative Capstone.
- UAA GER Social Sciences Requirement.

**Registration Restrictions:**

- ECON A123: Instructor permission by audition required.
- ECON A201, ECON A202: Minimum one year of high school algebra required.
- ECON A210: Minimum one year of high school algebra required.
- ECON A290: Specific title being offered.
- ECON A300: College of Business and Public Policy BBA majors.
- ECON A312: MATH A105 with minimum grade of C or MATH A107 or MATH A200 or MATH A201 or MATH A272.
- ECON A321: MATH A105 with minimum grade of C or completion of quantitative skills GER requirement.

**Topics:**

- ECON A123: 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.

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Theoretical approach to determination of the national income level and economic activity including coverage of the history of macroeconomic theory with special emphasis on economic growth, inflation, business cycles, international finance, and monetary and fiscal policy.
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 sources of growth. Policies affecting trade, aid, health, and the environment. Alaska 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 with minimum grade of C and ECON A202 with minimum grade of C.
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 A360.
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.
Studies the pure theory of international trade, including theories of comparative advantage, international monetary theory, and trade policy. Examines international institutions and their role and importance in world trade. Examines the role of free trade agreements and common currency areas.

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 A273 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 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 A312 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.

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: Bachelor’s 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 224, 786-4412
www.uaa.alaska.edu/coe

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
Prerequisites: ED A180.
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.
Course Descriptions

EDAE - Education - Adult Education

Offered through the College of Education
Professional Studies Building (PSB), Room 218, 786-4450
www.uaa.alaska.edu/coe

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 A675 Design of Programs for Adults 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
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 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 A698 Inquiry Project 1-3 CR
Contact Hours: 0 + 3-9
Prerequisites: 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: 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), Room 206, 786-6317
www.uaa.alaska.edu/coe

EDCN A610 Professional and Ethical Orientation to Counseling 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
Introduces the counseling profession. Includes fundamental ethical and legal issues; generic helping processes, histories, settings, roles, organizations; and credentials associated with various specialties in the field.

EDCN A613 Human Development for Helping Professionals 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
Examines the implications of development on counseling services. Explores the major theories of human growth from birth to death in areas such as personality, cognitive, learning, social, physical, cultural, and emotional development.

EDCN A614 Counseling Diverse Populations 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
Examines issues, concepts, and meanings of culture that impact counseling work with distinctive populations, with a focus on Alaska’s context. Addresses relationships and influences among culture, education, society, and counseling.

EDCN A616 Counseling Theories 3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
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.
Explores topics such as psychometric concepts, diagnostic interviewing, standardized tests, and non-testing assessment methods used in school and agency settings.

EDCN A623 Counseling Skills and Techniques 3 CR
Contact Hours: 3 + 0
Prerequisites: EDCN A610 and EDCN A616.
Registration Restrictions: Graduate standing.
Emphasizes developing proficiency in basic and advanced counseling skills and techniques associated with specific theories.

EDCN A624 Group 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 School Counseling 3 CR
Contact Hours: 3 + 0
Prerequisites: EDCN A610.
Registration Restrictions: Graduate standing.
Examines technological and functional skills necessary for the development and delivery of K-12 school counseling programs. Emphasizes state and national standards.

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. Emphasizes the technological and functional skills necessary for effective work with multiple client populations.

EDCN A632 Lifespan Career Development 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
Special Fees.
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 A637 Treating Emotional and Mental Disorders 3 CR
Contact Hours: 3 + 0
Prerequisites: EDCN A610.
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Admission to the M.Ed. in Counselor Education.
Examines essential knowledge and current research on treating mental health disorders. Analyzes the interrelationships between diagnostic assessment, documentation; the prevalence, etiology and client experience of mental disorders; and the current psychopharmacologic treatments for children and adults in school and agency settings.

EDCN A641 Counseling Military Personnel/Families 3 CR
Contact Hours: 3 + 0
Prerequisites: EDCN A610.
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Departmental approval and graduate standing.
Examines essential knowledge and current research on counseling issues that impact military personnel and their families. Analyzes the unique concerns that affect military families through pre-, during and post-deployment, as well as significant issues for children and adults in school and agency settings.

University of Alaska Anchorage 2013-2014 Catalog
www.uaa.alaska.edu
EDCN A680  Counseling Practicum  3 CR
Contact Hours: 1 + 5
Prerequisites: EDCN A613 and EDCN A614 and EDCN A620 and EDCN A623 and EDCN A624 and EDCN A632.
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing and department 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.

Provides students with an opportunity to bridge academic preparation with supervised practice in an approved setting. Involves seminar classes, direct and indirect counseling activities, and preparing for internship.

EDCN A683  Principles of Counseling Supervision  1 CR
Contact Hours: 1 + 0
Prerequisites: EDCN A680.
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Departmental approval and graduate standing.
Examines issues related to providing clinical supervision to novice counselors through academic and experiential activities. Studies areas such as counselor development, supervision models and strategies, and legal and ethical issues.

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. See advisor for applicability to degree program.
Explores current issues, techniques, and trends of interest to counselors.

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.

Provides an advanced supervised counseling experience in an approved secondary school or community agency setting.

EDCN A695C  Counseling Internship: Community Agency  3-6 CR
Contact Hours: 1 + 15-30
Prerequisites: EDCN A627 and EDCN A660 and EDCN A690 and EDCSE A632.
Registration Restrictions: Department approval required; admission to internship.
Grade Mode: Pass/No Pass.
Special Fees.
Special Note: Students attend seminar, and present and defend a portfolio that documents attainment of counselor competencies. Course may not be used to fulfill elective requirements. Students must apply for placement in advance. See advisor for deadlines and procedures.

Provides supervised counseling experience in an approved community agency setting.

EDCN A695E  Counseling Internship: Elementary School  3-6 CR
Contact Hours: 1 + 15-30
Prerequisites: EDCN A625 and EDCN A633 and EDCN A680 and EDCSE A632.
Registration Restrictions: Department approval required; admission to internship.
Grade Mode: Pass/No Pass.
Special Fees.
Special Note: Students attend seminar, and present and defend a portfolio that documents attainment of counselor competencies. Course may not be used to fulfill elective requirements. Students must apply for placement in advance. See advisor for deadlines and procedures.

Provides supervised counseling experience in an approved elementary school setting.

EDCN A695S  Counseling Internship: Secondary School  3-6 CR
Contact Hours: 1 + 15-30
Prerequisites: EDCN A625 and EDCN A633 and EDCN A680 and EDCSE A632.
Registration Restrictions: Department approval required; admission to internship.
Grade Mode: Pass/No Pass.
Introduction.
Special Fees.
Special Note: Students attend seminar, and present and defend a portfolio that documents attainment of counselor competencies. Course may not be used to fulfill elective requirements. Students must apply for placement in advance. See advisor for deadlines and procedures.

Provides supervised counseling experience in an approved secondary school setting.

EDD - Engineering Design & Drafting
Offered through Kenai Peninsula College
156 College Road, Soldotna, Alaska 99669, (907) 262-0330
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 224, 786-4412
www.uaa.alaska.edu/coe

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
Contains 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 A365.
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.
Corequisites: 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: 0 + 10
Prerequisites: EDEC A105 and EDEC A210 and EDEC A241 and EDEC A242.
Registration Restrictions: Departmental approval
Corequisite: EDEC A292.
Grade Mode: Pass/No Pass.
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
Registration Restrictions: Faculty permission required. Must have faculty permission to take concurrently with EDEC A295A.
Special Fees.
Supervised experience in an instructor approved early childhood setting. Emphasis is on an increasing level of responsibility for planning/supervising all program areas. Experience includes an initial assessment in all areas of professional competencies. An individual plan for the semester will be developed.

EDEC A303 Young Children in Inclusive Settings 3 CR
Contact Hours: 3 + 0
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 A403 Mathematics and Science in Early Childhood 3 CR
Contact Hours: 3 + 0
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
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.

EDEC A407 Observation and Documentation: in Early Childhood 4 CR
Contact Hours: 3 + 2
Prerequisites: EDSE A212 or PSY A365.
Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses.
May be stacked with: EDEC A607.
Special Fees.
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.

EDEC A408 Children’s Literature: Early Childhood Years 3 CR
Contact Hours: 3 + 0
Prerequisites: EDSE A212 or PSY A365.
May be stacked with: EDEC A608.
Special Fees.
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 A600 Contemporary Issues and Approaches in Early Childhood 3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.
Analysis of current principles, practices and research in early childhood education. Assesses the broad scope of early childhood education including issues related to child development, family and community partnerships, responsive teaching practices, behavior guidance, and curriculum development.

EDEC A604 Responsive Practices in Early Childhood 3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.
Special Fees.
Explores the implications of current neuroscience research in designing early childhood learning environments and curriculum. Critically examines theories on how children learn, the interaction of nature and nurture, processes of self-regulation and attachment, and the role of caregivers/teachers in the learning environment. Students focus on the application of this knowledge in reflective practice.

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 Fees.
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.
Special Fees.
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.

EDEC A650 Leadership and Advocacy in Early Childhood 3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.
Analysis of critical issues in early education. Discussion will center around public policy, research, professional development, mentorship, leadership, and advocacy in the field.
Course Descriptions

EDEL - Education - Elementary Education

Offered through the College of Education
Professional Studies Building (PSB), Room 224, 786-4412
www.uaa.alaska.edu/coe

EDEL A205  Becoming an Elementary Teacher  2 CR
Contact Hours: 1.5 + 2
Prerequisites: EDFN A301.
College Restriction: Must be in UAA College of Education.
Registration Restrictions: Admission to Department of Teaching and Learning.
Corequisite: EDEL A327 and EDEL A395.
Special Fees.

EDEL A207  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 A325  Teaching Literacy in Elementary Schools  6 CR
Contact Hours: 6 + 0
Prerequisites: EDFN A300 and EDFN A301 and EDFN A303 and EDSE A482.
Special Fees.
Corequisite: EDEL A426, EDEL A428 and EDEL A495A.
Special Fees.

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: 1.5 + 1.5
Prerequisites: EDFN A300 or concurrent enrollment.
College Restriction: Must be in UAA College of Education.
Registration Restrictions: Admission to Department of Teaching and Learning.
Special Note: Requires a 20-hour field experience arranged by the College of Education. Partners may limit registration.
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: Literacy and Social Studies  2 CR
Contact Hours: 0 + 6
Prerequisites: EDFN A301.
College Restriction: Must be in UAA College of Education.
Registration Restrictions: Admission to Department of Teaching and Learning.
Corequisite: EDEL A325 and EDEL A327.
Grade Mode: Pass/No Pass.
Special Fees.
Special Note: Field experiences will be arranged and supervised by the College of Education. Partners may limit registration.

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.

EDEL A426  Teaching Mathematics in Elementary Schools  3 CR
Contact Hours: 3 + 0
Prerequisites: EDEL A305.
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 Fees.

EDEL A428  Teaching Science in Elementary Schools  2 CR
Contact Hours: 2 + 0
Prerequisites: EDEL A305.
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 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.

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.

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.

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.

EDEL A492A  Elementary Education Seminar II: Learning Environment  2 CR
Contact Hours: 2 + 0
Prerequisites: EDEL A305.
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.
Integrates 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 A492B.
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 A206, EDEL A212 and EDEL A492A.
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 must be arranged and supervised by the College of Education. Partners may limit registration.
Supervised practicum in a K-6 educational facility. Supports development of proficiencies in creating an inclusive, engaging learning environment and teaching mathematics and science.

EDET - Education - Educational Technology
Offered through the College of Education
Professional Studies Building (PSB), Room 224, 786-4412
www.uaa.alaska.edu/coe

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, centered 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 A375 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 224, 786-4412
www.uaa.alaska.edu/coe

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: ([EDEC A105 or concurrent enrollment]) or (EDEL A205 or concurrent enrollment) or ([EDFN A101 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 A365 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.
Explores significant educational movements, theories, and research related to educational philosophy, sociology, and history to develop a framework for professional educational practice. Course emphasizes the importance of developing a coherent philosophy to guide teaching practice in a culturally diverse and inclusive classroom.

EDFN A301  Foundations of Literacy and Language Development  3 CR
Contact Hours: 3 + 0
Prerequisites: (EDSE A212 or concurrent enrollment) or (PSY A365 or concurrent enrollment).
Registration Restrictions: Admission to the Department of Teaching and Learning.
Special Fees.
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 A365.
College Restriction: Must be in UAA College of Education.
Registration Restrictions: Admission to the Department of Teaching and Learning.
Special Fees.
Practitioner-learner model. Emphasizes the role of technology in restructuring learning environments. Introduces basic technology concepts and uses. Teaches basic technology 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 in the classroom.

EDFN A303  Foundations of Teaching and Learning  3 CR
Contact Hours: 3 + 0
Prerequisites: (EDFN A301 or concurrent enrollment) and [EDSE A212 or PSY A365].
Registration Restrictions: Departmental approval required; admission to the College of Education.
Special Fees.
Extends understanding of cognitive, affective, and communicative development of children and youth and connects these to current research, theories, and practices in teaching and learning. Emphasizes learning theory, models of teaching and assessment, and curriculum planning as the foundation for developmentally appropriate teaching practice for inclusive classrooms. Course includes field experience.
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.
Special attention is given to research findings on first and second language issues in Alaska Native education as they apply to literacy 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 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 + 2-22
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. Focus is 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/cross-cultural and English as a second language (ESL) education as they apply to literacy issues. Special attention is given to research findings on first and second language acquisition and subsequent implications for the teaching of reading and writing.

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 A645 Culturally Sustaining Literacy for P-6 English Language Learners 3 CR
Contact Hours: 3 + 0
Major Restriction: Must be Language Education major.
Registration Restrictions: Department approval and admission to the Language Education Graduate Certificate program.
Examines how children learn language and become literate in their first and subsequent languages. Integrates structure of language and its application to the development and assessment of language and literacy for English language learners including Alaska Native populations. Explores implications of culturally sustaining pedagogy on academic literacy practices.

EDFN A646 Culturally Sustaining Instruction in Science, Technology, Engineering, Arts and Mathematics (STEAM) for English Language Learners in P-6 Classrooms 3 CR
Contact Hours: 3 + 0
Prerequisites: EDSY A668.
Major Restriction: Must be Language Education major.
Registration Restrictions: Department approval and admission to the Language Education Graduate Certificate program.
Corequisite: EDFN A689.
Special Fees.
Focus on assessment and science inquiry methods to promote science literacy and academic English proficiency for linguistically diverse students (including Alaska Native populations). Both Alaska Native and Western ways of knowing about the environment are addressed throughout this course. Discusses the cognitive academic language demands of school science. Integrates research-based science teaching strategies for supporting academic language development, including reading, writing, oral language, and auditory comprehension skills.

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
Registration Restrictions: Departmental approval required.
Sharing, analysis, reflection, and presentation of theory-based classroom inquiry conducted during the MAT program. Interns will self-assess their classroom experiences and develop their educational philosophies in light of standards, research, and current educational trends and perspectives.

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 A689  Action Research Experience: Culturally Sustaining Pedagogy for English Language Learners in P-6 Classrooms  1-6 CR
Contact Hours: 0 + 3-18
Prerequisites: EDSY A668.
Major Restriction: Must be Language Education major.
Registration Restrictions: Department approval and admission to the Language Education Graduate Certificate program
Corequisite: EDFN A646.
Special Fees.
Action research project in P-6 classroom to support the development of academic language proficiency and culturally sustaining pedagogy with an emphasis on theory-based inquiry into teaching and learning with English language learners and Alaska Native children.

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.
Focusses 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.
Supervised internship for candidates seeking a Graduate Certificate in Language Education in the ESOL concentration. Requires participation in a discussion group with an emphasis on theory-based inquiry into teaching and learning.

EDFN A698  Individual Research  1-6 CR
Contact Hours: 1-6 + 0
Prerequisites: EDFN 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: EDFN 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
www.uaa.alaska.edu/coe

EDL A610  Orientation to Graduate Studies in Leadership  3 CR
Contact Hours: 3 + 0
Major Restriction: Must be Educational Leadership major.
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Admission to EDL Department and graduate standing.
Provides an orientation to knowledge, skills and dispositions to be an educational leader, which are integral to the program. Reviews Alaskan administrator and ELCC national standards which serve as the program foundation. Summarizes expectations and requirements for scholarship in EDL graduate studies.

EDL A620  Leadership in Alaska Culture and Social Justice Issues  3 CR
Contact Hours: 3 + 0
College Restriction: Must be in UAA College of Education.
Registration Restrictions: Admission to College of Education
Examines cultural proficiency from personal and professional perspectives. Reflects on the effects of historical trauma of Alaska Natives in rural and urban settings. Explores educational leadership strategies to support culturally responsive practices and social justice.

EDL A657  Educational Leadership and Organizational Behavior  3 CR
Contact Hours: 3 + 0
Prerequisites: EDL A610 and EDL A620 and EDRS A660.
College Restriction: Must be in UAA College of Education.
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Admission to the College of Education and graduate standing.
Special Fees.
Examines attributes and practices of effective leaders. Explores the complexity of change as it applies to the transformation of organizations. Defines a vision of learning for schools. Analyzes culture in organizations. Considers the impact of globalization for organizations.

EDL A638  Instructional and Curricular Leadership  3 CR
Contact Hours: 3 + 0
Prerequisites: EDL A610 and EDL A620 and EDRS A660.
College Restriction: Must be in UAA College of Education.
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Admission to the College of Education and graduate standing.
Special Fees.
Analyzes contemporary practices and research in curriculum, instruction and assessment. Examines research to define knowledge and skills for instructional leaders to support improved student learning. Evaluates teacher practice with a variety of tools to enhance student academic performance within a culturally responsive context.

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 A637 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 setting or agency setting. Assignment will be respective to the Standards for Alaska’s Administrators.
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>EDL A642</td>
<td>Principal’s Seminar I</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>EDL A637 and EDL A640.</td>
<td>Corequisite: EDL A641.</td>
<td>Admission to Principal’s Certification Program.</td>
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<td>Special Fees.</td>
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<td>Special Fees.</td>
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<td></td>
<td>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.</td>
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<td>EDL A643</td>
<td>Principal’s Seminar II</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>EDL A637 and EDL A640.</td>
<td>Corequisite: EDL A641.</td>
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<td>Special Fees.</td>
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<td>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.</td>
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<tr>
<td>EDL A652A</td>
<td>Introduction to Teacher Leadership I</td>
<td>1 CR</td>
<td>1 + 0</td>
<td>EDL A637 and EDL A640.</td>
<td>Corequisite: EDL A641.</td>
<td>Graduation standing.</td>
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<td>Special Fees.</td>
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<td>Exploration and broad overview of teacher leadership. Emphasizes collaborative processes, reflection, and school-based research as paths to improving professional practice.</td>
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<td></td>
<td>Role of superintendent as the steward of the entire school system and the leader responsible for improving student learning through public accountability measures.</td>
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<td>EDL A672</td>
<td>Student Performance: Academic and Developmental</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>EDL A637 and EDL A640.</td>
<td>Corequisite: EDL A641.</td>
<td>Master's degree.</td>
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<td>Special Fees.</td>
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<td>Focus on the superintendent’s need to understand developmental research that explains student academic performance including the psycho-social, physiological, and cultural dimensions.</td>
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<td>Special Fees.</td>
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<td>Tools and approaches that enable superintendents to manage personnel and negotiation transactions within a school district.</td>
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<td>Special Fees.</td>
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<td>Key components of K-12 public school finance and K-12 facility design and maintenance as they relate to the preparation of superintendents.</td>
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<td>Special Fees.</td>
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<td>(EDL A677 or concurrent enrollment)</td>
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<td>Special Note: May be repeated for a maximum of 6 credits.</td>
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<td>Registration Restrictions: Admission to the Ed Leadership Superintendent program and completion of any two of EDL A671, EDL A672, EDL A673 and EDL A674.</td>
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<td>Special Fees.</td>
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<td>Themes of policy development and implementation, school-community relations, and instructional reform with a focus on state and local events and issues. Supplements EDL A675. Provides opportunity to interns for structured reflection and added input.</td>
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<td>Special Fees.</td>
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<td></td>
<td>THEMES OF policy development and implementation, human resource management, and district level finance and facilities management. Supplements EDL A675. Provides opportunity to interns for structured reflection and added input.</td>
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**EDRD - Education - Reading**

*Offered through the College of Education*

**Professional Studies Building (PSB), Room 204, 786-4412**

www.uaa.alaska.edu/coe

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<thead>
<tr>
<th>Course Code</th>
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<td>Special Fees.</td>
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<td>Focus on the theory and process of reading and cognition, particularly the relationship between reading and thinking. Students also explore issues related to the meaning of text and the development of comprehension for Kindergarten through grade twelve students. A review of the literature concerning research and theory about processes is a key element of the course.</td>
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**EDRS - Education - Research**

*Offered through the College of Education*

**Professional Studies Building (PSB), Room 218, 786-4450**

www.uaa.alaska.edu/coe

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<tr>
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<td>Special Fees.</td>
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<td>Provides exposure to fundamental language and concepts of research. Introduces students to research articles and reports to enhance understanding of their fields and ability to practice. Lays foundation for additional research courses.</td>
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<tr>
<td>EDRS A661</td>
<td>Data-Informed Instruction</td>
<td>2 CR</td>
<td>2 + 0</td>
<td>EDRS A660.</td>
<td>Corequisite: EDRS A660.</td>
<td>Graduation standing or permission of the instructor.</td>
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<td>Special Fees.</td>
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<td>Focuses on the educators' understanding, analysis, and application of student achievement and other school and student data to inform instructional decisions, planning, and actions at the school, classroom, and individual student levels.</td>
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<tr>
<td>EDRS A662</td>
<td>Action Research in Education</td>
<td>2 CR</td>
<td>2 + 0</td>
<td>EDRS A660.</td>
<td>Corequisite: EDRS A660.</td>
<td>Graduation standing or permission of the instructor.</td>
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<td>Special Fees.</td>
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<td>Empowers teachers, administrators, and other educators to participate in a socially responsive research process that seeks a solution to a problem. Emphasizes collaboration.</td>
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<td>Special Fees.</td>
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<td>Introduction to research design, with an emphasis on developing viable research proposals.</td>
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<td>Special Fees.</td>
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<td>Focuses on developing skills in reviewing professional literature. Participants will develop and practice the skills of literature search, organization, review and synthesis, resulting in a narrative survey of academic literature for a focused topic area.</td>
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<td>Special Fees.</td>
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<td>Highlights purpose, process, and utility of program evaluation. Emphasizes models, standards and types of program evaluation.</td>
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</tr>
</tbody>
</table>
EDRS A668 Introduction to Qualitative Research in Education 2 CR
Contact Hours: 2 + 0
Prerequisites: EDRS A660.
Registration Restrictions: Graduate standing.
Provides an in-depth understanding of concepts and issues that surround the needs of students who experience disabilities in the general education classroom.

EDSA A482 Internship 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 A490 Selected Topics: Early Childhood Special Education 3 CR
Contact Hours: 3 + 0
Class Standing Restriction: Must be Junior or Senior.
Registration Restrictions: Junior or senior standing.
May be stacked with: EDSE A690.
Special Fees.
Focuses on milestones in the developmental domains of communication, early literacy, and play.

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 A480 Special Children from Birth Through Five 3 CR
Contact Hours: 3 + 0
Class Standing Restriction: Must not be Freshman or Sophomore.
Registration Restrictions: Junior or senior standing.
Special Note: Field experience required.
Apply knowledge of child development and theories to analyze the laws, policies and procedures that form the framework for early intervention and early childhood special education. Emphasis on disabilities, Individuals with Disabilities Act, and intervention methods.

EDSE A482 Inclusive Classrooms for All Children 3 CR
Contact Hours: 3 + 0
Class Standing Restriction: Must not be Freshman or Sophomore.
Registration Restrictions: Junior standing or higher
Provides an in-depth understanding of concepts, strategies, and issues that surround the needs of students who experience disabilities in the general education classroom.

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 A422Y Strategies for Young Children with Special Needs in Inclusive Environments 3 CR
Contact Hours: 3 + 0
Class Standing Restriction: Must be Junior or Senior.
Registration Restrictions: Junior or senior standing.
May be stacked with: EDSE A422Y.
Provides an understanding of best practices in intervention strategies for children with special needs who are in inclusive settings.

EDSE A410 Clinical Assessment: Eligibility and Program Planning 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduation 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 A420 School-Age Care Program Planning 2 CR
Contact Hours: 2 + 0
Prerequisites: EDSE A212 and PSY A365.
Provides an understanding of best practices in intervention strategies for diverse groups of children in school-age care.

EDSE A611 Pre-Service Education Practicum 3 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 beginning internship experiences in speech-language pathology.

EDSE A614G Beginning 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 beginning 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.

EDSE A490 Early Childhood Special Education 3 CR
Contact Hours: 3 + 0
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 A421L Human Development and Learning Lab 1 CR
Contact Hours: 0 + 2
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 A212 Human Development and Learning 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Department approval.
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.

EDSA A202 School-Age Care Program Planning 2 CR
Contact Hours: 2 + 0
Prerequisites: EDSE A212 and PSY A365.
Provides introduction to theory, approaches and practice in developing programs for diverse groups of children in school-age care.

EDSE A410Y Assessment: Early Childhood Special Education 3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduation 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 A610 Clinical Assessment: 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Junior or senior standing.
Class Standing Restriction: Must not be Freshman or Sophomore.
Provides an understanding of best practices in intervention strategies for diverse groups of children in school-age care.

EDSA A422Y Strategies for Young Children with Special Needs in Inclusive Environments 3 CR
Contact Hours: 3 + 0
Class Standing Restriction: Must be Junior or Senior.
Registration Restrictions: Junior or senior standing.
May be stacked with: EDSE A422Y.
Provides an understanding of best practices in intervention strategies for children with special needs who are in inclusive settings.

EDSA A202 School-Age Care Program Planning 2 CR
Contact Hours: 2 + 0
Prerequisites: EDSE A212 and PSY A365.
Provides introduction to theory, approaches and practice in developing programs for diverse groups of children in school-age care.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>EDSE A622Y</td>
<td>Early Childhood Special Education</td>
<td>3 CR</td>
<td>Emphasizes use of evidence-based practices in assessment and intervention. Focuses on the inclusion of students with special learning needs. May be repeated with special fees.</td>
</tr>
<tr>
<td>EDSE A623</td>
<td>Language and Literacy: Best Practices in Assessment and Intervention</td>
<td>3 CR</td>
<td>Explores current research on language acquisition, assessment, and intervention. Emphasizes use of evidence-based practices in assessment and intervention. Identifies the link between language and literacy development and intervention.</td>
</tr>
<tr>
<td>EDSE A624</td>
<td>Social/Emotional Development, Assessment, and Intervention</td>
<td>3 CR</td>
<td>Provides a critical study of theoretical, professional, and philosophical issues related to management of individuals with disabilities.</td>
</tr>
<tr>
<td>EDSE A625</td>
<td>Teaching Mathematics to Special Learners</td>
<td>3 CR</td>
<td>Provides assessment and instructional strategies in mathematics for teachers of students with disabilities. Focuses on standards-based instruction, explicit instruction, curriculum-based assessments, and preparation of students for high stakes testing.</td>
</tr>
<tr>
<td>EDSE A633</td>
<td>Autism: Communication and Social Disorders</td>
<td>3 CR</td>
<td>Emphasizes current methods for assessment and intervention for students with autism. Current issues and trends impacting educational practices are analyzed. Case study method used to make assessment and instructional decisions. Parent communication is emphasized.</td>
</tr>
<tr>
<td>EDSE A634</td>
<td>Support and Supervision of Paraeducators</td>
<td>3 CR</td>
<td>Review and analysis of the literature on utilization, support, and supervision of paraeducators. Special attention is given to the knowledge and skills needed by supervising teachers. Course includes the benefits and concerns regarding utilization of paraeducators, and common problems and solutions are identified.</td>
</tr>
<tr>
<td>EDSE A637</td>
<td>Inclusive Teaching and Learning in Content Area Classrooms</td>
<td>2 CR</td>
<td>Attention will be paid to the philosophy of inclusion and the role of the content area teacher in providing appropriate classroom instruction for all the students within the inclusive classroom and other least restrictive settings.</td>
</tr>
<tr>
<td>EDSE A670</td>
<td>Topics in Special Education</td>
<td>1-3 CR</td>
<td>Explores issues of concern to professionals in special education and related fields.</td>
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<tr>
<td>EDSE A674</td>
<td>Family Partnerships in Early Childhood Special Education</td>
<td>3 CR</td>
<td>A family systems approach to the intervention for young children with disabilities. Methods in using tools that promote family involvement in the intervention are emphasized.</td>
</tr>
<tr>
<td>EDSE A675</td>
<td>Supervision</td>
<td>2 CR</td>
<td>Provides a theoretical and practical overview of best practices in supervision in education, special education, and related services. The course provides opportunities to practice skills through interactive activities and case studies.</td>
</tr>
<tr>
<td>EDSE A676</td>
<td>Special Education Finance</td>
<td>2 CR</td>
<td>Focuses on sources and processes for funding special education and related services. Other financial management processes are included.</td>
</tr>
<tr>
<td>EDSE A677</td>
<td>Multidisciplinary Seminar in Children's Mental Health</td>
<td>1 CR</td>
<td>Provides an interdisciplinary approach to working with children and families in a variety of behavioral/mental health and educational settings.</td>
</tr>
<tr>
<td>EDSE A681</td>
<td>Issues in Early Childhood Special Education</td>
<td>3 CR</td>
<td>Provides an interdisciplinary approach to working with children and families in order to meet the challenges of children and youth with serious mental health needs.</td>
</tr>
<tr>
<td>EDSE A690</td>
<td>Selected Topics in Special Education or Early Childhood Special Education</td>
<td>3 CR</td>
<td>Focuses on sources and processes for funding special education and related services. Other financial management processes are included.</td>
</tr>
<tr>
<td>EDSE A691</td>
<td>Children's Mental Health Systems of Care</td>
<td>3 CR</td>
<td>Expands systems of care as a coordinated network of community-based services and supports that are organized, multidisciplinary, and in partnership with youth and family. Addresses the cultural and linguistic needs of families in order to meet the challenges of children and youth with serious mental health needs.</td>
</tr>
<tr>
<td>EDSE A695D</td>
<td>Internship: Special Education Administration</td>
<td>3-6 CR</td>
<td>Field-based experience in the administration, supervision, and coordination of services for students with disabilities and their families.</td>
</tr>
</tbody>
</table>
EDSE 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.

EDSE A695S  Advanced Internship in Special Education: Secondary  3-6 CR
Contact Hours: 0 + 9-18
Registration Restrictions: Graduate standing. Department 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 A695Y  Advanced Internship: Early Childhood Special Education  3-6 CR
Contact Hours: 0 + 9-18
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Admission to the M.Ed. Early Childhood Special Education program, instructor approval and graduate standing.
Grade Mode: Pass/No Pass.
Special Fees.
Supervised advanced internship in early intervention and/or early childhood special education. Allows for application of intervention and assessment strategies in early intervention and early childhood special education settings.

EDSY - Education - Secondary Education

Offered through the College of Education
Professional Studies Building (PSB), Room 224, 786-4412
www.uaa.alaska.edu/coe

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.
Examines multicultural education as the responsibility of all educators. Focuses on second language acquisition, and how culture influences language and literacy development. Discusses the cognitive academic language demands of content area classrooms. Emphasis is placed on integrating research-based teaching strategies for supporting all aspects of cognitive academic language development, including reading, oral language, writing, and visual literacy. Includes the importance of culturally responsive teaching as an integral component of the learning environment.

EDSY A644  Community of Learners in Content Area Classrooms  3 CR
Contact Hours: 3 + 0
Prerequisites: EDFN A601 with minimum grade of C and EDFN A602 with minimum grade of C and EDFN A603 with minimum grade of C.
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Departmental approval required; graduate standing.
Special Fees.
Special Note: Concurrent enrollment in internship required.
Examines schools as complex social systems. The course will focus on students’ learning, development, and academic achievement, with attention given to the development of classroom learning communities that meet the diverse needs of students.

EDSY A648  Developing Literacies in the Secondary Content Areas  1 CR
Contact Hours: 1 + 0
Prerequisites: EDFN A647.
Registration Restrictions: Departmental approval required.
Special Fees.
Special Note: Concurrent enrollment in internship required.
Focuses on supporting 7-12 student development in multiple literacies, including visual, literary, and performing arts. Content area instruction and assessment strategies for multiple literacies.

EDSY A661  General Methods for Secondary Classrooms  3 CR
Contact Hours: 3 + 0
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.
Special Fees.
Special Note: Concurrent enrollment in internship required.
Fundamentals of methodology, standards-based curriculum planning, and assessment for the diverse student populations in middle and high school classrooms. Focuses on the development of professional teaching dispositions and practices appropriate for secondary curricula. Integrates technology and all forms of literacy.

EDSY A663  Teaching English/Language Arts in Secondary Schools  3 CR
Contact Hours: 3 + 0
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.
Special Fees.
Special Note: Concurrent enrollment in internship is required.
Fundamentals of standards-based, integrated curriculum planning and assessment for the diverse student populations in secondary English/Language Arts classrooms. Focuses on the development of professional teaching dispositions and practices appropriate for secondary English/Language Arts curricula. Integrates technology and all forms of literacy.

EDSY A664  Teaching Social Studies in Secondary Schools  3 CR
Contact Hours: 3 + 0
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.
Special Fees.
Special Note: Concurrent enrollment in internship is required.
Fundamentals of standards-based, integrated curriculum planning and assessment for the diverse student populations in secondary social studies classrooms. Focuses on the development of professional teaching dispositions and practices appropriate for social studies curricula. Integrates technology and all forms of literacy.

EDSY A665  Teaching Mathematics in Secondary Schools  3 CR
Contact Hours: 3 + 0
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.
Special Fees.
Special Note: Concurrent enrollment in internship is required.
Fundamentals of standards-based, integrated curriculum planning and assessment for the diverse student populations in secondary mathematics classrooms. Focuses on the development of professional teaching dispositions and practices appropriate for secondary mathematics curricula. Integrates technology and all forms of literacy.

EDSY A667  Teaching World Language in Secondary Schools  3 CR
Contact Hours: 3 + 0
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.
Special Fees.
Special Note: Concurrent enrollment in internship is required.
Fundamentals of standards-based, integrated curriculum planning and assessment for the diverse student populations in secondary world language classrooms. Focuses on the development of professional teaching dispositions and practices appropriate for second world language curricula. Integrates technology and all forms of literacy.

EDSY A668  Teaching English as a Second Language in Secondary Schools  3 CR
Contact Hours: 3 + 0
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.
Special Fees.
Special Note: Concurrent enrollment in internship is required.
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.
**Course Descriptions**

**EE - Electrical Engineering**

**Offered through the School of Engineering**

Engineering Building (ENGR), Room 201, 786-1900

www.uaa.alaska.edu/schoolofengineering

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**EE A203 Fundamentals of Electrical Engineering I**

- **Credit Hours:** 4 CR
- **Contact Hours:** 3 + 0
- **Prerequisites:** MATH A202 with minimum grade of C or concurrent enrollment.
- **Special Fees:**

- This course introduces fundamental concepts and principles of electrical systems. It covers basic circuit analysis, including Ohm's law, Kirchhoff's laws, and superposition. Students learn to analyze simple circuits using thevenin and norton theorems and study the behavior of passive and active devices such as resistors, capacitors, inductors, and transistors. This course is the prerequisite for EE A204, which covers computer hardware concepts.

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**EE A214 Computer Hardware Concepts**

- **Credit Hours:** 4 CR
- **Contact Hours:** 3 + 3
- **Prerequisites:** CSCE A201 with minimum grade of C or CSE A205 with minimum grade of C.
- **Special Fees:**

- This course focuses on the fundamentals of computer hardware, including the architecture of computer systems, instruction sets, register sets, memory hierarchy, and input/output devices. Students learn about computer operating systems, compilers, and assembly language programming. This course is the prerequisite for EE A241, which covers computer hardware concepts in more depth.

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**EE A241 Fundamentals of Electrical Engineering II**

- **Credit Hours:** 4 CR
- **Contact Hours:** 3 + 3
- **Prerequisites:** MATH A201 and EE A203.
- **Special Note:** Offered Fall Semesters.

- This course continues the study of electrical systems, focusing on circuits and systems analysis techniques. It covers the use of differential equations to analyze circuits, the Laplace transform, and the use of complex numbers in circuit analysis. Students learn about the design and analysis of electrical circuits and systems, including the use of computer-aided design tools. This course is the prerequisite for EE A354, which focuses on engineering signal analysis.

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**EE A306 Dynamics of Systems**

- **Credit Hours:** 3 CR
- **Contact Hours:** 3 + 0
- **Prerequisites:** [EE A203 or ES A309] and [ES A208 or ES A210] and MATH A302.
- **Crosslisted with:** ME A306.

- This course covers the fundamentals of dynamics of systems, focusing on the analysis of mechanical, electrical, fluid, and thermal systems. It includes topics such as modeling, stability analysis, and control systems. This course is the prerequisite for EE A307, which focuses on introduction to power systems.

---

**EE A307 Introduction to Power Systems**

- **Credit Hours:** 3 CR
- **Contact Hours:** 3 + 0
- **Prerequisites:** EE A353 with minimum grade of C.

- This course introduces students to power systems, including topics such as transmission and distribution systems, generation, and power quality. It covers the analysis of power systems using computer-aided design tools. This course is the prerequisite for EE A308, which focuses on instrumentation and measurement.

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**EE A308 Instrumentation and Measurement**

- **Credit Hours:** 3 CR
- **Contact Hours:** 3 + 0
- **Prerequisites:** MATH A302 with minimum grade of C and [EE A306 with minimum grade of C or ME A306 with minimum grade of C or EE A353 with minimum grade of C].
- **Crosslisted with:** ME A308.

- This course covers the principles of measurement and instrumentation, including transducer design, signal conditioning, data acquisition, and control systems. It focuses on the use of the Laplace transform and Fourier series to analyze power systems. This course is the prerequisite for EE A321, which focuses on electromagnetics.

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**EE A324 Electromagnetics II**

- **Credit Hours:** 3 CR
- **Contact Hours:** 3 + 0
- **Prerequisites:** [EE A314 or PHYS A314] and MATH A302.
- **Crosslisted with:** PHYS A324.

- This course covers advanced topics in electromagnetics, including wave propagation, reflection, and transmission. It focuses on the use of Maxwell's equations in analysis of planar wave propagation. This course is the prerequisite for EE A324L, which focuses on electromagnetics laboratory.

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**EE A324L Electromagnetics Laboratory**

- **Credit Hours:** 1 CR
- **Contact Hours:** 0 + 3
- **Corequisite:** EE A324.
- **Special Fees:**

- This course provides laboratory experiences using Maxwell's equations in analysis of plane wave propagation. It focuses on the use of computer-aided design tools to analyze planar wave propagation, wave reflection, and transmission. This course is the laboratory component to EE A324.

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**EE A333 Electronic Devices**

- **Credit Hours:** 4 CR
- **Contact Hours:** 3 + 3
- **Prerequisites:** EE A333 with minimum grade of C or concurrent enrollment.

- This course covers the fundamentals of electronic devices, including semiconductors, diodes, field effect transistors (FETs), and bipolar junction transistors (BJTs). It focuses on the use of computer-aided design tools to analyze electronic devices. This course is the prerequisite for EE A354, which focuses on engineering signal analysis.

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**EE A335 Circuit Theory**

- **Credit Hours:** 3 CR
- **Contact Hours:** 3 + 0
- **Prerequisites:** EE A203 with minimum grade of C and MATH A302 with minimum grade of C or concurrent enrollment.

- This course covers the fundamentals of circuit theory, focusing on the analysis of passive and active filters. It includes topics such as circuit behavior, analysis of signal filters, and Fourier transforms. This course is the prerequisite for EE A354, which focuses on engineering signal analysis.

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**EE A353L Circuit Theory Lab**

- **Credit Hours:** 1 CR
- **Contact Hours:** 0 + 3
- **Corequisite:** EE A353.
- **Special Fees:**

- This course provides laboratory experiences using computer-aided design tools to analyze circuit behavior. It focuses on the analysis of passive and active filters. This course serves as a laboratory component to EE A353.

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**EE A354 Engineering Signal Analysis**

- **Credit Hours:** 3 CR
- **Contact Hours:** 3 + 0
- **Prerequisites:** EE A353 and MATH A302.

- This course covers the fundamentals of signal analysis, focusing on the use of computer-aided design tools to analyze discrete-time signals and Fourier transforms. It includes topics such as probability theory and random variables. This course is the prerequisite for EE A407, which focuses on power distribution.

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**EE A407 Power Distribution**

- **Credit Hours:** 3 CR
- **Contact Hours:** 3 + 0
- **Prerequisites:** EE A204 and EE A353.

- This course covers the fundamentals of power distribution and control systems, focusing on the use of computer-aided design tools to analyze power systems. It includes topics such as power quality, voltage regulation, and economic dispatch. This course is the prerequisite for EE A438, which focuses on design of electrical engineering systems.

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**EE A438 Design of Electrical Engineering Systems**

- **Credit Hours:** 3 CR
- **Contact Hours:** 3 + 0
- **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.

- This course focuses on the design of electrical engineering systems, including power systems, control systems, and signal processing. It includes topics such as system design, simulation, and testing. This course is the capstone course for electrical engineering students.

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**University of Alaska Anchorage 2013-2014 Catalog**

www.uaa.alaska.edu
Course Descriptions

EE A441 Integrated Circuit Design 3 CR
Contact Hours: 3 + 0
Prerequisites: CHEM A105 and EE A204 and EE A353.
Develops the design and fabrication of integrated circuits (ICs) used in computer electronics. Describes the material properties, methods of charge transport, energy exchanges, fundamentals of device fabrication, and fabrication process capabilities and limits. Electrical characteristics, timing considerations, heat and power considerations, and reliability of IC devices.

EE A451 Digital Signal Processing 3 CR
Contact Hours: 3 + 0
Prerequisites: EE A354 with minimum grade of C.
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 prob system-solving. Methods and effects of signal processing are analyzed and evaluated.

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.
Apply theoretical 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 antennas.

EE A462 Communication Systems 3 CR
Contact Hours: 3 + 0
Prerequisites: EE A354.
Develops the theory behind the design and operation of electronic communication systems. Includes the mathematical representation of signal and system components and their interaction. Covers power spectra, modulation techniques, frequency response of media and components, detection and recovery of information, and the effects of noise.

EE A465 Telecommunications 3 CR
Contact Hours: 3 + 0
Prerequisites: EE A354.
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 A306 or ME A306 or EE A353] and [ES A208 or ES A210] and MATH A302.
Crosslisted with: ME A471.
Special Fees.
Focus feedback control of linear mechanical and electrical systems by using block diagrams with transfer functions of plants, controllers, sensors and actuators. Stability analysis with transfer-function and state-space models. Transient, steady-state, sensitivity analysis, frequency-domain analysis, and design of control systems with Bode plots and the Nyquist criterion.

ENGL - English

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 08].
Registration Restrictions: Meet prerequisite or appropriate score on English Placement Test.
Special Fees.
Preparation for ENGL A113 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.

EMT - Emergency Medical Technology

Offered through the College of Health
Allied Health Sciences Building (AHS), Room 153, 786-6476
www.uaa.alaska.edu/alliedhealth

EMT A110 Emergency Trauma Technician 3 CR
Contact Hours: 2 + 2
Registration Restrictions: Must provide evidence of cardiopulmonary resuscitation (CPR) training at the Healthcare Provider or Basic Life Support level prior to course conclusion.
Special Fees.
Alaska State certified basic emergency medical course beyond advanced first aid. Emphasizes prevention, assessment, and care of injury and illness commonly encountered in both urban and rural settings.

EMT A130 Emergency Medical Technician I 6 CR
Contact Hours: 4 + 4
Registration Restrictions: Provide evidence of CPR training at the professional provider level. Restriction may be waived with instructor approval.
Special Fees.
Special Note: Students must have the strength to be able to move victims, sufficient vision to assess condition of victims, and dexterity to perform the skills application procedures.
Provides skills for proficiency in victim assessment, recognition, and treatment of medical emergencies and other basic life support procedures. May include practicum experience in hospitals, emergency rooms, or other sites. Provides the necessary training to become state or nationally registered as an EMT I, which is optional.

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 A111  Introduction to Composition  3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A109 with minimum grade of C or PRPE A108 with minimum grade of C or Accuplacer-Reading Comp with score of 080 and Accuplacer-Sentence Skills with score of 090] 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 ACT English with score of 22.
Course Attributes: UAA GER Written Communication.
Special Fees.
  Provides instruction in responding to academic and civic writing situations. Students learn rhetorical knowledge (e.g., how to write for a purpose and an audience, how to adopt an appropriate voice, tone and level of formality); they engage in critical thinking, reading and writing; they learn about processes and technologies available for producing texts; and they refine knowledge of academic conventions, including inquiry and research writing, documentation, and Written English.

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 with minimum grade of C or ENGL A1W with minimum grade of C or ENGL A3W with minimum grade of C or ENGL A3W with minimum grade of C or Enhanced ACT English with score of 30 or SAT Critical Reading Score with score of 620 or SAT Verbal Score with score of 620. 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 early-modern period.

ENGL A202  Masterpieces of World Literature II  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 Enhanced ACT English with score of 30 or SAT Critical Reading Score with score of 620 or SAT Verbal Score with score of 620. 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 early-modern period 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 evidence, 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, or ENGL A214 with minimum grade of C.
Course Attributes: UAA GER Written Communication.
Special Fees.
Advanced instruction in composing and revising, with focus on invention, audience, persuasion, and style.

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, or ENGL A214 with minimum grade of C.
Registration Restrictions: ENGL A212 recommended
Course Attributes: UAA GER Written Communication.
Special Fees.
Advanced study of technical writing principles, practices and genres. Extensive practice in designing, revising and editing print and electronic documents.

ENGL A313  Professional 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.
Special Fees.
Special Note: May include 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.

ENGL A315  Survey of Medieval Literature  3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A210 with minimum grade of C and ENGL A202 with minimum grade of C.
Registration Restrictions: Upper-division standing recommended.
A selective survey of primarily Western literature from the fifth century through the fifteenth. Representative authors and genres.

ENGL A320  Renaissance Literature  3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A210 with minimum grade of C and ENGL A202 with minimum grade of C.
A selective survey of Western literature from the fifteenth century through the middle of the seventeenth. Representative authors and genres.

ENGL A325  Neoclassical Literature  3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A201 and ENGL A202.
A selective survey of primarily British literature of the period 1660-1798.

ENGL A330  Literature of Romanticism  3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A201 and ENGL A202.
A study of the Romantic movements from late eighteenth century to mid-nineteenth century.
ENGL A424 Shakespeare 3 CR
Contact Hours: 3 + 0
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.

ENGL A429 Major Authors 3 CR
Contact Hours: 3 + 0
Prerequisites: [ENGL A201 with minimum grade of C or ENGL A202 with minimum grade of C or LING A101 with minimum grade of C or LING A201 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.
Special Note: May be repeated once for credit with a change of subtitle.

ENGL A433 Literacy, Rhetoric and Social Practice 3 CR
Contact Hours: 3 + 0
Prerequisites: [ENGL A201 with minimum grade of C or ENGL A202 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.

ENGL A434 History of Rhetoric 3 CR
Contact Hours: 3 + 0
Prerequisites: [ENGL A211 or ENGL A212 or ENGL A213 or ENGL A214] and HIST A101 and HIST A102.
Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses and junior standing.
Course Attributes: UAA GER Integrative Capstone.
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.

ENGL A435 History of Criticism 3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A201 and ENGL A202.
Critical theory from its classical origins to the present.

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.

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.

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.
Study of traditional, historical stories and contemporary texts written in English by Alaska Natives.

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.
An inductive linguistic analysis of English emphasizing transformational grammar.

ENGL A476 History of English Language 3 CR
Contact Hours: 3 + 0
Prerequisites: [ENGL A201 with minimum grade of C or ENGL A202 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] and HIST A101 and HIST A102.
Class Standing Requirement: Must be Junior or Senior.
Registration Restrictions: Completion of Tier I (basic college-level skills) courses and junior or senior standing.
Course Attributes: UAA GER Integrative Capstone.
Investigates origins, development, and variation of the English language from linguistic, social, literary, and technological perspectives. Relates history and variation in English to contemporary issues about language.

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) courses and junior standing, and 4 credits of Natural Science GER, including one lab credit.
Course Attributes: UAA GER Integrative Capstone.
Focuses on rhetorical issues at the intersections of discourse, science, and citizenship, 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
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.

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.

ENGL A495 Internship in Professional Writing 1-6 CR
Contact Hours: 0 + 3-18
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: Faculty permission required.
Special Note: May be repeated for up to 6 credits with change in setting and/or responsibilities or change in venue.

ENGL A499 English Honors Thesis 3 CR
Contact Hours: 0 + 9
Registration Restrictions: Completion of six credits of 400-level topics courses w/ grade of A (ENGL A404, ENGL A429, ENGL A440, ENGL A444, ENGL A490, ENGL 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 A610 Studies in Literary Periods and Movements 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 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.
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 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.
Advanced study of particular topics, trends, and issues in linguistics of the English language.

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, literary 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.
Major Restriction: Must be English major.
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 A698 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.uaa.alaska.edu/schoolofengineering

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 Introduction to Engineering 1 CR
Contact Hours: 1 + 0
An introduction to engineering, both as a profession and as a field of study. Introduces students to the roles, responsibilities and capabilities of civil, computer systems, electrical and mechanical engineers.

ENGR 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 computer methods and tools for practicing engineering. Introduction to computer programming and engineering problem solving software including Visual Basic in spreadsheets, Matlab, and Mathcad.

ENGR A495 Engineering Internship 1 CR
Contact Hours: 0 + 3
Registration Restrictions: Instructor permission.
Professional work experience designed to provide students with the opportunity to investigate the practical applications of engineering design within engineering organizations. Assignments and projects arranged with cooperating organizations and agencies.
ENVI - Environmental Studies

Offered through the College of Arts and Sciences

Professional Studies Building (PSB), Room 104, 786-6049
www.uaa.alaska.edu/ges

ENVI A211 Environmental Science: Systems and Processes 3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A111 and [MATH A105 or MATH A107 or MATH A108 or MATH A109 or MATH A172 or MATH A200 or MATH A272].
Course Attributes: UAA GER Social Sciences Requirement.

Introduces science as a powerful but limited tool for understanding and solving environmental problems. The Earth is discussed as a system with feedbacks and inter-relationships. These include natural systems, cycles and flows and natural and human induced changes in these systems. Topics include: basic ecology, climate change, resources and resource stress (air, water, oceans, soils), natural hazards. Uses Alaskan, Arctic and other regional examples.

ENVI A211L Environmental Science: Systems and Processes Laboratory 1 CR
Contact Hours: 0 + 3
Prerequisites: ENVI A211. Crosslisted with: UAA GER Natural Sciences Lab Only. Special Fees.

Laboratory introducing students to the systematic acquisition of data and its analysis and interpretation in a manner consistent with the disciplines of environmental studies. This includes field and classroom experiences and the use of remotely sensed data and geographic information systems in interpretation, analysis and presentation. In complement to ENVI A211, themes include: scientific method, data management, data analysis, and report write-up.

ENVI A212 Living on Earth: People and the Environment 3 CR
Contact Hours: 3 + 0
Prerequisites: ENVI A211. Course Attributes: UAA GER Social Sciences Requirement.

Study of the relationship between people and their environment. Considers environmental problems and potential solutions. Examines the ecological impacts of social systems and policy as well as of our personal choices as citizens and consumers.

ENVI A280 Professional Preparation in Environmental Fields I 1 CR
Contact Hours: 1 + 0
Prerequisites: ENVI A212 or concurrent enrollment. May be stacked with: ENVI A480.

A professional preparation course that will guide students in professional preparation through their academic program, begin the development of professional portfolios, introduce internship opportunities, encourage the pursuit of undergraduate research opportunities and assist in planning for graduate school.

ENVI A303 Environmental Ethics 3 CR
Contact Hours: 3 + 0
Crosslisted with: PHIL A303.

Historical and comparative analysis of Western, non-Western, indigenous and Native American philosophies, concerning the intrinsic, aesthetic and use values of nature and the land. Contemporary environmental ethics, including deep ecology, the land ethic, ecofeminism, and animal rights theories will be examined in detail. There will also be a focus on the ethical issues surrounding contemporary environmental controversies, such as land management, wildlife management, wilderness designation, sustainability, biodiversity and species preservation, private property and public commons, environmental racism, human overpopulation, development versus preservation, laboratory use of animals, vivisection, animal farming, subsistence, and sports hunting.

ENVI A395 Environmental Studies Internship 3-9 CR
Contact Hours: 0 + 9-27
Prerequisites: ENVI A211. Registration Restrictions: Instructor permission required.

Intensive experience applying environmental studies disciplinary knowledge and skills in a professional setting. Internships will be completed with a community partner (such as an agency or private organization) that engages in environmentally based work.

ENVI A470 Environmental Planning and Problem Solving 4 CR
Contact Hours: 2 + 6
Prerequisites: COMM A241 and [ENGL A212 or ENGL A213] and ENVI A211 and ENVI A211L and ENVI A212 and [STAT A252 or STAT A253]. Course Attributes: UAA GER Integrative Capstone.

Examination of methodological concepts and issues in environmental planning and problem-solving. Includes the content and structure of Environmental Impact Assessment (EIA); approaches to EIA with reference to the assessment of impacts on biophysical and social systems. Involves substantial practical work, including hands-on exercises, writing, and oral presentations.

ENVI A480 Professional Preparation in Environmental Fields II 1 CR
Contact Hours: 1 + 0
Prerequisites: ENVI A280 with minimum grade of C and ENVI A395 with minimum grade of C. Major Restriction: Must be Environment & Society major. Registration Restrictions: Environment and Society major. May be stacked with: ENVI A280.

A professional preparation course that will require students to report on their internships and undergraduate research, systematically reflect on their degree program, and develop career and academic plans.

ENVI A490 Topics in Environment and Society 3 CR
Contact Hours: 3 + 0
Prerequisites: ENVI A211 or ENVI A212. Special Note: May be repeated twice with change of subtitle.

A seminar focusing on approaches and practices for addressing social concerns related to environmental problems.

ES - Engineering Science

Offered through the School of Engineering

Engineering Building (ENGR), Room 201, 786-1900
www.uaa.alaska.edu/schoolofengineering

ES A103 Engineering Graphics 3 CR
Contact Hours: 1 + 6
Prerequisites: MATH A108 with minimum grade of C or MATH A109 with minimum grade of C.

Introduces the fundamentals of engineering graphics and provides training in visualization skills necessary for graphically presenting of engineering ideas using standard drawing techniques and Computer Aided Design (CAD).

ES A208 Engineering Statics and Dynamics 5 CR
Contact Hours: 5 + 0
Prerequisites: MATH A201 with minimum grade of C and PHYS A211 with minimum grade of C.

Static and dynamic analysis of particles and rigid bodies. Statics topics covered include Newton's laws of motion, Newton's law of gravitational attraction, force and force systems, equilibrium, structural analysis, internal forces, friction, and center of gravity and centroid. Dynamics topics covered include particle and rigid body kinematics and kinetics, force and acceleration, work and energy, impulse and momentum, and vibrations.

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.

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.

Kinetics 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.

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: ES A209 with minimum grade of C and [(ES A302 with minimum grade of C or concurrent enrollment) or (MATH A302 with minimum grade of C or concurrent enrollment)].
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.

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 elementary 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/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 Oral Fluency I 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Appropriate score on TOEFL/TSE or interview with ESL director.
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 College Reading and Writing I 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Appropriate score on English Placement Test or TOEFL.
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 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.
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 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
Prerequisites: ESL A104.
Registration Restrictions: Appropriate score on English placement test or TOEFL.
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 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.
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.

ESM - Engineering & Science Management

Offered through the School of Engineering
University Center (UC), Room 155, 786-1924
www.uaa.alaska.edu/schoolofengineering/programs/esm

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.
Course Descriptions

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.

ESM A610 Cost Estimating 3 CR
Contact Hours: 3 + 0
Registration Restrictions: BS degree in Engineering or in a physical science or faculty permission.

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 workplace. 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. Crosslisted 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: 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: 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

ET - Electronics Technology

Offered through the Community & Technical College
University Center (UC), Room 130, 786-6495
www.uaa.alaska.edu/ctc

ET A101 Basic Electronics: DC Circuits 4 CR
Contact Hours: 3 + 3
Prerequisites: MATH A055.

Principles of electricity in direct current (DC) circuits, including voltage, current, resistance, and power. Properties of series and parallel circuits. Covers circuit analysis theorems and techniques.

ET A102 Basic Electronics: AC Circuits 4 CR
Contact Hours: 3 + 3
Prerequisites: ET A101 and MATH A055.

Principles of alternating current (AC) circuits, including vectors, phase relationships, inductive and capacitive reactance and impedance. Covers AC circuit analysis, series and parallel resonant circuits, transformers, and network analysis.

ET A126 Digital Electronics 4 CR
Contact Hours: 3 + 2
Prerequisites: MATH A055.
Special Fees.

Principles of digital logic; including number systems, logic gates, logic functions, logic design, and analysis methods.

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.

Presents methods of safe and accurate measurement of DC electrical quantities using basic electrical test equipment. Covers equipment connection, testing methods and operation to observe electrical component characteristics to troubleshoot defective circuits. Power sources, distribution systems, schematic and wiring diagrams will also be covered.

ET A162 AC Electrical Systems 3 CR
Contact Hours: 3 + 0
Prerequisites: ET A160 and ET A161.
Corequisite: ET A163.
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 A163 AC Lab 1 CR
Contact Hours: 0 + 3
Prerequisites: ET A160 and ET A161.
Corequisite: ET A162.
Special Fees.

Presents measurement of AC electrical quantities using basic electrical test equipment. Covers AC circuit troubleshooting through proper equipment connections, testing, and operations. Power sources, distribution systems, schematic, and wiring diagrams will also be covered.

ET A165 Introduction to Digital Devices 1 CR
Contact Hours: 1 + 0.5
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.
### Course Descriptions

**ET A166 Technical Calculations and Applications** 2 CR  
Contact Hours: 2 + 0  
Prerequisites: ET A162 and ET A163.  
This course presents applied calculations for students in technical fields. Covers basic arithmetic, conversions, logarithms, trigonometric functions, and statistical interpretation. Special Fees.

**ET A175 Technical Introduction to Computing Systems** 3 CR  
Contact Hours: 3 + 0  
Prerequisites: MATH A055.  
This course provides an overview of computer science concepts, applications, and programming in both assembly and the high-level languages. Prerequisites: ET A126. Special Fees.

**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 circuits. Component coverage includes specialty diodes, multi-layer control devices, bipolar transistors, JFETs, MOSFETs, and multistage coupling devices. Special Fees.

**ET A181 Digital Electronics** 4 CR  
Contact Hours: 3 + 2  
Special Fees.  
This course 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. Special Fees.

**ET A182 Applied Integrated Circuits** 2 CR  
Contact Hours: 1.5 + 2  
Prerequisites: ET A180.  
Special Fees.  
This course 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. Special Fees.

**ET A184 Telecommunications** 2 CR  
Contact Hours: 1.5 + 1  
Prerequisites: ET A162 and ET A163.  
This course presents and examines basic telecommunication and data communication concepts and equipment. Topics include binary and hexadecimal number systems, transmission methodologies, multiplexing, media, data conversion, analog-to-digital and digital-to-analog, protocols, interfacing, direction control, telecommunication equipment, switching systems, subscriber services, and distribution techniques. Special Fees.

**ET A185 Transmitters and Receivers** 3 CR  
Contact Hours: 2 + 3  
Prerequisites: ET A184.  
This course explores the methods and techniques used in transmission and reception of AM, FM, and SSB signals. Emphasizes antennas, transmission lines, signal propagation, transmitter and receiver circuitry, alignment, and troubleshooting. Special Fees.

**ET A200 Computer Systems Interfacing** 3 CR  
Contact Hours: 3 + 0  
Prerequisites: ET A126 and ET A175.  
Introduces concepts, programming techniques and device connections for computer sensing and control systems. Covers program design for device interfacing, common interfacing circuits, analog to digital conversion, digital to analog conversion, and serial communications. Special Fees.

**ET A240 Digital Control Systems** 3 CR  
Contact Hours: 3 + 0  
Prerequisites: ET A240.  
Introduces concepts, architecture and development of digital supervisory control and data acquisition (SCADA) systems. Includes systems organization, industrial data communications, data point addressing and recording, programmable logic controller (PLC) connections and programming, and human-machine interface (HMI) design and implementation. Special Fees.

**ET A243 Programmable Logic Controllers** 3 CR  
Contact Hours: 3 + 0  
Prerequisites: ET A126.  
Introduces the programmable logic controller (PLC) for industrial control applications. Includes PLC system design, hardware selection, configuration, input/output connections, programming and troubleshooting. Special Fees.
**FD - Floral Design**

Offered through the Community & Technical College
University Center (UC), Room 141, 786-6400
www.uaa.alaska.edu/ctc

**FD A161 Floral Design I**
Contact Hours: 2 + 2
Special Fees.

**FIRE - Fire Science**

Offered through the College of Health
Allied Health Sciences Building (AHS), Room 161, 786-6928
www.uaa.alaska.edu/alliedhealth/academics/fire.cfm

**FIRE A101 Principles of Emergency Services**
Contact Hours: 3 + 0
Provides overview of fire protection and emergency services (ES). Includes introduction to the history and development of the fire service, as well as careers in fire and emergency service.

**FIRE A105 Fire Prevention**
Contact Hours: 3 + 0
Provides fundamental knowledge relating to the field of fire prevention. Topics include history and philosophy of fire prevention, organization and operation of a fire prevention bureau, use and application of codes and standards, review of prevention plans, fire inspections, fire and life safety education, and fire investigation.

**FIRE A107 Strategy and Tactics of Fire Suppression**
Contact Hours: 3 + 0
Prerequisites: FIRE A101 with minimum grade of C.
Provides the principles of fire ground control through utilization of personnel, equipment and extinguishing agents.

**FIRE A111 Principles of Fire and Emergency Service Administration**
Contact Hours: 3 + 0
Prerequisites: FIRE A101 with minimum grade of C.
Introduces organization and management of a fire and emergency services department and the relationship of government agencies to the fire services. Emphasis is placed on fire and emergency service, ethics, and leadership from the perspective of the company officer.

**FIRE A117 Rescue Practices**
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**
Contact Hours: 3 + 0
Prerequisites: MATH A105 with minimum grade of C or concurrent enrollment.
Explores the theories and fundamentals of how and why fires start, spread, and are controlled.

**FIRE A123 Fire Investigation I**
Contact Hours: 3 + 0
Prerequisites: FIRE A101 with minimum grade of C and FIRE A121 with minimum grade of C.
Provides the student with the fundamentals and technical knowledge needed for proper fire scene interpretations, including recognizing and conducting origin and cause, preservation of evidence and documentation, scene security, motives of the fire setter, and types of fire causes.

**FIRE A131 Firefighter I, Series I**
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**
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)
Introduces the fundamental knowledge of fire behavior, fire organizations, types of fire equipment, emergency services processes and methods of their use. Includes portable extinguishers, ropes and knots, building search, victim removal, forcible entry tools, construction, techniques, and ground ladders.

**FIRE A135 Firefighter I, Series III**
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)
Provides fundamental knowledge of fire behavior, fire organizations, types of fire equipment, emergency response services processes, and methods of their use. Includes ventilation, water supply, hose rolling, coupling, loading, carrying, advancing, laying, and water fire streams.

**FIRE A137 Firefighter I, Series IV**
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)
Provides fundamental knowledge of fire behavior, fire organizations, types of fire equipment, emergency response services processes, and methods of their use. Includes wildland fire control, classes of fire, vehicle fires, sprinkler systems, salvage, overhaul, fire cause, communications equipment and techniques, fire prevention, and public fire education.

**FIRE A151 Wildland Fire Control I**
Contact Hours: 3 + 0
Special Fees.
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 wildland chainsaw operations.

**FIRE A159 Wildland Fire Operations Function**
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 Emergency Services**
Contact Hours: 3 + 0
Introduces the basic concepts of occupational health and safety as they relate to emergency service organizations. Topics include risk and hazard evaluation and control procedures for emergency service organizations.

**FIRE A190 Selected Topics in Fire and Emergency Services**
Contact Hours: 0-3 + 0-9
Registration Restrictions: Departmental approval
Grade Mode: Pass/No Pass.
Special Note: Course may not be repeated with same title.
Covers various topics in fire and emergency services technology. Course content is determined by student or industry needs.
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 with minimum grade of C and FIRE A121 with minimum grade of C.
Provides a foundation of theoretical knowledge in order to understand the principles of the use of water in fire protection and to apply hydraulic principles to analyze and to solve water supply problems.

FIRE A203 Hazardous Materials Chemistry 3 CR
Contact Hours: 3 + 0
Prerequisites: FIRE A101 with minimum grade of C and FIRE A121 with minimum grade of C.
Special Fees.
Apply basic chemistry related to hazardous materials. Includes recognition, identification, reactivity and health hazards potentially encountered by emergency services personnel.

FIRE A206 Building Construction Issues Related to Fire Protection 3 CR
Contact Hours: 3 + 0
Prerequisites: FIRE A101 with minimum grade of C and FIRE A121 with minimum grade of C.
This course examines building construction and design related to firefighter and life safety.

FIRE A214 Fire Protection Systems 3 CR
Contact Hours: 3 + 0
Prerequisites: FIRE A101 with minimum grade of C and FIRE A105 with minimum grade of C and FIRE A121 with minimum grade of C.
Provides information relating to the features of design and operation of fire alarm systems, water-based fire suppression systems, special hazard fire suppression systems, water supply for fire protection and portable fire extinguishers.

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 with minimum grade of C or concurrent enrollment.
Introduces the federal, state and local laws that regulate emergency services including review of national standards, regulations and consensus standards.

FIRE A221 Principles of Fire and Emergency Services Safety and Survival 3 CR
Contact Hours: 3 + 0
Prerequisites: FIRE A101 with minimum grade of C and FIRE A121 with minimum grade of C.
Introduces the basic principles and history related to the national firefighter life safety initiatives, focusing on the need for cultural and behavioral change throughout the emergency services.

FIRE A223 Fire Investigation II 3 CR
Contact Hours: 3 + 0
Prerequisites: FIRE A123 with minimum grade of C.
Special Fees.
Provides advanced technical knowledge on the rule of law, fire scene analysis, fire behavior, evidence collection and preservation, scene documentation, case preparation, and courtroom testimony.

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.

FIRE A235 Fire and Emergency Services Practicum 3 CR
Contact Hours: 0 + 9
Prerequisites: FIRE A101 with minimum grade of C and EMT A110 with minimum grade of C or EMT A130 with minimum grade of C or FIRE A121 with minimum grade of C or FIRE A201 with minimum grade of C.
Registration Restrictions: Departmental approval
Grade Mode: Pass/No Pass.
Provides an opportunity to observe, participate and apply firefighting, emergency medical or emergency management skills in a structured and supervised organizational setting.

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.
Introduction 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.
Special Note: Course conducted in French.
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.
Special Note: Course conducted in French.

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. Course conducted in French.

FREN A310  Selected Topics: Literary Trends and Traditions  3 CR
Contact Hours: 3 + 0
Prerequisites: FREN A302 with minimum grade of C.
Special Fees.
Special Note: May be repeated for credit with a change of subtitle. Course conducted in French.

FREN A432  Selected Topics: Studies in French/Francophone Literature and Culture  3 CR
Contact Hours: 3 + 0
Prerequisites: FREN A302 with minimum grade of C.
Special Fees.
Special Note: May be repeated for credit with a change of subtitle. Course conducted in French.

GEO - Geomatics

Offered through the School of Engineering
Engineering Building (ENGR), Room 330, 786-1972
www.uaa.alaska.edu/geomatics

GEO A137  Principles of Mapping  3 CR
Contact Hours: 2 + 2
Registration Restrictions: Computer competency (see admission requirements) or instructor approval.
Special Fees.
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 Fees.
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  1 CR
Contact Hours: 0 + 2
Prerequisites: GEO A155 or concurrent enrollment.
Registration Restrictions: Prerequisites may be waived by instructor based on student’s prior experience.
Corequisite: ENGR A161.
Special Fees.
Special Note: To be taken concurrently with ENGR A161.
Use of computational devices with applications in Geomatics. The basics of Reverse Polish Notation and keystroke programming will be covered. Use of Excel and MATLAB to solve geomatics problems will be emphasized.

GEO A167  Remote Sensing and Image Analysis  4 CR
Contact Hours: 4 + 0
Registration Restrictions: Computer competency (see admission requirements) or instructor approval.
Special Fees.
Special Note: Offered Spring Semesters.

GEO A181  Construction Surveying  1 CR
Contact Hours: 0 + 3
Prerequisites: MATH A105 with minimum grade of C or MATH A107 with minimum grade of C.
Special Fees.
Basic construction surveying procedures, including staking for roads, buildings and excavations; use of maps, construction plans, datums and coordinate systems; machine control systems. The course is predominantly field work.

GEO A248  Digital Terrain Cartography  3 CR
Contact Hours: 2 + 2
Prerequisites: GEO A157.
Special Fees.
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 Autodesk 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 A256  Municipal and Civil Geomatics  3 CR
Contact Hours: 2 + 3
Prerequisites: GEO A155 with minimum grade of C and MATH A107 with minimum grade of C and MATH A108 with minimum grade of C or MATH A109 with minimum grade of C or MATH A200 with minimum grade of C.
Special Fees.
Theory and application of engineering surveying, including design and implementation of horizontal and vertical control. Route surveys, horizontal and vertical curves, control surveys, quantity and as-built surveys. Mining surveys, terrestrial scanners. Application of the theory of errors, error budgets and error simulation.
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.

GEO A266  Advanced Surveying  3 CR
Contact Hours: 2 + 3
Prerequisites: GEO A146 with minimum grade of C and GEO A155 with
minimum grade of C and GEO A157 with minimum grade of C.
Special Fees.
Advanced survey measurement techniques. Use of conventional survey
instrumentation, total stations and data controllers. Acquisition and retrieval
of geomatics data from data controllers. Horizontal and vertical traversing and
adjustment methods. Basics of GPS control surveying. Topographic surveying
projects.

GEO A267  Boundary Law I  4 CR
Contact Hours: 4 + 0
Prerequisites: GEO A155.
Special Fees.
Special Note: Offered Fall Semesters.
Elements of boundary control and legal principles, boundary history,
ownership, rights, interests, title, transfer and description of real property, the
rectangular system, retracement, restoration of corners, locating sequential
conveyances and simultaneously created boundaries, combination descriptions
and conveyances, easements, riparian and littoral boundaries including riparian
rights, navigability, public water, erosion, accretion, avulsion, reliction, and other
water boundary elements.

GEO A301  Geomatics Professional Development I  1 CR
Contact Hours: 0 + 2
Class Standing Restriction: Must be Junior or Senior.
Registration Restrictions: Junior or senior standing.
An introduction to the engineering design process as used by geomatics
professionals. Determining objectives and design criteria, research, and analysis in
gmatics problem solving. Analysis of legal and similar arguments in geomatics.
The course has an emphasis on developing open-ended problem-solving skills,
including solving ethical and legal geomatics problems.

GEO A302  Geomatics Professional Development II  1 CR
Contact Hours: 0 + 2
Prerequisites: GEO A301 with minimum grade of C.
An introduction to the engineering design process as used by geomatics
professionals. Conceptualization, feasibility assessment, human factors, design
management and implementation in geomatics problem solving. The course has an
emphasis on developing open-ended problem-solving skills, including solving
ethical and legal geomatics problems. Continuation of GEO A301.

GEO A303  Geomatics Professional Development III  1 CR
Contact Hours: 0 + 2
Class Standing Restriction: Must be Junior or Senior.
Registration Restrictions: Junior or senior standing; completion of GER Tier I (basic
college-level skills) courses.
Communications within geomatics engineering design groups, and between the
groups and the wider community. Geomatics communications using a
range of media and styles. Groupware and its use in geomatics. Introduction to
organizational skills, with an emphasis on understanding how modern businesses
involved in geomatics operate. Consulting in the geomatics 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.
Special Fees.
Special Note: Offered Fall Semesters.
Concepts governing land development. Analysis of soil, topography,
geometry, environmental impact, aesthetic and economic principles in land
planning. Permitting process. Federal, state, and municipality platting regulations.
Automated subdivision design and platting. Ethical considerations when
developing land.

GEO A358  Programming for Digital Cartography  3 CR
Contact Hours: 2 + 2
Prerequisites: GEO A157 with minimum grade of C.
Special Fees.
Advanced principles of computer-aided design and mapping. Organization,
filining, and database principles. Programming routines in Auto Visual Basic and
AutoLISP languages.

GEO A359  Geodesy and Map Projections  3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A200.
Special Fees.
Special Note: Offered Fall Semesters.
Introduction to geometric geodesy. Computations on the ellipsoid. Elements
of datums. Map projections and state plane coordinate systems. Coordinate
transformations.

GEO A365  Geomatics Adjustment and Analysis  4 CR
Contact Hours: 4 + 0
Prerequisites: MATH A272 with minimum grade of C and STAT A253 with
minimum grade of C and GEO A256 with minimum grade of C.
Special Fees.
Analysis of errors and adjustments in Geomatics measurements. Propagation
of errors and variances. Statistical analyses and error ellipses. Geomatics accuracies
and standards. Theory and methods of weighted, non-linear least squares
adjustment.

GEO A433  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.
Special Fees.
Special Note: Offered Fall Semesters.
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 A459  Geodetic Geometrics  3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A202 and GEO A359.
Special Fees.
Special Note: Offered Spring Semesters.
Projects in Geomatics and Geographic Information Systems (GIS). Research,
design, data compilation, analysis and mapping for a Geomatics project.
Professional standards and ethical concerns for Geomatics professionals.
GEOL - Geological Sciences

Offered through the College of Arts and Sciences
ConocoPhillips Integrated Sciences Building (CPSB), Room 101R, 786-4940
www.uaa.alaska.edu/geology

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 geology with a focus on geologic processes and linkages to how humans interact with the geologic environment. Both internal and external Earth processes and related topics such as earthquakes and volcanic eruptions as well as coastal processes and mineral and energy resources will be included.

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 A177 Fundamentals of Oceanography 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Placement into MATH A105 or higher.
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 Laboratory 1 CR
Contact Hours: 0 + 3
Registration Restrictions: Placement into MATH A105 or higher.
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.
Special Note: Meets the GER natural science lab requirement.
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.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Contact Hours</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL A320</td>
<td>Volcanology</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>GEOL A221</td>
</tr>
<tr>
<td>GEOL A321</td>
<td>Mineralogy</td>
<td>4 CR</td>
<td>3 + 3</td>
<td>GEOL A221 and CHEM A106 or concurrent enrollment and MATH A105. Special Fees.</td>
</tr>
<tr>
<td>GEOL A322</td>
<td>Igneous and Metamorphic Petrology</td>
<td>4 CR</td>
<td>3 + 3</td>
<td>GEOL A321. Special Fees.</td>
</tr>
<tr>
<td>GEOL A325</td>
<td>Geology of Ore Deposits</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>GEOL A322. Special Fees.</td>
</tr>
<tr>
<td>GEOL A335</td>
<td>Structural Geology</td>
<td>4 CR</td>
<td>3 + 3</td>
<td>GEOL A221 and MATH A108 or MATH A109. Special Fees.</td>
</tr>
<tr>
<td>GEOL A340</td>
<td>Hydrogeology</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>GEOL A221 and CHEM A105. Special Fees.</td>
</tr>
<tr>
<td>GEOL A350</td>
<td>Geomorphology</td>
<td>4 CR</td>
<td>3 + 3</td>
<td>GEOL A221. Special Fees.</td>
</tr>
<tr>
<td>GEOL A360</td>
<td>Geochemistry</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>CHEM A106 and GEOL A221. Major Restriction: Must be Geology major. Registration Restrictions: BSCs majors. Special Fees.</td>
</tr>
<tr>
<td>GEOL A380</td>
<td>Anchorage Field Studies</td>
<td>3 CR</td>
<td>0 + 9</td>
<td>GEOL A221. Special Fees.</td>
</tr>
<tr>
<td>GEOL A381</td>
<td>Kenai Peninsula Field Studies</td>
<td>3 CR</td>
<td>0 + 9</td>
<td>GEOL A221. Special Fees.</td>
</tr>
<tr>
<td>GEOL A382</td>
<td>Geologic Field Studies</td>
<td>3 CR</td>
<td>0 + 9</td>
<td>GEOL A221. Special Fees.</td>
</tr>
<tr>
<td>GEOL A383</td>
<td>Paleoclimatology and Global Change</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>GEOL A221 and [CHEM A106 or concurrent enrollment] and GEOL A221. Special Fees.</td>
</tr>
<tr>
<td>GEOL A384</td>
<td>Sedimentology and Stratigraphy</td>
<td>4 CR</td>
<td>3 + 3</td>
<td>GEOL A221 and [STAT A252 or STAT A253 or STAT A307]. Special Fees.</td>
</tr>
<tr>
<td>GEOL A385</td>
<td>Glacial and Quaternary Geology</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>GEOL A221. Special Fees.</td>
</tr>
<tr>
<td>GEOL A386</td>
<td>Geoarchaeology</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>GEOL A221. Special Fees.</td>
</tr>
<tr>
<td>GEOL A387</td>
<td>Geoarchaeology</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>GEOL A221 and ANTH A211. Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses and junior standing. Course Attributes: UAA GER Integrative Capstone. Special Fees.</td>
</tr>
</tbody>
</table>

Note: Some courses may have additional registration restrictions and special fees.
Course Descriptions

GEOL A460 Environmental Geochemistry 3 CR
Contact Hours: 3 + 0
Prerequisites: GEOL A360. Special Fees.
Principles and applications of environmental geochemistry on a global scale. Geochemical cycles and chemical mass balance of the oceans. Emphasis on water cycle and geochemistry of the oceans, atmospheric and rainwater chemistry, chemical weathering of rocks and ore deposits, and river and lake geochemistry. Clay mineralogy and principles of sorption of cations and anions in geologic environments. Stable isotope fractionation and applications of isotopic modeling of environmental systems. Specific examples of environmental geochemistry issues such as disposal of radioactive waste and metals. Participation in laboratory research project.

GEOL A465 Isotope Geochemistry 3 CR
Contact Hours: 3 + 0
Prerequisites: GEOL A360. May be stacked with: GEOL A665. 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 3 CR
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 3 CR
Contact Hours: 0 + 9
Prerequisites: GEOL A322 and GEOL A335 and GEOL A452. Special Fees.
Special Note: Course may count for credit towards major if geology field camp is taken elsewhere.
Introduction to principles and applications of basic geologic field methods, 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 3 CR
Contact Hours: 0 + 9
Prerequisites: GEOL A350 and GEOL A480. Special Fees.
Special Note: Course fees cover lodging and camping fees. Students required to provide own food, transportation, field and camping gear.

GEOL A482 Geologic Field Investigations 3 CR
Contact Hours: 0 + 9
Prerequisites: GEOL A480. Special Fees.
Special Note: Course may count as credit towards the major if field camp is taken elsewhere. May be repeated with a change of subtitle for a maximum of 9 credits.
Field excursion within the United States or another country to conduct field exercises on bedrock and/or surficial mapping, generate cross sections from maps, measure and draw stratigraphic sections, and learn regional geology and tectonic settings.

GEOL A490 Advanced Topics in Geology 1-4 CR
Contact Hours: 1-4 + 0
Prerequisites: GEOL A221. Special Fees.
Special Note: May be repeated with a change of topic. Detailed study of a selected topic in geology.

GEOL A492 Geology Seminar 1 CR
Contact Hours: 1 + 0
Prerequisites: GEOL A221. Special Note: May be repeated under different subtitles for a maximum of 3 credits.
Lecture series with invited professional geologists, discussion of relevant professional papers and research. Topical nature of material.

GEOL A495 Geology Internship 1-3 CR
Contact Hours: 1-3 + 0
Registration Restrictions: Junior standing. Special Note: May be repeated, but only 3 credits count towards major requirements.
Work experience in an approved position with supervision and training in various agencies and businesses. Exposes student to work environment beyond the campus setting, to acquire essential practical skills and enhance self-confidence and career direction.

GEOL A498 Student Research 1-3 CR
Contact Hours: 1-3 + 0
Registration Restrictions: Faculty permission. Special Note: May be repeated for a maximum of 6 credits.
Student research conducted on specific subjects in geology. Research topic to be approved and directed by a faculty member in the Department of Geological Sciences.

GEOL A499 Senior Thesis 3 CR
Contact Hours: 0 + 9
Registration Restrictions: Senior standing. Faculty permission. Special Note: May be repeated for a maximum of 6 credits.
Planning, preparation, and completion of senior thesis for the BS degree in Geological Sciences.

GEOL A665 Isotope Geochemistry 3 CR
Contact Hours: 3 + 0
Prerequisites: CHEM A106 and GEOL A360. 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. 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. Independent research project required.

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. Special Fees.
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. Emphasizes 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.
### Course Descriptions

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>GER A201</td>
<td>Intermediate German I</td>
<td>4 CR</td>
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<tr>
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<td>Contact Hours: 4 + 0</td>
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<tr>
<td></td>
<td>Prerequisites: GER A102.</td>
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<tr>
<td></td>
<td>Course Attributes: UAA GER Humanities Requirement.</td>
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<td>Special Fees.</td>
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<tr>
<td>GER A202</td>
<td>Intermediate German II</td>
<td>4 CR</td>
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<tr>
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<td>Contact Hours: 4 + 0</td>
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<tr>
<td></td>
<td>Prerequisites: GER A201.</td>
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<tr>
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<td>Special Fees.</td>
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<tr>
<td>GER A205</td>
<td>Conversational Skills Maintenance II</td>
<td>1 CR</td>
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<td>Contact Hours: 0 + 2</td>
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<td>GER A301</td>
<td>Advanced German I</td>
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<td>Contact Hours: 4 + 0</td>
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<tr>
<td>GER A302</td>
<td>Advanced German II</td>
<td>4 CR</td>
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<tr>
<td></td>
<td>Contact Hours: 4 + 0</td>
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<tr>
<td>GER A305</td>
<td>Conversational Skills Maintenance III</td>
<td>1 CR</td>
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<td>Contact Hours: 0 + 2</td>
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<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<tr>
<td>GER A490</td>
<td>Selected Topics in German Literature</td>
<td>3 CR</td>
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<td>GIS A123</td>
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<tr>
<td>GIS A124</td>
<td>Introduction to GIS and Remote Sensing</td>
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<td>GIS A125</td>
<td>GPS for GIS</td>
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<td>Internship in Geographic Information Systems I</td>
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<tr>
<td>GIS A366</td>
<td>Spatial Information Analysis and Modeling</td>
<td>3 CR</td>
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### GIS - Geographic Information Systems

Offered through the School of Engineering

Engineering Building (ENGR), Room 201, 786-1900

www.uaa.alaska.edu/schoolofengineering

<table>
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<tr>
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<th>Credits</th>
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For more information, visit www.uaa.alaska.edu/schoolofengineering
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 A360  Land Information Systems  3 CR
Contact Hours: 2 + 2
Prerequisites: GIS A268 with minimum grade of C and GEO A267 with minimum grade of C. Special Fees.

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, GIS, 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 A371  GIS Applications I  3 CR
Contact Hours: 1 + 4
Prerequisites: GIS A268 with minimum grade of C. Special Fees.

Detailed investigation of application areas of GIS, together with applications methodologies. Topics may include applications of GIS in public health and epidemiology, decision-support processes, geology, transportation, utility and facility management, temporal analysis, business, cadastral system, logistics, and natural resource management. Students will complete several application projects during the semester.

GIS A433  Coastal Mapping  3 CR
Contact Hours: 2 + 2
Prerequisites: GIS A366 with minimum grade of C. Registration Restrictions: Prerequisites may be waived by instructor based on student’s prior experience. Special Fees.

Applying spatial reasoning and information to coastal mapping projects. Supporting engineering and decision making in the coastal zone with GIS and mapping tools. Joining upland and bathymetric data sets. Resolving datum issues.

GIS A458  Design and Management of Spatial Information  3 CR
Contact Hours: 2 + 2
Prerequisites: GIS A366 with minimum grade of C. Special Fees.

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 in organizational contexts. Human-computer interactions and GIS.

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 classes 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: GEO A359 with minimum grade of C and GEO A365 with minimum grade of C and GIS A268 with minimum grade of C. Special Fees.

Integration of GPS, INS, GIS, photogrammetry, remote sensing, terrestrial surveying and related technology and techniques. Scripting and development in various geo-spatial packages. Data translation/transfer techniques. Web-based approaches to spatial information management and dissemination. Mobile and server technologies for spatial information.

GIS A471  GIS Applications II  4 CR
Contact Hours: 1 + 6
Prerequisites: GIS A366 with minimum grade of C. Special Fees.

Detailed investigation of advanced application areas of GIS. Topics may include socio-economic, decision-support, web-based, archaeological, justice, temporal, agricultural, land parcel, business, logistics and natural resource applications. Students will complete several application projects during the semester.

GIS A490  Selected Advanced Topics in GIS  1-6 CR
Contact Hours: 0-6 + 0-12
Prerequisites: GIS A268 with minimum grade of C. Special Fees.

Special Note: May be repeated 4 times with change in topics.

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  Creating Success in College  3 CR
Contact Hours: 3 + 0
Special Fees.

Designed to assist incoming students make a successful transition from high school, home or the workplace to college. Adopts a seminar approach requiring students to use a textbook, listen to lectures, participate in discussions, activities, and complete a variety of written and oral assignments. Adjustment and transition issues -- academic, career, intrapersonal and interpersonal -- are addressed with a structured, content-based curriculum, flexible enough to promote the exploration and resolution of individual concerns.

GUID A150A  Survival Skills/College  1 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.

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www.uaa.alaska.edu

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Course Descriptions

HCA - Health Care Assisting

Offered through Kenai Peninsula College
156 College Road, 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.

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.

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 ancient America through the Civil War. 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
Afro-American history from colonial times to 1865. Social, economic, psychological, religious, and racial aspects of Africa. Slave trade, slavery, slave trading nations, and Civil War. Impact of various racial theories and practices on black/white relations.

HIST A239 Black History II 3 CR
Contact Hours: 3 + 0
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.

HIST A244 Studies in Film History 3 CR
Contact Hours: 3 + 0
Special Fees.
Special Note: May be repeated once for credit with a change of subtitle. 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.

HIST A257A The Alaska-Yukon Gold Rush 3 CR
Contact Hours: 3 + 0
Nineteenth-century gold rushes in California, Nevada, the Rocky Mountains, Black Hills (Dakota Territory), and British Columbia are examined, culminating in the Alaska-Yukon Gold Rush Era of 1880-1920.

HIST A261 Russian History 3 CR
Contact Hours: 3 + 0
A survey of Russian history from early origins to modern Russia. Topics include Kievan Rus; Mongol Era; Rise of Moscow; Romanov Russia and Serfdom; Revolutionary Russia; Soviet Union and Russian Federation.

HIST A306 The Roman Empire 3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A101 and HIST A225.
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.

HIST A308 Europe in the High Middle Ages 3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A101 with minimum grade of C and [ENGL A111 or ENGL A211]. Registration Restrictions: Appropriate score on English Placement Test, SAT Verbal Section, or ACT English Test will waive the ENGL A111 or ENGL A211 prerequisites.
An analysis of key issues in Europe from roughly 1000-1400, including feudal and manorial structures, religious developments, such as new monastic orders and the growth of papal power, intellectual and economic developments such as the rise of scholasticism and book-keeping, and political and social developments. Particular emphasis will be placed on the impact of the Crusades, the Twelfth Century Renaissance, religious minorities, dissent, and rural and urban life.

HIST A310 Renaissance/Reformation Europe 3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A101.
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.
HIST A312 Early Modern Europe: 1600-1789 3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A102.
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 Régime on the eve of Revolution.

HIST A314 Nineteenth Century Europe 3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A102.
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.

HIST A316 Twentieth Century Europe 3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A102.
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.

HIST A320 The Rise, Fall and Reinvention of the Samurai 3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A121 and HIST A122.
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.

HIST A321 Modern China 3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A121 or HIST A122.
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.

HIST A322 Modern Japan 3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A121 or HIST A122.
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.

HIST A323 Communist China 3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A122 and HIST A321.
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 transition from Deng Xiaoping from 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.

HIST 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 GECO, HIST or PS courses. Crosslisted with: INTL A325 and PS 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.

HIST A330 Russia in East Asia 3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A102 or HIST A121.
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.

HIST A336 Latin America to 1800 3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A101 with minimum grade of C and [ENGL A111 or ENGL A211].
Registration Restrictions: Appropriate score on English Placement Test, SAT Verbal Section, or ACT English Test will waive the ENGL A111 or ENGL A211 prerequisite.
An analysis of pre-Columbian cultures, the impact of the arrival of Europeans on indigenous societies in Mesoamerica and South America, and the societies that emerged out of conquest and colonization. Emphasis will be placed on labor, economy, religion, culture, society, and daily life up to 1800, as well as the beginning of Independence movements.

HIST A338 Modern Latin America 3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A132 with minimum grade of C and [ENGL A111 or ENGL A211].
Registration Restrictions: Appropriate score on English Placement Test, SAT Verbal Section, or ACT English Test will waive the ENGL A111 or ENGL A211 prerequisite.
An analysis of Latin American history from the Independence movements of the nineteenth century to the present, including the formation of states, the development of national identities, and Latin America’s connection to growing global economies. Emphasis will be placed on post-Independence political and social conflicts, social reforms and revolutions, the impact of modernization and industrialization, and cultural and artistic developments.

HIST A341 History of Alaska 3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A132.
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.

HIST A346 History of Native Peoples of United States and Canada 3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A131 or HIST A132.
An examination of themes in the history of indigenous peoples of the U.S. and Canada from pre-contact through the 20th century, with an emphasis on Native voices and perspectives.

HIST A355 Major Themes in US History 3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A131 and HIST A132.
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.

HIST A360 Modern Economic History 3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A102 and ECON A201.
Crosslisted with: ECON A360.
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.

HIST A377 Historiography: The Uses and Abuses of History 3 CR
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 A382 American Women's History 3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A131 or HIST A132.
An exploration of the historical status and role of women in American society. Emphasizes such themes as women’s work and labor; women’s political activism; historical definitions of feminism and sexuality; the religious, legal and cultural prescriptions of women’s “proper” role in American society; and the influences of race, class and ethnicity in women’s historical experience.
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<td>HIST A102</td>
<td>Interdisciplinary examination and analysis of contemporary Russian culture and society.</td>
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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.
   An intensive examination of selected fundamental topics in modern American history. Specific areas will be treated as student need and faculty expertise indicate. Subtitle varies.

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 College of Health
Allied Health Sciences Building (AHS), Room 155, 786-4346
www.uaa.alaska.edu/alliedhealth

HLTH A101 Introduction to Health Occupations 3 CR
Contact Hours: 2 + 2
Introduces basic knowledge and skills of health care occupations including principles of infection control, medical office procedures, general patient care, professionalism, cardiopulmonary resuscitation and first aid. Provides laboratory component for development of associated clinical skills. Includes introduction to health care facilities and careers in health care.

HNRS - Honors
Offered through the University Honors College
Edward and Cathryn Rasmuson Hall (RH), Room 115, 786-1086
www.uaa.alaska.edu/honorscollege

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 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 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 findings and skills, including the collection and analysis of both quantitative and qualitative data. Students will gain considerable experience communicating both orally and in writing.

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 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.
Course Descriptions

HNRS A490 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. Completion of GER Tier 1 (basic college-level skills) courses and junior standing.
Course Attributes: UAA GER Integrative Capstone.
Special Note: The course extends over both fall and spring semesters earning six hours credit thereby satisfying the three hour GER Integrative Capstone Course requirement. A passing grade is dependent on successful completion of the year-long course.

A two-semester long interdisciplinary Honors seminar investigating a central theme extending beyond the confines typically found within the individual disciplines and majors. Course is delivered in a Socratic style with themes generally focusing on the emerging 21st century leading to an enhanced understanding of the complex world of the future and of the student’s role in it.

HNRS A495 Honors Internship 1-6 CR
Contact Hours: 0 + 3-18
Registration Restrictions: Permission from the University Honors College and approval by a faculty member acting as the internship advisor.
Special Fees: Special Fees.
Special Note: Repeatable once for credit with a change of internship venue.

Applying interdisciplinary knowledge and skills to a student internship project, through a variety of governmental and private settings both within and outside of Alaska.

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.

HS - Health Sciences

Offered through the College of Health
Diplomacy Building (DPL), Room 305, 786-5481
www.uaa.alaska.edu/healthsciences

HS A210 Introduction to Environmental Health 3 CR
Contact Hours: 3 + 0
Provides an introduction to the field of environmental health including health effects of global climate change. Reviews agents of environmental disease and public health applications.

HS A220 Core Concepts in the Health Sciences 3 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 A230 Introduction to Global Health 3 CR
Contact Hours: 3 + 0
Provides an introduction to the field of global health with a focus on links between health and economic and social development. Reviews the global burden of disease as well as the impact of culture on health.

HS A326 Introduction to Epidemiology 3 CR
Contact Hours: 3 + 0
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 A345 Planning and Implementation of Health Education Programs 3 CR
Contact Hours: 3 + 0
Prerequisites: HS A220.
Theory and practice of program planning and implementation for health education and health promotion programs. Focuses on the use of educational strategies and methods to facilitate the development of policies, procedures, interventions, and systems that support the health of individuals, groups, and communities.

HS A370 Medical Sociology 3 CR
Contact Hours: 3 + 0
Prerequisites: SOC A101.
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 A420 Introduction to Program Evaluation 3 CR
Contact Hours: 3 + 0
Prerequisites: [PSY A260 or STAT A252 or STAT A253] and [(HS A345 or concurrent enrollment) or HUMS A295B].
Crosslisted with: HUMS A420.

Introduces the theory and practice of program evaluation for applied public health and human service settings.

HS A433 Health Education: Theory and Practice 3 CR
Contact Hours: 3 + 0
Prerequisites: HS A220 with minimum grade of C or NS A300 with minimum grade of C.
Registration Restrictions: Faculty permission.
Crosslisted with: NS A433.

Provides the theoretical foundation for health education and health promotion. Develops students’ abilities to design and deliver health education programs.

HS A463 Physician Assistant Clinical Clerkship I 12 CR
Contact Hours: 0 + 40
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 + 40
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 + 40
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.

HS A466 Physician Assistant Family Practice Clerkship II 12 CR
Contact Hours: 0 + 40
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 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.

HS A490 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 settings. Subjects will be drawn from current health care priority areas including diseases specific to Alaska, substance abuse, behavioral health, and appropriate health care practices.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
<th>Contact Hours</th>
<th>Prerequisites</th>
<th>Restrictions</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS A491</td>
<td>Health Issues in Alaska</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Prerequisites: HS A463 or HS A465. Major Restriction: Must be Health Sciences major. Registration Restrictions: Health Sciences Physician Assistant Track Major or instructor permission.</td>
<td>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.</td>
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<tr>
<td>HS A492</td>
<td>Senior Seminar: Contemporary Health Policy</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Prerequisites: HS A220 and HS A326. Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses and junior standing. Course Attributes: UAA GER Integrative Capstone. Focuses on contemporary health policy issues with an emphasis on population-level public policies and health disparities.</td>
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<tr>
<td>HS A498</td>
<td>Senior Project in Health Sciences</td>
<td>3 CR</td>
<td>0 + 9</td>
<td>Prerequisites: HS A220 and HS A345 and ([HS A420 or concurrent enrollment) or (HUMS A420 or concurrent enrollment)). Class Standing Restriction: Must be Senior. Registration Restrictions: Senior standing. Approval by the faculty member acting as project advisor. Special Note: May be repeated once for a total of 6 credits. Individual senior projects completed under the mentorship of a faculty advisor. May be repeated once as part of a two-semester sequence with initial results, an outline, and bibliography presented at the end of the first semester and a final paper at the end of the second.</td>
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<tr>
<td>HS A499</td>
<td>Senior Thesis in Health Sciences</td>
<td>1-3 CR</td>
<td>0 + 3-9</td>
<td>Prerequisites: HS A220. Class Standing Restriction: Must be Senior. Registration Restrictions: Senior standing. Approval by the faculty member acting as thesis advisor. Special Note: May be repeated once for a maximum of 6 credits. Individual thesis projects completed under the mentorship of a faculty advisor.</td>
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<tr>
<td>HS A605</td>
<td>Public Health and Society</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>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.</td>
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<tr>
<td>HS A610</td>
<td>Environmental and Occupational Health</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>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.</td>
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<tr>
<td>HS A615</td>
<td>Health Services Administration</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>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.</td>
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<tr>
<td>HS A624</td>
<td>Circumpolar Health Issues</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>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.</td>
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<tr>
<td>HS A625</td>
<td>Biostatistics for Health Professionals</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>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.</td>
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<tr>
<td>HS A625L</td>
<td>Biostatistics for Health Professionals Lab</td>
<td>1 CR</td>
<td>0 + 3</td>
<td>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.</td>
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<tr>
<td>HS A626</td>
<td>Principles of Epidemiology</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>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.</td>
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<td>HS A628</td>
<td>Program Evaluation</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>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.</td>
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<tr>
<td>HS A629</td>
<td>Public Health Research Tools and Methods</td>
<td>4 CR</td>
<td>3 + 2</td>
<td>Prerequisites: [HS A625 or NS A625] and [HS A626 or NS 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.</td>
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Course Descriptions

HS A630  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.

HS A683  Innovative Practices in Telehealth  3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing or instructor permission Crosslisted with SWK A685. Special Fees.
Provides an overview of telehealth with an emphasis on telebehavioral health in Alaska. Includes topics on the history of telehealth and current legal, technical and logistical considerations to prepare leaders in the expanding field of telehealth. Includes hands-on experience with telehealth technology and clinical exercises.

HS A690  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.

HS A698  MPH Project Practicum  1-5 CR
Contact Hours: 0 + 3-15
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Admission to the MPH program and academic advisor approval. Special Fees.
The MPH Project Practicum culminates a program of advanced study and evidence a high degree of scholarly and professional competence. It serves as the basis for evaluating the student in the area of evidence-based professional public health service.

HS A699  Thesis Practicum  1-5 CR
Contact Hours: 0 + 3-15
Registration Restrictions: Admission to MPH Program and Academic Advisor Approval. Special Fees.
The thesis practicum culminates a program of advanced study and should evidence a high degree of scholarly and professional competence. It serves as the basis for evaluating the capability of its author in the areas of applied research and professional practice. The thesis practicum is a reflection of the student’s capabilities, with the help and guidance of the faculty and appropriate community members. The student’s work is reviewed by her/his thesis committee to judge the author’s scholarship and professional presentation, and to ascertain that the student has demonstrated his/her knowledge and ability to receive the Master’s Degree.

HUM - Humanities

Offered through the College of Arts and Sciences

www.uaa.alaska.edu/hums

HUM A211  Introduction to Humanities I  3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A111.
Course Attributes: UAA GER Humanities Requirement.
Uses humanities-based methods of inquiry and analysis to interpret art works representing 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. 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. Two critical essays required; readings are numerous.

HUMS - Human Services

Offered through the College of Health

Professional Studies Building (PSB), Room 212, 786-6437

www.uaa.alaska.edu/hums

HUMS A101  Introduction to Human Services  3 CR
Contact Hours: 3 + 0
Special Fees.
Introduces human services as a profession. Traces historical and contemporary service delivery approaches. Identifies ethical and professional roles of human service workers. Examines human service consumer problems and appropriate helping systems and strategies.

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—ethical, 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 historical foundations of the human service profession through the lens of formative legislation and service delivery systems.

HUMS A122  Substance Abuse as a Contemporary Problem  3 CR
Contact Hours: 3 + 0
Presents current issues in addiction through a human service perspective emphasizing social, legal, public health and public policy contexts.

HUMS A123  Public Education and Prevention in Substance Abuse  3 CR
Contact Hours: 3 + 0
Special Fees.
Presents knowledge and skills as tools in the development of community education and prevention programs in substance abuse.

HUMS A124  Introduction to the Physiology and Pharmacology of Substance Abuse  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 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.
Presents human relation skills appropriate in the workplace. Course includes skills related to task group team membership and leadership, problem solving, and workplace etiquette.

HUMS A185  Introduction to Field Work  3 CR
Contact Hours: 3 + 0
Special Fees.
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 A295.

HUMS A223  Introduction to Paraprofessional Counseling I  3 CR
Contact Hours: 3 + 0
Special Fees.
Presents basic paraprofessional counseling skills focused upon a systematic approach to effective helping. Skills are organized into the four categories: skills for understanding, skills for comfort and crisis intervention, skills for positive action, and trauma-informed care.
HUMS A224 Conflict and Collaborative Systems 3 CR  
Contact Hours: 3 + 0  
Employs a general systems approach to examine social conflict and collaboration. Communication and conflict resolution skills are presented as tools enhancing collaboration and managing conflict.

HUMS A226 Intervention Continuum in Substance Abuse Counseling 3 CR  
Contact Hours: 3 + 0  
Prerequisites: HUMS A223 with minimum grade of C.  
Provides the continuum of substance abuse treatment interventions. Topics include screening and placement criteria, motivational interviewing, aftercare, relapse planning, documentation, and confidentiality.

HUMS A240 Geriatric Lifestyle Assessment 3 CR  
Contact Hours: 3 + 0  
Prerequisites: HUMS A101 or SOC A110.  
Presents the continuum of substance abuse treatment interventions. Topics include screening and placement criteria, motivational interviewing, aftercare, relapse planning, documentation, and confidentiality.

HUMS A290 Selected Topics in Alcohol and Drug Counseling 0.5-3 CR  
Contact Hours: 0.5-3 + 0  
Grade Mode: Pass/No Pass.  
Special Fees.  
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 with minimum grade of C or concurrent enrollment) and HUMS A101 with minimum grade of C and HUMS A185 with minimum grade of C and HUMS A223 with minimum grade of C.  
Major Restriction: Must be Human Services major.  
Registration Restrictions: GER Written Communication, Human Services major  
Special Fees.  
Provides students with guided learning experiences at a human services agency including 125 agency hours in a weekly seminar class. Course topics include agency structure and function, application of entry-level helping skills, and interagency networking.

HUMS A295B Human Services Practicum II 3 CR  
Contact Hours: 1 + 9  
Prerequisites: HUMS A295A with minimum grade of C.  
Major Restriction: Must be Human Services major.  
Registration Restrictions: Human Services major  
Special Fees.  
Provides students with guided learning experiences at a human services agency. Students are required to complete 125 supervised agency hours during which they will become familiar with agency structure and protocols and engage in supervised client contact. Students will also participate in a weekly classroom seminar.

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.  
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 with minimum grade of C.  
Special Fees.  
Provides students both theory and skill development learning experiences designed to advance paraprofessional counseling skills.

HUMS A333 Alternative Dispute Resolution 3 CR  
Contact Hours: 3 + 0  
Prerequisites: HUMS A223 and HUMS 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 A223 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 Note: Offered Fall Semesters.  
Provides an exploration of masculinity and male sex role from historical, cultural and social-psychological perspectives with a 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 0.5-3 CR  
Contact Hours: 0.5-3 + 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 Service Practice 3 CR  
Contact Hours: 3 + 0  
Prerequisites: HUMS A101 and HUMS A223.  
Special Fees.  
Special Note: Offered Fall Semesters.  
Overviews of ethics in human service practice. Clients' rights and confidentiality, worker responsibility for ethical behavior in the areas of confidentiality, multicultural counseling, professional responsibility, and practitioner competency.

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.  
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 A420 Introduction to Program Evaluation 3 CR  
Contact Hours: 3 + 0  
Prerequisites: [PSY A260 or STAT A252 or STAT A253] and [HS A345 or concurrent enrollment] or HUMS A295B.  
Crosslisted with: HS A420.  
Introduces the theory and practice of program evaluation for applied public health and human service settings.
### Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUMS A424</td>
<td>Advanced Counseling for Human Service Professionals</td>
<td>3 CR</td>
<td>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.</td>
</tr>
<tr>
<td>HUMS A434</td>
<td>Group Facilitation for Human Service Professionals</td>
<td>3 CR</td>
<td>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.</td>
</tr>
<tr>
<td>HUMS A640</td>
<td>Contemporary Issues in Rehabilitation</td>
<td>3 CR</td>
<td>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.</td>
</tr>
<tr>
<td>HUMS A650</td>
<td>Leadership and Organizational Development in Human Services</td>
<td>3 CR</td>
<td>Provides leadership styles based upon human organizational development theory and concepts. Through the frameworks of transformative, strategic and structural change models, the course examines organizational change and leadership in public, private and self-help human service organizations.</td>
</tr>
<tr>
<td>HUMS A660</td>
<td>Promoting Positive Development in At-Risk Youth</td>
<td>3 CR</td>
<td>Provides an overview of ethical issues in human services emphasizing the identification of ethical issues and the application of ethical principles and codes of ethics in applied decision making.</td>
</tr>
<tr>
<td>HUMS A670</td>
<td>Professional Ethics in Human Services</td>
<td>3 CR</td>
<td>Provides an overview of major theories and research in adolescent development with a focus on applications in human service systems. Emphasis on program development and systems issues in multicultural settings and strategies to promote healthy development and resilience.</td>
</tr>
<tr>
<td>HUMS A680</td>
<td>Advanced Topics in Human Development: Childhood</td>
<td>3 CR</td>
<td>Provides an overview of major theories and research in adolescent development with a focus on applications in human service systems. Emphasis on program development and systems issues in multicultural settings and strategies to promote healthy development and resilience.</td>
</tr>
<tr>
<td>HUMS A681</td>
<td>Advanced Topics in Human Development: Adolescence</td>
<td>3 CR</td>
<td>Provides an overview of major theories and research in adolescent development with a focus on applications in human service systems. Emphasis on program development and systems issues in multicultural settings and strategies to promote healthy development and resilience.</td>
</tr>
<tr>
<td>HUMS A682</td>
<td>Advanced Topics in Human Development: Adulthood and Aging</td>
<td>3 CR</td>
<td>Provides an overview of major theories and research in adolescent development with a focus on applications in human service systems. Emphasis on program development and systems issues in multicultural settings and strategies to promote healthy development and resilience.</td>
</tr>
<tr>
<td>ID A141</td>
<td>Interior Design</td>
<td>3 CR</td>
<td>Beginning interior design survey course. Design theory as related to planning and decorating homes. Particular emphasis on developing individual styles, color schemes, floor, wall and window coverings, basic lighting, and interior furnishings.</td>
</tr>
</tbody>
</table>
INTL - International Studies

Offered through the College of Arts and Sciences
Administration/Humanities Building (ADM), Room 262, 786-1509
www.uaa.alaska.edu/intl

INTL A101 Local Places/Global Regions: An Introduction to Geography 3 CR
Contact Hours: 3 + 0
Crosslisted with: GEOG A101.
Course Attributes: UAA GER Social Sciences Requirement.
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.

INTL A315 Canada: Nation and Identity 3 CR
Contact Hours: 3 + 0
Prerequisites: GEOG A101 or INTL A101 and HIST A131.
Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses and junior standing.
Course Attributes: UAA GER Integrative Capstone.
An interdisciplinary examination and analysis of Canada. Themes include the development of Canadian nationalism and national identity, problems of official bilingualism, Quebec separation, multiculturalism and Canadian First Nations. American political and cultural relations will be explored as issues framing the future of Canada and its international role in the 21st century.

INTL 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 PS 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.

INTL A495 International Studies Internship 3 CR
Contact Hours: 1 + 8
Registration Restrictions: International Studies Major; junior standing.
Special Fees.
Special Note: Repeatable for credit with change of internship venue.
Internship in which student gains intensive experience applying cross-cultural and international knowledge and skills to specific, assigned projects. Internships are available in a variety of Anchorage-based international governmental and private settings and require a formal agreement between the student, the faculty member, and the supervisor.

JPC - Journalism & Public Communications

Offered through the College of Arts and Sciences
Professional Studies Building (PSB), Room 203, 786-4180
www.uaa.alaska.edu/journalismandpubliccommunications

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 A211 Visual Literacy 3 CR
Contact Hours: 2 + 2
Examines visual forms of communication. Emphasis on the use of images in newspapers, magazines, film, television, photography, informational graphics, interactive multimedia, digital games, and Web-based technologies and the role of visual media in cultural processes and aesthetic appreciation.

JPC A212 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 A213 Digital Imaging 3 CR
Contact Hours: 2 + 2
Examines the creation and use of electronically generated images to communicate. Emphasis on visual aesthetics, composition, image layering, photo retouching, spatial relationships, compression techniques, digital painting, editing, color adjustment, filtering, image capture and file formatting.

JPC A312 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 A313 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 A314 Documentary Filmmakers and Filmmaking 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Junior status.
Analyzes cinematography and filmmaking techniques of significant American and international documentary filmmakers.

JPC A342 Photojournalism 3 CR
Contact Hours: 2 + 2
Prerequisites: JPC A204.
Special Fees.
Analyzes newspaper, magazine, and World Wide Web digital photography as news and documentary forms. Emphasis on principles, practices, and professional standards of shooting and editing digital photographs on deadline. Students shoot, edit, and print spot news, sports, features and special essays.

JPC A343 Radio News Reporting 3 CR
Contact Hours: 2 + 2
Prerequisites: JPC A204.
Analyzes 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 Content Creation  3 CR
Contact Hours: 2 + 2
Prerequisites: JPC A204.
Analyzes content strategies and techniques for contemporary magazines, including writing, photography, and editorial content. Emphasis on professional principles and practices of story development, magazine story research and writing, copy editing, use of images, typography and outlines, and placement of stories in contemporary magazine markets. Students produce content for on-campus and off-campus publications.

JPC A362  Principles of Strategic Communications  3 CR
Contact Hours: 3 + 0
Prerequisites: JPC A204.
Analyzes theories of persuasion and the evolution of contemporary public relations, advertising, and marketing industries. Emphasis on professional principles and practices of persuasive communications strategies and techniques for mass audiences using contemporary media.

JPC A361  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 multi-page publications.

JPC A382  Digital Audio Production  3 CR
Contact Hours: 2 + 2
Prerequisites: 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 A413  Communications Law  3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110 or JPC A202 with minimum grade of C.
Crosslisted with: JUST A413.
Legal rights, privileges, and regulations of press, radio, television, Internet and films; libel, contempt, copyright, rights of privacy; decisions of regulatory bodies.

JPC A442  Multimedia Journalism  3 CR
Contact Hours: 2 + 2
Prerequisites: JPC A204 and JPC A345.
Applies ethical principles and professional practices of multimedia journalism, especially regarding the creation of storytelling techniques developed on digital platforms. Examines the emergence of a global information society, with a focus on the effects these phenomena are having on the news media.

JPC A443  Enterprise Reporting  3 CR
Contact Hours: 2 + 2
Prerequisites: JPC A204 with minimum grade of C.
Registration Restrictions: JPC junior or senior status.
Applies ethical principles and advanced professional practices of reporting that go beyond breaking news coverage to in-depth, investigative, explanatory and analytical reporting about contemporary topics for print, radio, television and multimedia.

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  Magazine Editing and Production I  3 CR
Contact Hours: 2 + 2
Prerequisites: JPC A204 with minimum grade of C.
Evaluates the use of design for magazine production. Emphasis on magazine writing, design, layout, typography, production, electronic distribution, and prepress. Class will produce a general interest color 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 idea development, script writing, storyboarding, planning, use of digital video cameras, lighting, sound, and post-production editing. Students produce commercials, public service spots, and promotional videos for multiple formats and audiences.

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 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 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. Analyze, develop, and apply 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
Prerequisites: JPN A101.
Course Attributes: UAA GER Humanities Requirement.
Special Fees.
Continuation of introductory course. Further develops elementary listening, speaking, reading, and writing skills in Japanese for effective communication. Enhances appreciation of cross-cultural perspectives. Course conducted in Japanese.

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
Prerequisites: JPN A201.
Course Attributes: UAA GER Humanities Requirement.
Special Fees.

JPN A280 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 Chadō/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.
Special Note: Course conducted in Japanese.
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.
Special Note: Course conducted in Japanese.
Continuation of one 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. Course conducted in Japanese.
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: Course conducted in Japanese.
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.

JPN A390 Selected Topics: Studies in Japanese Culture and Society 3 CR
Contact Hours: 3 + 0
Prerequisites: JPN A301 with minimum grade of C.
Special Fees.
Special Note: Course may be repeated twice for credit with a change in subtitle.
Examines various aspects of Japanese culture and society with critical analysis of textual and cultural artifacts (e.g., historical, political, literary) through a variety of disciplinary methodologies. Enhances Japanese language skills in writing, reading, speaking, listening and cultural literacy. Course conducted in Japanese.

JUST - Justice
Offered through the College of Health
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 in Justice 3 CR
Contact Hours: 3 + 0
Introduces social science research methods used in justice studies, including explanation of the scientific method, experimental and quasi-experimental designs, sampling, data collection methods, and analytical strategies.

JUST A201 Justice Data Analysis 3 CR
Contact Hours: 3 + 0
Introduces students to descriptive statistical analysis and presentation of crime and justice data. Topics include measures of central tendency, dispersion, hypothesis testing and statistical significance. Data presentations focus on the production and interpretation of tables and graphs to impact justice policy and practice.

JUST A210 Principles of Corrections 3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110.
Provides an overview of the field of corrections. Topics include theories of punishment and sentencing, history of the prison and jail, inmate prison life, inmate litigation, and the organization of prisons and staff. Issues of gender, race/ethnicity and class are integrated throughout the course.

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.
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, negotiables, debtor-creditor relations, agency, business organizations, and property protection.

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.
Introduces fundamentals of investigation. Topics include crime scene search and recording, collection and preservation of physical evidence, and scientific aids. Explores modus operandi, sources of information, interviews and interrogations, follow-up, and case preparation.

JUST A310 Introduction to Forensic Science 3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110 or LEGL 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 A315 Development of Law 3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110 with minimum grade of D or LEGL A101 with minimum grade of D.
Registration Restrictions: Completion of Written Communication Skills GER for baccalaureate degrees with a minimum grade of D.
Examines the philosophy and development of law in the United States from colonial times to the present. Explores American constitutional history and the role of the courts, the legislature and the executive branch in the lawmaking process. Analyzes legal developments as they relate to changing economic, political, social and intellectual trends.
JUST A320  Crime Prevention  3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A200 and JUST A201 and [JUST A251 or SOC A251].
Examines primary, secondary, and tertiary crime prevention strategies and concepts. Explores in a multidisciplinary context the legal, moral and ethical considerations and problems of human and environmental manipulation. Emphasizes contemporary approaches to preventing criminal behavior.

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 A332  Environmental Crime Prevention  3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A200 and JUST A201 and [JUST A251 or SOC A251].
Special Note: JUST A230 recommended
Examines the theoretical background to opportunity-reducing in environmental crime prevention. Explores the application and implementation of crime prevention through environmental design, defensible space, and problem-oriented policing. Illustrates the practical and policy difficulties of environmental crime prevention through the use of case studies and field work.

JUST A334  Police and Society  3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110 with minimum grade of D and JUST A200 with minimum grade of D and JUST A201 with minimum grade of D.
Provides a foundation in American policing. Examines the history, social organization, institutional contradictions and contemporary challenges of the police in the United States. Special emphasis given to the use of empirical research methods to advance our understanding of policing.

JUST A340  Family Law  3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110 with minimum grade of D or LEGL A101 with minimum grade of D.
Crosslisted with: LEGL A340.

JUST A343  Constitutional Law  3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110 or PS A101.
Crosslisted with: PS A343.
Introduces students to American constitutional law through a study of the history of the Constitution and selected landmark Supreme Court cases. Topics covered are separation of powers, judicial review, civil rights and liberties, property and economic rights and others.

JUST A352  Criminal Law and Procedure  3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110 with minimum grade of D or LEGL A101 with minimum grade of D.
Registration Restrictions: LEGL A215 recommended.
Crosslisted with: LEGL A352.
Examines elements and functions of substantive criminal law together with constitutional, statutory and rules-based limits on law enforcement in the United States. Includes federal and state law of crimes, defenses, search and seizure, interrogations and confessions, identification, arrests and charging, right to counsel, right to jury, sentencing, and double jeopardy.

JUST A355  Rural Justice  3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110 with minimum grade of D.
Class Standing Restriction: Must be Junior or Senior.
Registration Restrictions: Junior or senior standing
Investigates rural crime and criminal justice. Examines the specific geographic, social and cultural characteristics of rural communities and how these factors influence the prevalence and nature of crime and criminal justice. Reviews and assesses competing theories of justice. Comparative analysis of rural crime and criminal justice in other countries, with emphasis given to other Circumpolar nations.

JUST A360  Justice Theory and Policy Analysis  3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110 with minimum grade of D and JUST A200 with minimum grade of D and JUST A201 with minimum grade of D and JUST A251 with minimum grade of D.
Critiques the essential theories underlying the operation of the justice system and analyzes contemporary policies within the framework of justice theory and policy. Analyzes the influence of politics and ideology on the operation of the justice system and evaluates the role of social science research evidence in formulating evidence-based justice policy.

JUST A365  Comparative Justice Systems  3 CR
Contact Hours: 3 + 0
Crosslisted with: LEGL A355
Compares and contrasts global justice systems and examines international problems related to crime and justice.

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 A371  Cinematic Images of Justice  3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110 with minimum grade of D.
Class Standing Restriction: Must be Junior or Senior.
Registration Restrictions: Junior or senior 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 the media. Attention given to each component of the criminal justice system. Impact of fictionalized events and justice system action/reaction will be juxtaposed with the reality of the justice system.

JUST A374  The Courts  3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110 with minimum grade of D or LEGL A101 with minimum grade of D.
Class Standing Restriction: Must be Junior or Senior.
Registration Restrictions: Junior standing and above
Examines the basic components of the U.S. courts with particular emphasis on case processing through the court system and the roles of court actors. Covers the history as well as the current structure and function of the court system and assesses the gap between the ideals and the realities of court processes and practices.

JUST A375  Juvenile Justice and Delinquency  3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110 with minimum grade of D or LEGL A101 with minimum grade of D.
Class Standing Restriction: Must not be Freshman or Sophomore.
Registration Restrictions: Junior standing and above
Course Attributes: UAA GER Social Sciences Requirement.
Examines the theory and practice of juvenile justice. Reviews changing conceptions of justice and their impact on their impact on policy and legal rights. Explores formal and informal responses to juvenile delinquency, with specific attention to gender, race, and ethnic disparities.

JUST A384  Contemporary Corrections  3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110 with minimum grade of D and JUST A200 with minimum grade of D and JUST A201 with minimum grade of D.
Reviews current theory, research and policy in the field of corrections and evaluates the operation of correctional policies using evidence-based standards of effectiveness. Issues analyzed range from examining contemporary explanations of American punishment policies to evaluating treatment and rehabilitation programs.

JUST A398  Individual Research  1-6 CR
Contact Hours: 1-6 + 3-18
Prerequisites: JUST A110 with minimum grade of D and JUST A200 with minimum grade of D and JUST A201 with minimum grade of D.
Registration Restrictions: Faculty permission
Special Note: May be repeated for maximum of 6 credits.
Applies substantive and methodological training to a selected justice topic under the direction of a supervising faculty member. Research activities may include, but are not limited to, conducting literature reviews; compiling bibliographies; formulating research hypotheses; developing research designs; collecting, entering and analyzing data; and interpreting findings.
JUST A413 Communications Law 3 CR
Contact Hours: 3 + 0
Prerequisites: JPC A202 with minimum grade of C or JUST A110.
Crosslisted with: JPC A413.
Special Fees:
Legal rights, privileges, and regulations of press, radio, television, Internet and films; libel, contempt, copyright, rights of privacy; decisions of regulatory bodies.

JUST A434 Police-Community Relations 3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110 with minimum grade of D and JUST A200 with minimum grade of D and JUST A201 with minimum grade of D.
Class Standing Restriction: Must be Senior.
Registration Restrictions: Senior standing or instructor approval
Examines police-community relations in the United States. Explores common conceptions of the police role, from the perspective of both the public and the police themselves, and their impact on police-community relations. Particular emphasis is given to recent developments aimed at ameliorating strained relationships between the police and the various communities they serve.

JUST A443 Civil Liberties 3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A315 with minimum grade of D or JUST A434 with minimum grade of D or PS A343 with minimum grade of D.
Studies civil liberties in the United States with emphasis on freedom of speech and religion, due process, equal protection of the law, and the right of privacy. Focuses on Supreme Court cases and literature and considers various influences on judicial decision-making.

JUST A444 Terrorism 3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110 with minimum grade of D and JUST A251 with minimum grade of D.
Class Standing Restriction: Must be Junior or Senior.
Registration Restrictions: Junior or senior standing
Examines contemporary and historical terrorist ideology, organization and tactics including international and domestic groups. Focuses on the balance of prevention, security and liberty.

JUST A445 Probation, Parole and Community Corrections 3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110 with minimum grade of D.
Covers the history and development of probation and parole, including notions of rehabilitation, reentry and reintegration. Investigates evidence-based standards, and numerous and diverse types of supervision, treatment, control, restoration and supportive programs for criminal offenders within the community.

JUST A460 Justice in Crisis 3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110 with minimum grade of D and JUST A200 with minimum grade of D and JUST A201 with minimum grade of D and [JUST A251 with minimum grade of D or SOC A251 with minimum grade of D].
Class Standing Restriction: Must be Senior.
Registration Restrictions: Completion of all GER Tier 1 (basic college-level skills) courses and Senior standing.
Course Attributes: UAA GER Integrative Capstone.
Critically examines various perspectives on justice and the ability of a society to maintain the ideal of justice. Compares conditions in different countries and investigates different social and historical conditions when justice was challenged. Analyzes the influence of culture, race/ethnicity and socioeconomic inequality on the operation of the American justice system.

JUST A463 Biobehavioral Criminology 3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110 with minimum grade of D and JUST A200 with minimum grade of D and JUST A201 with minimum grade of D and JUST A251 with minimum grade of D or SOC A251 with minimum grade of D.
Class Standing Restriction: Must be Senior.
Registration Restrictions: Completion of all GER Tier 1 (basic college-level skills) courses and Senior standing.
Course Attributes: UAA GER Integrative Capstone.
Examines biobehavioral correlates of crime and ways these factors interact with socio-environmental and psychophysiological factors to impact crime. Analyzes historical and contemporary theories and research. Applies interacting factors to explain specific types of violent and non-violent criminal behavior.

JUST A485 Tribal Courts and Alaska Native Rights 3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110 with minimum grade of D or LEGL A101 with minimum grade of B.
Class Standing Restriction: Must be Junior or Senior.
Registration Restrictions: Junior or senior standing.
Crosslisted with: LEGL A485.

JUST A488 Research Practicum 1-6 CR
Contact Hours: 0 + 3-18
Prerequisites: JUST A110 with minimum grade of B and JUST A200 with minimum grade of B and JUST A201 with minimum grade of B.
Registration Restrictions: Faculty permission required.
Special Note: May be repeated for a maximum of 6 credits.
Explores the application of research skills to the study of a problem in the justice field. May involve field research and related independent study.

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.
A variable topics course which addresses current issues. Topics of national interest as well as those peculiar to Alaska will be included.

JUST A495 Internship 1-6 CR
Contact Hours: 0 + 5-30
Level Restriction: Approval by internship coordinator.
Grade Mode: Pass/No Pass.
Special Note: May be repeated for a maximum of 6 credits.
Specially arranged field experiences for advanced Justice majors and Paralegal Certificate students. Designed to expand knowledge and skills through supervised placements in justice, law and governmental settings.

JUST A625 Seminar in Criminal Violation 3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.
Applies theories of crime causation to specific types of criminal violations in a seminar format. Assesses methods of prevention and potential treatment of the violator. Includes crimes of violence, crimes against the public order, organized crime and white collar crime.

JUST A630 Justice Administrative Theory and Practice 3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.
Synthesizes policy development with theory and research in the administration of justice organizations. Analyzes theories, practices, innovations and administration strategies.

JUST A640 Corrections Theory and Research 3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.
Reviews and assesses the historical development of corrections including the social and economic costs of imprisonment and the research evidence on effectiveness. Examines changes in punishment philosophy, contemporary correctional practice and the emergence of mass incarceration in the late 20th century.

JUST A650 Policing Theory and Research 3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.
Reviews and assesses prevailing theories of the historical development, social organization and behavior of police. Examines the role of police as a response to public safety and public health problems. Evaluates recent police reforms and the overall effectiveness of public policy efforts that place emphasis on a police response.
## Course Descriptions

### LAT - Latin

**Offered through the College of Arts and Sciences**  
Administration/Humanities Building (ADM), Suite 287, 786-4030  
[www.uaa.alaska.edu/languages](http://www.uaa.alaska.edu/languages)

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Contact Hours:</th>
<th>Special Fees:</th>
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</thead>
<tbody>
<tr>
<td><strong>LAT A101</strong></td>
<td>Elementary Latin I</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>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.</td>
</tr>
<tr>
<td><strong>LAT A102</strong></td>
<td>Elementary Latin II</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Continuation of LAT A101. Further develops elementary reading and writing skills in Classical Latin for effective communication at the elementary level. Introduces historical perspectives. Course conducted in English.</td>
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</table>

### LEGL - Legal Studies

**Offered through the College of Health**  
Consortium Library (LIB), Room 213, 786-1810  
[http://justice.uaa.alaska.edu](http://justice.uaa.alaska.edu)

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<tr>
<td><strong>LEGL A101</strong></td>
<td>Introduction to Law</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Course Attributes: UAA GER Social Sciences Requirement.</td>
<td></td>
</tr>
<tr>
<td><strong>LEGL A215</strong></td>
<td>Legal Ethics and the Role of the Legal Professional</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Studies legal ethics and the nonlawyer professional's role in a law office, corporate or public interest legal department, or government agency. Explores nature, scope and ethics of legal practice and the relationship of nonlawyer staff to lawyers, clients, the court system and the public. Legal practice in Alaska and the rules governing the unauthorized practice of law are emphasized. Foundational practice skills and principles of legal research and writing are introduced. Emphasizes professional skills development. Legal specialty course.</td>
<td></td>
</tr>
<tr>
<td><strong>LEGL A340</strong></td>
<td>Family Law</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Prerequisites: LEGL A101 with minimum grade of D or JUST A101 with minimum grade of D. Crosslisted with: JUST A340.</td>
<td></td>
</tr>
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</table>

### KOR - Korean

**Offered through the College of Arts and Sciences**  
Administration/Humanities Building (ADM), Suite 287, 786-4030  
[www.uaa.alaska.edu/languages](http://www.uaa.alaska.edu/languages)

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<tr>
<td><strong>KOR A101</strong></td>
<td>First Year Korean I</td>
<td>4 CR</td>
<td>4 + 0</td>
<td>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.</td>
</tr>
</tbody>
</table>

### LEGL A352 | Criminal Law and Procedure | 3 CR | 3 + 0 | Prerequisites: JUST A110 with minimum grade of D or LEGL A101 with minimum grade of D. Registration Restrictions: LEGL A215 recommended. Crosslisted with: JUST A352. | examines elements and functions of substantive criminal law together with constitutional, statutory and rules-based limits on law enforcement in the United States. Includes federal and state law of crimes, defenses, search and seizure, interrogations and confessions, identification, arrests and charging, right to counsel, right to jury, sentencing, and double jeopardy. |

### LEGL A356 | Legal Research, Analysis, and Writing | 3 CR | 3 + 0 | Prerequisites: [LEGL A101 with minimum grade of C and LEGL A215 with minimum grade of C and ENGL A111 with minimum grade of C 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 A214 with minimum grade of B or ENGL A311 with minimum grade of C and ENGL A312 with minimum grade of C and ENGL A313 with minimum grade of C and ENGL A414 with minimum grade of B or ENGL A487 with minimum grade of B]. Special Fees. | Explores techniques of legal research, analysis and writing. Includes legal citation; researching judicial, statutory, regulatory, and secondary sources; research databases; fact pattern analysis; and technical rules of legal writing. Emphasizes professional skills development. Legal specialty course. |

### LEGL A362 | Contracts, Debt and Principles of Ownership | 3 CR | 3 + 0 | Prerequisites: LEGL A101 with minimum grade of C and LEGL A215 with minimum grade of C. Examines fundamental principles of contract law, property ownership, debt formation and collection. Includes Uniform Commercial Code and Bankruptcy. Legal ethics, practice in Alaska and development of professional skills are emphasized. Legal specialty course. |

### LEGL A377 | Evidence, Investigation, and Discovery | 3 CR | 3 + 0 | Prerequisites: LEGL A101 with minimum grade of C and LEGL A215 with minimum grade of C. Introduces procedural concepts of civil litigation and pretrial practice. Covers the rules of pleading and process, discovery, and motion practice. Reviews concepts of jurisdiction, venue, parties, statutes of limitation, and res judicata, and the ethical duties of competence and diligence. Emphasizes applied professional skills and practice in Alaska. Legal specialty course. |

### LEGL A380 | Torts, Workers' Compensation and Insurance Law | 3 CR | 3 + 0 | Prerequisites: LEGL A101 with minimum grade of C and LEGL A215 with minimum grade of C. Registration Restrictions: Prior completion of LEGL A367 is recommended. Examines state and federal rules of evidence; sources and scope of privileges; techniques, ethics, and management of case investigation; and discovery processes and problems. Emphasizes professional skills development, Alaska law, and electronic discovery. Legal specialty course. |

### LEGL A385 | Health Care Law and Regulatory Compliance | 3 CR | 3 + 0 | Prerequisites: LEGL A101 with minimum grade of C and LEGL A215 with minimum grade of C. Registration Restrictions: Completion of LEGL A356 is strongly recommended. Examines laws and regulations affecting health care providers. Explores ethical issues in tort, workers' compensation, and insurance issues. Practice in Alaska and the development of professional skills are emphasized. Legal specialty course. |

### LEGL A385 | Health Care Law and Regulatory Compliance | 3 CR | 3 + 0 | Prerequisites: LEGL A101 with minimum grade of C and LEGL A215 with minimum grade of C. Registration Restrictions: Completion of LEGL A356 is strongly recommended. Explores ethical issues arising in the delivery of health care services, including the physician-patient relationship and standards of care, individual and institutional liability, patient privacy and medical records security, insurance and Medicare, managed care and access to care, federal and state regulation of health care providers and regulatory compliance, accreditation and licensure, staff privileges, and medical ethics. Practice in Alaska and the development of professional skills are emphasized. Legal specialty course. |
LEGL A485  Tribal Courts and Alaska Native Rights  3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110 with minimum grade of D or LEGL A101 with minimum grade of D.
Class Standing Requirement: Must be Junior or Senior.
Registration Restrictions: Junior or senior standing.
Crosslisted with: JUST A485.

LEGL A487  Trial and Advanced Litigation Processes  3 CR
Contact Hours: 3 + 0
Prerequisites: LEGL A101 with minimum grade of C and LEGL A215 with minimum grade of C and LEGL A367 with minimum grade of C. and LEGL A377 with minimum grade of C.
Registration Restrictions: LEGL A36 is strongly recommended.
Addresses advanced litigation processes and trial support. Includes alternative dispute resolution processes, case management systems, pretrial orders, pleadings, exhibit and witness lists, pretrial motions, jury instructions and selection, judgments and orders, and notices of appeal. Practice in Alaska and development of professional skills is emphasized. Legal specialty course.

LEGL A489  Legal Studies Senior Seminar  3 CR
Contact Hours: 3 + 0
Prerequisites: LEGL A101 with minimum grade of C and LEGL A215 with minimum grade of C and LEGL A367 with minimum grade of C and LEGL A367 with minimum grade of C and LEGL A377 with minimum grade of C.
Class Standing Requirement: Must be Junior or Senior.
Registration Restrictions: Junior or senior standing.
Special Fees.
Analyzes advanced legal concepts and the role of the nonlawyer in administrative law, business organizations, contract law, torts and workers’ compensation, estate planning and probate, and property law. Emphasizes applied paraprofessional skills in legal research, fact analysis, and drafting legal documents. Legal specialty course.

LEGL A495  Legal Studies Internship  3-6 CR
Contact Hours: 0 + 9-18
Prerequisites: LEGL A101 with minimum grade of C and LEGL A215 with minimum grade of C and LEGL A367 with minimum grade of C.
Registration Restrictions: Approval by internship coordinator.
Grade Mode: Pass/No Pass.
Special Note: May be repeated for maximum of 6 credits.
Specially arranged field experiences for advanced Legal Studies students.
Designated to expand knowledge and skills through supervised placements in law-related work settings. Emphasizes professional skills development. Legal specialty course.

LGOP - Logistics Operations
Offered through the College of Business and Public Policy
Edward & Cathryn Rasmuson Hall (RH), Room 203, 786-4100
www.uaa.alaska.edu/cbpp
Students taking any ACCT, BA, CIS, ECON, LGOP, LOG, or PADM course will be charged a single lab fee of $34 for the semester. Applies to Elmendorf Air Force Base or Fort Richardson classes only when specifically noted on UAOnline. 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
Administration/Humanities Building (ADM), Room 101, 786-4355
www.uaa.alaska.edu/english

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
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.

LNC - Legal Nurse Consultant
Offered through the College of Health
Consortium Library (LIB), Room 213, 786-1810
http://justice.uaa.alaska.edu

LNC A347  Legal Nurse Consultant Paralegal Principles and Practices  2 CR
Contact Hours: 2 + 0
Prerequisites: (LEGL A101 with minimum grade of C or concurrent enrollment) and (LEGL A215 with minimum grade of C or concurrent enrollment).
Registration Restrictions: Associate or baccalaureate degree in Nursing from a regionally accredited institution.
Examines regulatory climate governing the work of Legal Nurse Consultant Paralegals and introduces concepts of substantive law and professional skills necessary for success in this field. Practice in Alaska and professional ethics are emphasized. Legal specialty course.

LNC A348  Medical Records Review  1 CR
Contact Hours: 1 + 0
Prerequisites: (LEGL A101 with minimum grade of C or concurrent enrollment) and (LEGL A215 with minimum grade of C or concurrent enrollment).
Registration Restrictions: Associate or baccalaureate degree in Nursing from a regionally accredited institution.
Examines the role of medical records in personal injury litigation, malpractice cases, claims review, peer review, and compliance proceedings. Includes obtaining, reviewing, and summarizing records; records confidentiality and records security procedures; use of medical consultants; use of medical records to value and settle a case; working with records at trial; and rules of legal ethics associated with access to medical records. Legal specialty course.
LOG - Logistics

Offered through the College of Business and Public Policy
Edward & Cathryn Rasmuson Hall (RH), Room 206, 786-4100
www.uaa.alaska.edu/cbpp

Students taking any ACCT, BA, CIS, ECON, LGOP, LOG or PADM course will be charged a single lab fee of $34 for the semester. Applies to Elmendorf Air Force Base or Fort Richardson classes only when specifically noted on UAOnline. Does not apply to Chugach-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 A379 Transportation 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 the structure and operating characteristics of the major modes of transportation. Managerial techniques are applied to transportation decision-making. Procurement and choice of for-hire transportation services are discussed within supply chain management.

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.

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 Measurement in Supply Chains 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 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 A604 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 5S’s, quick change-over, theory of constraints, and total productive maintenance.

LOG A605 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 A606 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 A607 Supply Chain Strategic Planning 6 CR
Contact Hours: 6 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Admission to the Master of Science, Global Supply Chain Management Program and completion of GMAT.

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.
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Admission to the Master of Science, Global Supply Chain Management Program and completion of GMAT
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 A661.
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Admission to Master of Science, Global Supply Chain Management Program and completion of GMAT
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.
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Admission to Master of Science, Global Supply Chain Management Program and completion of GMAT
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.
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Admission to Master of Science, Global Supply Chain Management Program and completion of GMAT
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
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing
Study of logistics and supply chain management as related to strategic activities within domestic and international organizations. Analyzes and evaluates decision-making with respect to outsourcing, purchasing, environmental impact, and supply chain security.

LSIC - Liberal Studies Integrated Core
Offered through the College of Arts and Sciences
Professional Studies Building (PSB), Room 104A, 786-6049
www.uaa.alaska.edu/liberalstudies

LSIC A231  Truth, Beauty, and Goodness  3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A111 or concurrent enrollment.
Crosslisted 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 A331  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: LSIS A202 and LSSS A111 and [LSIC A231 or PHIL A231] and (LSSS A311 or concurrent enrollment).
Explores the interplay of scientific discovery, technological advancement, and the transformation of human societies. It does so by examining key ethical, social, economic, cultural, and policy issues associated with modern science and technology. A speaking intensive course.

LSIC A488A  Capstone Project I: Design and Research  3 CR
Contact Hours: 3 + 0
Prerequisites: LSSS A311 and LSIS 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 Integrative 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 prepare and present a research or creative project proposal and to begin data collection or project implementation.

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
Professional Studies Building (PSB), Room 104A, 786-6049
www.uaa.alaska.edu/liberalstudies

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.
Course Attributes: UAA GER Natural Science w/ Lab.
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.

LS - Library Science
Offered through the College of Arts and Sciences
Consortium Library Reference Desk, 786-1848
http://consortiumlibrary.org

LS IS 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 IS A211  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.
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.

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

Professional Studies Building (PSB), Room 104A, 786-6049
www.uaa.alaska.edu/liberalstudies

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 A311  People, Places, and Ecosystems  3 CR  
Contact Hours: 3 + 0
Prerequisites: STAT A252 and LSSS A111 and [LSIS 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 group and institutional activities, group and institutional influence on people’s lives, and dynamics in the formation and change of institutions.

MA - Medical Assisting

Offered through the College of Health
Allied Health Sciences Building (AHS), Room 161, 786-6928
www.uaa.alaska.edu/alliedhealth/academics/medassist

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:  2 CR  
Contact Hours: 2 + 0

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 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 transcription of physicians’ medical dictation. Introduces the use of transcription equipment, formating 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.

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.

Presents 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, CLLA-waived laboratory procedures, venipuncture, electrocardiography and emergency procedures.

MA A295  Medical Office Externship  5 CR  
Contact Hours: 0.5 + 15
Grade Mode: Pass/No Pass.

Special Note: A grade of C or better in all courses required for the nontranscribed 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.

MA A320  Advanced Case Studies in Medical Coding  2 CR  
Contact Hours: 2 + 0
Prerequisites: MA A220.

Grade Mode: Pass/No Pass.

Special Fees.

Presents in-depth practice with procedural and diagnostic coding as it applies to the ambulatory care setting through the analysis of case studies. Strengthens and improves coding skills by comprehensively coding both diagnoses and procedures for the same medical record.
MATH - Mathematics

Offered through the College of Arts and Sciences
Social Sciences Building (SSB), Room 154, 786-1744
www.uaa.alaska.edu/mathematicalsciences

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 A058A Elementary Algebra A 1 CR
Contact Hours: 1 + 0
Prerequisites: MATH A054 with minimum grade of C.
First of three sections of an Elementary Algebra course. Includes operations with signed numbers, properties of real numbers, solutions of linear equations in one-variable, graphing, and introduction to functions.

MATH A058B Elementary Algebra B 1 CR
Contact Hours: 1 + 0
Prerequisites: MATH A058A with minimum grade of C.
Registration Restrictions: If prerequisite is not satisfied, approved UAA Placement Test required. Special Note: MATH A058A, MATH A058B, and MATH A058C combined are equivalent to MATH A055.
Second of three modules of an Elementary Algebra course. Includes solving systems of equations, exponents, radicals, and operations with polynomial functions.

MATH A058C Elementary Algebra C 1 CR
Contact Hours: 1 + 0
Prerequisites: MATH A058B with minimum grade of C. Registration Restrictions: If prerequisite is not satisfied, approved UAA Placement Test required.
Special Note: MATH A058A, MATH A058B and MATH A058C combined are equivalent to MATH A055.
Third of three modules of an Elementary Algebra course. Includes factoring, solving quadratic functions, algebraic fractions, solving radical equations, and variation.

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 A055 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.
Provides mathematical training for students enrolled in technical programs. 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.
Covers radicals, solutions of quadratic equations, graphing of quadratic and other functions, functions and their inverses, and introduction to logarithmic and exponential functions. Also covers applications, systems of equations, and rational expressions.

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, MATH A108 and MATH A109 toward the graduation requirements for any baccalaureate degree.
Covers equations and inequalities, function theory, solution of equations greater than first degree, matrices and determinants, systems of equations and inequalities, exponential and logarithmic functions, graphs and equations of conic sections, binomial theorem, and sequences and series including applications of all these topics.

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] or [MATH A109 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.

MATH A205  Communicating Mathematical Ideas  3 CR
Contact Hours: 3 + 0
Prerequisites: EDSE A212 with minimum grade of C or PSY A365 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.

Elementary set theory, linear systems, basic number theory and
divisibility, problem-solving strategies, topics from geometry, including the
properties of two-and three-dimensional geometric objects. Field experience in the
classroom may be required.

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 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 minimum variance and unbiased (UMVU) estimators, confidence intervals and hypotheses testing, lemma of Neyman Pearson, and statistical decision theory.

MATH A410 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.
Historical development of mathematical concepts in algebra, geometry, number theory, analytical geometry, and calculus.

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 A430 Concepts of Topology 3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A324 with minimum grade of C.
Corequisite: MATH A303.
Covers axiomatic definition of a topological space, mappings between topological spaces, continuity, homeomorphism, connectivity, completeness and compactness. Also covers examples and applications from analysis and geometry. May include homotopy (the fundamental group with low-dimensional applications) and/or knot theory.

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.

MATH A490B Selected Topics in Applied Mathematics 1-3 CR
Contact Hours: 1-3 + 0
Prerequisites: MATH A302 and MATH A314.
Registration Restrictions: Instructor permission required.
Special Fees.
Special Note: Depending on topic selected, use of numerical and/or symbolic computation software, including scientific programming, may be required. May be repeated once for credit, with a change in subtitle.
Advanced topics in mathematics applied to science and technology.

MATH A495 Mathematics Practicum 1-3 CR
Contact Hours: 0 + 3-9
Prerequisites: MATH A202.
Registration Restrictions: Faculty permission required.
Grade Mode: Pass/No Pass.
Special Note: May be repeated up to a maximum of 3 credits. May not be applied towards upper division elective credits for the Mathematics or Computer Science degree.
Provides upper-division mathematics majors the experience of teaching mathematics. The student is responsible for 3 hours per week per credit in the mathematics laboratory.

MATH A498 Individual Research 1-3 CR
Contact Hours: 1-3 + 0
Registration Restrictions: Minimum of six credits of upper division mathematics courses with a minimum grade of B and faculty permission.
Special Fees.
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.

**ME - Mechanical Engineering**

Offered through the School of Engineering

Engineering Building (ENGR), Room 201, 786-1973
www.uaa.alaska.edu/schoolofengineering

ME A280 Solid Modeling for Engineers 3 CR
Contact Hours: 2 + 2
Prerequisites: ENGR A105A and ENGR A105B and ENGR A105C.
This course is an introduction to the use of solid modeling in engineering.
The process of creating solid parts, assemblies, and fabrication-ready drawings in addition to kinematics linkages will be covered. Rapid prototyping technologies such as three dimensional printing will be used as laboratory exercises.

ME A306 Dynamics of Systems 3 CR
Contact Hours: 3 + 0
Prerequisites: [EE A203 or ES A309] and [ES A208 or ES A210] and MATH A302.
Crosslisted with: EE A306.
Modeling of mechanical, electrical, fluid and thermal elements and systems. Study of free and forced response by the Laplace transform, transfer function and state space models. Time domain and frequency domain responses. Coupled systems, system analogy, sensing and actuation principles.

ME A308 Instrumentation and Measurement 3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A302 with minimum grade of C and [EE A306 with minimum grade of C or ME A306 with minimum grade of C or EE A353 with minimum grade of C].
Crosslisted with: EE A308.
Special Fees.
Principles of measurement, instrumentation, Laplace transform, Fourier series, transfer function, steady-state response, calibration, and errors. Signal filtering and amplification, data acquisition, recording, and processing. Methods and devices for measuring strain, force, torque, displacement, velocity, acceleration, pressure, fluid flow properties, and temperature. Mechatronics, sensors, actuators, and controls.

ME A313 Mechanical Engineering Thermodynamics 3 CR
Contact Hours: 3 + 0
Prerequisites: ES A346.
Investigation and design of power and refrigeration cycles (Rankine, Brayton, Otto, and Diesel), compressible flow (isentropic, shock waves, and flow in ducts with friction), and combustion and gas vapor mixtures.

ME A334 Materials Science 3 CR
Contact Hours: 3 + 0
Prerequisites: CHEM A106 with minimum grade of C and (ME A334L with minimum grade of C or concurrent enrollment) and PHYS A212 with minimum grade of C.
Study and investigate the processing, structures, properties and performance of materials including metals, ceramics, polymers, and composites. Materials design and selection for engineering applications.

ME A334L Materials Science Laboratory 1 CR
Contact Hours: 0 + 3
Prerequisites: (ME A334 with minimum grade of C or concurrent enrollment) and ENGL A212 with minimum grade of C.
Special Fees.
Provides laboratory instruction and experience in the structures, properties, technology, and performance of materials.
ME A403  Machine Design  3 CR
Contact Hours: 3 + 0
Prerequisites: ENGR A161 with minimum grade of C and ES A331 with minimum grade of C and MATH A302 with minimum grade of C and ME A280 with minimum grade of C.

Design and analysis of machines by analytical, experimental and computer methods. Identification of requirements and conceptual design of mechanical systems, detailed design of components, strength, life, reliability, and cost analysis.

ME A408  Mechanical Vibrations  3 CR
Contact Hours: 3 + 0
Prerequisites: ENGR A306 with minimum grade of C or ME A306 with minimum grade of C and ES A331 with minimum grade of C.

Provides supplemental explanation and practical exercises applying thermal system design and heating, ventilation and air conditioning (HVAC) concepts including refrigeration systems, psychrometric applications, air handling unit designs, pipe and pump designs, and fan and air distribution designs.

ME A414  Thermal System Design  3 CR
Contact Hours: 3 + 0
Prerequisites: ES A341 with minimum grade of C and ES A346 with minimum grade of C.

Course introduces students to the design of power and space conditioning systems, energy conversion, heating, ventilating, air conditioning, refrigeration (HVAC&R), and steady-state simulation of thermal systems.

ME A414L  Thermal System Design Lab  1 CR
Contact Hours: 0 + 2
Prerequisites: ES A341 with minimum grade of C and ES A346 with minimum grade of C and ME A414 with minimum grade of C or concurrent enrollment).

Provides supplemental explanation and practical exercises applying thermal system design and heating, ventilation and air conditioning (HVAC) concepts including refrigeration systems, psychrometric applications, air handling unit designs, pipe and pump designs, and fan and air distribution designs.

ME A413  Composite Materials  3 CR
Contact Hours: 3 + 0
Prerequisites: ES A331 with minimum grade of C and ME A280 with minimum grade of C and ME A403 with minimum grade of C.

Course introduces students to the design of power and space conditioning systems, energy conversion, heating, ventilating, air conditioning, refrigeration (HVAC&R), and steady-state simulation of thermal systems.

ME A438  Design of Mechanical Engineering Systems  3 CR
Contact Hours: 3 + 0
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.

Course Attributes: UAA GER Integrative Capstone.

Special Fees.

ME A441  Heat and Mass Transfer  3 CR
Contact Hours: 3 + 0
Prerequisites: ES A341 with minimum grade of C and ES A346 with minimum grade of C and MATH A302 with minimum grade of C.

Provides supplemental explanation and practical exercises applying heat and mass transfer concepts to engineering problems including steady state and transient conduction, numerical analysis of heat transfer problems, laminar and turbulent free and forced convection, and black body and real surface radiation.

ME A441L  Heat and Mass Transfer Lab  1 CR
Contact Hours: 0 + 2
Prerequisites: ME A441 with minimum grade of C or concurrent enrollment.

Special Fees.

ME A442  Advanced Fluid Mechanics  3 CR
Contact Hours: 3 + 0
Prerequisites: ES A341 with minimum grade of C and MATH A302 with minimum grade of C.

Advanced topics in fluid mechanics, including derivation of flow equations, ideal fluid flows, incompressible viscous flows and compressible inviscid flows.

ME A450  Manufacturing Design  3 CR
Contact Hours: 2 + 2
Prerequisites: ENGR A105A and ENGR A105B and ENGR A105C and ENGR A151 and ENGR A161 and ME A280.

Pro/Engineer 3-D part, composite, sheet metal and assembly modules are used to practice variety of engineering design applications.

ME A453  Renewable Energy Systems Engineering  3 CR
Contact Hours: 3 + 0
Prerequisites: ES A341 with minimum grade of C and ES A346 with minimum grade of C.

The study and design of renewable energy systems from a technical engineering standpoint. Solar, hydrokinetic, conventional hydroelectric, wind, geothermal, and biological energy systems will be examined. Additional topics include feasibility analysis and energy storage techniques.

ME A455  HVAC Systems Optimization  3 CR
Contact Hours: 2 + 2
Prerequisites: ES A341 with minimum grade of C and ES A346 with minimum grade of C.

May be stacked with: ME A655.

Design of thermal and heating, ventilation, and air-conditioning (HVAC) systems with emphasis on economic considerations and optimization. Concepts of thermodynamics, fluid mechanics and heat transfer will be integrated under a design framework. A semester long project is conducted to design a thermal system, perform system simulations, and to optimize the design based on economic and technical considerations.

ME A459  Fracture Mechanics  3 CR
Contact Hours: 3 + 0
Prerequisites: ES A331 with minimum grade of C.

The topics of theoretical, experimental, and applied fracture of solids, structures, and machines, subcrical crack growth including fatigue, creep, impact and corrosion, embrittlement, safety, and life cycle design and analysis will be presented. Case studies will be used to illustrate the course topics.

ME A471  Automatic Control  3 CR
Contact Hours: 3 + 0
Prerequisites: [EE A306 or ME A306 or EE A353] and [ES A208 or ES A210] and MATH A302.

May be stacked with: EE A471.

Feedback control of linear mechanical and electrical systems by using block diagrams with transfer functions of plants, controllers, sensors and actuators. Stability analysis with transfer-function and state-space models. Transient, steady-state analysis, frequency-domain analysis, and design of control systems with Bode plots and the Nyquist criterion.

ME A608  Mechanical Vibrations  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing or instructor permission.

May be stacked with: ME A408.

Special Note: Not available for credit to students who have completed ME A408.

Modeling of vibratory mechanical systems with single and multiple degrees of freedom. Study of free and forced vibrations with or without damping by lumped-parameter methods and finite element analysis. Vibrations of rotor systems and vibration monitoring.

ME A615  Composite Materials  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing or instructor permission.

May be stacked with: ME A415.

Special Note: Not available for credit to students who have completed ME A415.

This course presents the mechanics and manufacturing of composite materials and their applications. The analysis, design, processing/fabrication, repair, and evaluation of composite materials and structures are considered.
ME A642 Advanced Fluid Mechanics 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing or instructor permission.
May be stacked with: ME A442.
Special Note: Not available for credit to students who have completed ME A442.
Advanced topics in fluid mechanics, including derivation of flow equations, ideal fluid flows, incompressible viscous flows and compressible inviscid flows.

ME A653 Renewable Energy Systems Engineering 3 CR
Contact Hours: 3 + 0
May be stacked with: ME A53.
Special Note: Not available for credit to students who have completed ME A53.
The study and design of renewable energy systems from a technical engineering standpoint. Solar, hydrokinetic, conventional hydroelectric, wind, geothermal, and biological energy systems will be examined. Additional topics include feasibility analysis and energy storage techniques.

ME A655 HVAC Systems Optimization 3 CR
Contact Hours: 2 + 2
Registration Restrictions: Graduate standing or instructor permission.
May be stacked with: ME A455.
Special Note: Not available for credit to students who have completed ME A455.
Design of thermal and heating, ventilation, and air-conditioning (HVAC) systems with emphasis on economic considerations and optimization. Concepts of thermodynamics, fluid mechanics and heat transfer will be integrated under a design framework. A semester long project is conducted to design a thermal system, perform system simulations, and to optimize the design based on economic and technical considerations.

ME A659 Fracture Mechanics 3 CR
Contact Hours: 3 + 0
Prerequisites: ES A331 with minimum grade of C.
May be stacked with: ME A459.
Theoretical, experimental, and applied fracture of solids, structures, and machines, subcritical crack growth including fatigue, creep, and corrosion, embrittlement, safety, and life cycle design and analysis will be presented. Case studies will be used to illustrate the course topics.

ME A664 Corrosion Processes and Engineering 3 CR
Contact Hours: 3 + 0
Prerequisites: ES A346.
Registration Restrictions: Prerequisite and graduate standing, or faculty permission.
The study of different corrosion processes and mechanisms. Topics include the concepts, materials, and mechanisms of corrosion with application to engineering design for corrosion prevention.

ME A685 Arctic Heat and Mass Transfer 3 CR
Contact Hours: 3 + 0
Prerequisites: ES A346.
Registration Restrictions: Graduate standing, with a degree in engineering or physical science, or upper class standing in an accredited undergraduate program in these categories.
Special Fees.
Application of the principles of heat and mass transfer with special emphasis on application to problems encountered in the Arctic such as ice and frost formation, permafrost, condensation, and heat loss in structures.

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.
Covers fundamentals of safe machine shop practice including the operation of the lathe, vertical mill, band saw, 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 A115 Gasoline Engine Rebuilding 3 CR
Contact Hours: 2 + 2
Offered only at Kenai Peninsula College.
Discusses in detail the operating principles of aspirated, non-computerized automotive engines. Includes hands-on practice in rebuilding procedures including valve grinding, bearing fitting, and cylinder boring.

MECH A201 Advanced Machine Shop 4 CR
Contact Hours: 2 + 4
Prerequisites: MECH A101.
Registration Restrictions: The student should have fundamental skills with the lathe, mill, drill press, saws, and hand tools.
Offered only at Kenai Peninsula College.
Advanced projects will be completed by students to include surface grinding, heat treatment of metals, hardness testing, shaft straightenings, and machining couplings. Other topics will be lapping, magna-flux, boring operations, effects of welding on machining, keyed assemblies, collets and torque.

MEDT - Medical Laboratory Technology
Offered through the College of Health
Allied Health Sciences Building (AHS), Room 169, 786-4930
www.uaa.alaska.edu/alliedhealth/academics/medlab

MEDT A101 Phlebotomy Procedures 3 CR
Contact Hours: 2 + 3
Registration Restrictions: PRPE A086 with a minimum grade of C or appropriate placement scores and department approval.
Introduces concepts, procedures and equipment used in phlebotomy. Topics include: infection control, laboratory safety, specimen requisitioning, blood collection and handling techniques, quality assurance, communications and professionalism. Prepares students for phlebotomy practicum.

MEDT A105 Microbiology for Clinical Assistants 3 CR
Contact Hours: 2 + 2
Prerequisites: MEDT A110 with minimum grade of C.
Registration Restrictions: Departmental approval.
Special Fees.
Develops skills in the selection, inoculation and incubation of appropriate media for culturing clinical microbiology specimens.

MEDT A106 Waived Testing 4 CR
Contact Hours: 3 + 3
Prerequisites: MEDT A110 with minimum grade of C.
Registration Restrictions: Departmental approval.
Special Fees.
Introduces quality control, instrumentation and methodologies for waived testing in hematology, chemistry, urinalysis and microbiology. Prepares students for clinical assistant practicum.

MEDT A110 Specimen Processing 3 CR
Contact Hours: 3 + 0
Prerequisites: MEDT A101 with minimum grade of C.
Registration Restrictions: Departmental approval. Prerequisite may be waived with documented experience in phlebotomy as assessed by faculty.
Special Fees.
Introduces common procedures used to safely and accurately collect, separate and transport specimens prior to testing. Clerical and technical responsibilities of the clinical assistant are introduced, including accessioning, determining specimen acceptability and problem solving. Lab information system processes, quality assurance and compliance within the laboratory will be included.

MEDT A132 Introduction to Laboratory Medicine 3 CR
Contact Hours: 2 + 2
Prerequisites: BIOL A111 with minimum grade of C and CHEM A103 with minimum grade of C and CHEM A103L with minimum grade of C or [CHEM A105 with minimum grade of C and CHEM A105L with minimum grade of C and [CIS A105 with minimum grade of C or CIS A110 with minimum grade of C].
Registration Restrictions: Departmental approval.
May be stacked with: MEDT A133.
Special Fees.
Introduces the basic terms, concepts, procedures, and equipment used in a clinical laboratory. Topics include: professional ethics, regulatory agencies, laboratory safety, phlebotomy, specimen processing, measurements and calculations, laboratory information systems and quality assessment.

MEDT A133 Basic Techniques in Laboratory Medicine 1 CR
Contact Hours: 0.5 + 1
Prerequisites: BIOL A111 with minimum grade of C and CHEM A103 with minimum grade of C and CHEM A103L with minimum grade of C or [CHEM A105 with minimum grade of C and CHEM A105L with minimum grade of C and [CIS A105 with minimum grade of C or CIS A110 with minimum grade of C] and MEDT A101 with minimum grade of C.
Registration Restrictions: Departmental approval. Prerequisite may be waived with documented experience in phlebotomy as assessed by faculty.
May be stacked with: MEDT A132.
Introduces the basic terms, concepts, procedures, and equipment used in a clinical laboratory. Topics include: laboratory measurements and calculations, laboratory information systems, and quality assessment.
**MEDT A195A  Phlebotomy Practicum  3 CR**

**Contact Hours:** 0 + 9

**Prerequisites:** MEDT A101 with minimum grade of C and (MEDT A110 with minimum grade of C or concurrent enrollment).

**Registration Restrictions:** Departmental approval. Grade Mode: Pass/No Pass. Special Fees.

- Applies principles of safety, phlebotomy and specimen processing techniques to patient testing in a clinical laboratory. Prepares student for entry-level employment as a phlebotomist.

**MEDT A195B  Clinical Assistant Practicum  4 CR**

**Contact Hours:** 0 + 12

**Prerequisites:** MEDT A105 with minimum grade of C and MEDT A106 with minimum grade of C.

**Registration Restrictions:** Departmental approval. Grade Mode: Pass/No Pass. Special Fees.

- Applies principles of safety, quality control, waived testing and culture set-up to patient testing in a clinical laboratory. Prepares student for entry-level employment as a clinical assistant.

**MEDT A202  Clinical Chemistry  6 CR**

**Contact Hours:** 3 + 6

**Prerequisites:** BIOL A112 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 or MEDT A133 with minimum grade of C].

**Registration Restrictions:** Departmental approval.

- Develops skills in performing chemical analysis of blood and other body fluids. Discusses and practices specific testing procedures for different organ systems and analytes. Presents correlation of laboratory results with clinical findings. Emphasizes quality assessment.

**MEDT A203  Clinical Microbiology  6 CR**

**Contact Hours:** 3 + 6

**Prerequisites:** BIOL A112 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 or MEDT A133 with minimum grade of C].

**Registration Restrictions:** Departmental approval.

- Emphasizes culture media, biochemical tests, immunoassays, and staining techniques used in the identification and susceptibility testing for microorganisms of medical importance to humans. Includes bacteriology and an introduction to parasitology, mycology and virology.

**MEDT A204  Hematology and Coagulation  6 CR**

**Contact Hours:** 3 + 6

**Prerequisites:** BIOL A112 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 or MEDT A133 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 A112 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 or MEDT A133 with minimum grade of C].

**Registration Restrictions:** Departmental approval.

- Introduces concepts of the immune system and functions of cellular and soluble components. Discusses principles of antigen-antibody based tests and their use in the diagnosis of infectious diseases and blood banking procedures. Introduces the theory of antigen-antibody reactions as it relates to blood grouping and typing, antibody detection and compatibility testing. Discusses blood donor screening and component preparations, storage and transportation.

**MEDT A208  Urine and Body Fluid Analysis  3 CR**

**Contact Hours:** 2 + 2

**Prerequisites:** BIOL A112 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 or MEDT A133 with minimum grade of C].

**Registration Restrictions:** Departmental approval.

- 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

**Grade Mode:** Pass/No Pass.

- Challenges students to examine their cultural biases and to recognize the importance of cultural awareness in providing exceptional medical care. Examines community, personal and family relationships through the lens of cross-cultural health and healing practices. Introduces healthcare consumers from various cultural backgrounds.
MEDT A601 Diagnostic Flow Cytometry 3 CR
Contact Hours: 2 + 2
Prerequisites: MEDT A204 with minimum grade of C and MEDT A206 with minimum grade of C.
Registration Restrictions: Bachelor of Science in Medical Technology and departmental approval.
Special Fees.
Examines technical and managerial information about flow cytometry and its applications in the clinical laboratory.

MILS - Military Science
Offered through the Community & Technical College
Eugene Short Hall (ESH), Room 211, 786-6094
www.uaa.alaska.edu/armyrotc

MILS A101 Leadership and Personal Development 1 CR
Contact Hours: 1 + 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, officership and Army operations. Develops basic knowledge and comprehension of Army Leadership Dimensions while gaining a big-picture understanding of the ROTC program, its purpose in the Army and its advantages for the student.

MILS A102 Introduction to Tactical Leadership 1 CR
Contact Hours: 1 + 0
Corequisite: MILS A150.
Overview of leadership fundamentals such as setting direction, problemsolving, 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: Students must be enrolled in Army ROTC academic courses unless they have completed all ROTC academic courses for program completion. Corequisites are: MILS A101 or MILS A102 or MILS A201 or MILS A202 or MILS A301 or MILS A302 or MILS A401 or MILS A402.
Grade Mode: Pass/No Pass.
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 students' 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.
Uses increasingly intense situations for applied team leadership challenges to build student awareness and skills in leading tactical operations at the small unit level. Students review aspects of full spectrum operations. Develops proficiency in the operations orders process by conducting military briefings.

MILS A401 Adaptive Leadership 3 CR
Contact Hours: 3 + 0
Prerequisites: MILS A302.
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 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.

MILS A450 History of the United States Army 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Departmental approval
Develops student awareness of the relationship of the military establishment to society in the United States. Examines the evolution of war and the progression of military professionalism and provides an awareness of and purpose for military operations from colonial America to present day. Discusses the importance of understanding United States Army history as a part of the military profession. Analyzes the evolution of both tactics and force structure of the United States Army during these periods.

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 A124 Small Wooden Boatbuilding 3 CR
Contact Hours: 1 + 4
Grade Mode: Pass/No Pass.
Covers the process of traditional boatbuilding. Includes the design process, boat types, their strengths and weaknesses, and materials and technologies used in boatbuilding. One small boat may be built as a class project.

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.
MUS - Music

Offered through the College of Arts and Sciences
Fine Arts Building (ARTS), Room 302, 786-1595
www.uaa.alaska.edu/music

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
Prerequisites: MUS A111.
Registration Restrictions: Ability to read music in treble and bass clef in all keys or permission of instructor.
Elementary study of harmony and melody: formation of scales, modes, intervals, chords, inversions, and simple harmonic progressions. Writing and harmonizing of melodic lines.

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 or permission of instructor.
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
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.
Co-requisite: 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 Aural Skills I 2 CR
Contact Hours: 2 + 0
Co-requisite: MUS A131.
The development of skills in reading and hearing music through the study of sight singing and dictation.

MUS A134 Aural Skills II 2 CR
Contact Hours: 2 + 0
Prerequisites: MUS A133.
Co-requisite: MUS A132.
The development of skills in reading and hearing music through the study of sight singing and dictation. Continuation of MUS A133.

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 noteread 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 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 who demonstrate enough piano ability to potentially pass a minimum of two components 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 a minimum of four components of the piano proficiency exam. Suggested components include: 1) harmonization and transposition of a simple melody; 2) improvisation; 3) realization of a simple figured bass line; 4) a memorized performance of a Bach Two-Part Invention or a Clementi Sonata; 5) an arrangement of a simple tune read from a lead sheet. Student may have previously passed some of these requirements in MUS A154B.

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 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.

Private music instruction in brass, guitar, harpsichord, organ, percussion, piano, strings, voice, and woodwinds.

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.
Continuation of MUS A161.

MUS A163  Private Lessons (Non-Juried)  1-2 CR
Contact Hours: 1-2 + 0
Registration Restrictions: Departmental approval.
Special Fees.
Special Note: This course cannot be petitioned to substitute for juried lessons (MUS A161, MUS A162, MUS A261, MUS A262, MUS A361, MUS A362, MUS A461, and MUS A462).

Non-juried private music instruction in brass, guitar, harpsichord, organ, percussion, piano, strings, voice, and woodwinds.

MUS A164  Private Lessons (Non-Major)  1-2 CR
Contact Hours: 1-2 + 0
Registration Restrictions: Departmental approval.
Special Fees.
Special Note: For non-music majors and students not currently enrolled in a university music ensemble.

Private music instruction in brass, guitar, harpsichord, organ, percussion, piano, strings, voice, and woodwinds.

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: MUS 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.

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.

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.

Functioning 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  Aural Skills III  2 CR
Contact Hours: 2 + 0
Prerequisites: MUS A134.
Corequisite: MUS A231.

The development of skills in reading and hearing music through the study of sight singing and dictation. Continuation of MUS A134.

MUS A233  Aural Skills IV  2 CR
Contact Hours: 2 + 0
Prerequisites: MUS A233.
Corequisite: MUS A232.

The development of skills in reading and hearing music through the study of sight singing and dictation. Continuation of MUS A233.

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 A280  Basic Conducting  2 CR
Contact Hours: 2 + 0
Prerequisites: MUS A131.

Introduces principles of conducting. Explores time-beating, use of left hand, score reading, and transposition as they relate to conducting.

MUS A301A  University Singers  1 CR
Contact Hours: 2 + 0
Registration Restrictions: By audition.
Grade Mode: Pass/No Pass.
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.
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: 1 + 3
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 Fees.
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 Fees.
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 non music 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 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 A232.
Special Fees.
Special Note: Student must be able to read music fluently while 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 A232.
Special Fees.
Special Note: Student must be able to read music fluently while 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 A232.
Special Fees.
Special Note: Student must be able to read music fluently while 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 A232.
Special Note: Student must be able to read music fluently and perform basic piano skills.
Instruction in musical voice technique and pedagogy. The course is part of the teacher training program.

MUS A375  Percussion Methods and Techniques  2 CR
Contact Hours: 2 + 0
Prerequisites: MUS A232.
Registration Restrictions: Student must be able to read music fluently while holding/performing on the percussion instruments.
Special Fees.
Special Note: Student must be able to read music fluently while performing on the percussion instruments.
Instruction in the percussion instruments. The course is part of the teacher training program.

MUS A376  Elementary Music Methods and Techniques  2 CR
Contact Hours: 2 + 0
Prerequisites: MUS A232.
Special Fees.
Special Note: Students must be able to read music fluently.
Instruction in elementary music methods, techniques, learning theories and pedagogy. The course is part of the teacher training program.

MUS A381  Choral Conducting  2 CR
Contact Hours: 2 + 0
Prerequisites: MUS A232 and MUS A280.
Principles of conducting and interpreting choral music.

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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: 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 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. Elective for 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, Latin, and fusion. Meets small ensemble requirement 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 sight-reading 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, lied, 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.

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, MUS A261, MUS A262, MUS A361, MUS A362, MUS A461 or MUS 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.
Course Descriptions

NS - Nursing Sciences

Offered through the College of Health
Health Science Building (HSB), Room 101, 786-4550
www.uaa.alaska.edu/schoolofnursing

NS A203 Preparing for Nursing Program Success 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Admission into either the UAA AAS or BS Nursing program or permission of the program chair.
Crosslisted with: NURS A203.
Explores ideas, strategies and skills that will assist the student in successful completion of the nursing program and the building of a successful nursing career.

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.
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.
Explores 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.
Special Note: Offered Fall and Spring Semesters.
Systematic use of the nursing process in the care of individuals in a variety of settings. Emphasis on identifying the physiological and psychosocial alterations in health patterns and the basic therapeutic nursing intervention.

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 or concurrent enrollment.
Major Restriction: Must be Nursing Science major.
Registration Restrictions: Admission to clinical major and RN licensure in the state of Alaska.
Corequisite: NS A305.
Grade Mode: Pass/No Pass.
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 and NS A300 with minimum grade of C.
Registration Restrictions: Admission to BS, 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 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.
Introduces episodic health disruptions occurring across the lifespan to include collaborative care and nursing management. Nursing therapeutics focus on nursing management of the individual and the family within an acute care setting.

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 A313.
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 the 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 and NS A313 with minimum grade of C and NS A313L with minimum grade of P.
Major Restriction: Must be Nursing Science major.
Registration Restrictions: Bachelor of Science Nursing Science majors only.
Corequisite: NS A315L.
Emphasizes health states and risk factors amenable to health promotion and illness prevention efforts. Focuses on achieving and maintaining healthy lifestyles as well as self-management of health in individuals and families across the lifespan.

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 and NS A313 with minimum grade of C and NS A313L with minimum grade of P.
Major Restriction: Must be Nursing Science major.
Registration Restrictions: Bachelor of Science Nursing Science majors only.
Corequisite: NS A315.
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 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 P 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.
Course Descriptions

NS A401L  Health Disruptions II Laboratory  2.5 CR
Contact Hours: 0 + 7.5
Prerequisites: 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.
Corequisite: NS A401.
Grade Mode: Pass/No Pass.
Special Fees.
Provides clinical experience to build skills and reinforce student learning in NS A401.

NS A406  Nursing Therapeutics  2 CR in Complex Health Disruptions
Contact Hours: 2 + 0
Prerequisites: NS A401 with minimum grade of C and NS A401L with minimum grade of P.
Corequisite: NS A406L.
Emphasis on health disruptions with complex pathophysiology and/or psychological adjustments of clients of all ages and their families. Nursing management includes a high level of collaboration with other health care providers and agencies utilizing previously learned nursing therapeutics.

NS A406L  Nursing Therapeutics in Complex Health Disruptions Laboratory  2.5 CR
Contact Hours: 0 + 7.5
Prerequisites: NS A401 with minimum grade of C and NS A401L with minimum grade of P.
Corequisite: NS A406.
Grade Mode: Pass/No Pass.
Special Fees.
Provides clinical experience to build skills and reinforce student learning in NS A406.

NS A411  Health II: Nursing Therapeutics  3 CR
Contact Hours: 3 + 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 P.
Registration Restrictions: Completion of GER Tier I (basic college-level skills) courses and junior standing.
Corequisite: NS A411L.
Course Attributes: UAA GER Integrative Capstone.
Focuses on describing the health status of populations and vulnerable groups with an emphasis on identifying health disparities and population-focused interventions that foster risk reduction through health promotion and disease prevention. The impact of social, cultural, economic, and global factors on health status will be explored as they relate to health policy and nursing's role in the policymaking process.

NS A411L  Health II: Nursing Therapeutics Laboratory  3 CR
Contact Hours: 0 + 9
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 P.
Corequisite: NS A411.
Grade Mode: Pass/No Pass.
Special Fees.
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.
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  0.5 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 and NS A411L with minimum grade of P and NS A415 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 A406 with minimum grade of C and NS A406L with minimum grade of P and NS A411 with minimum grade of C and NS A411L with minimum grade of P and NS A415 with minimum grade of C.
Corequisite: NS A416.
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 A422  Nursing Care for the Critically Ill Adult  3 CR
Contact Hours: 2 + 2
Prerequisites: NS A313 with minimum grade of C and NS A315 with minimum grade of C.
Registration Restrictions: RN license to practice in the state of Alaska.
Special Fees.
Focuses on the specific nursing care needs of the critically ill adult from time of admission through discharge and rehabilitation. Explores roles of the critical care nurse. Includes a participant observation experience in local critical care units.

NS A423  Transcultural Nursing  3 CR
Contact Hours: 3 + 0
Prerequisites: NS A313 with minimum grade of C and NS A315L with minimum grade of P.
Major Restriction: Must be Nursing Science major.
Registration Restrictions: RN license to practice in the state of Alaska, enrolled in baccalaureate program or instructor permission.
May be stacked with: NS A623.
Special Fees.
Special Note: Students may take NS A423 or NS A623 for credit, but not both.
Examines socio-cultural factors that influence health, illness, and health-related behaviors, including cultural beliefs, values, and lifestyles. Explores the historical development of the major non-western and western health systems with implications for nursing practice. Places health-related behaviors within a cultural context and applies the elements of a culturally sensitive approach to clients seeking professional nursing care services.

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 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 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.

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**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, then 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 an approach to 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 A305L with minimum grade of P and NS A309 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. Alaskan 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 A305L 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
Prerequisites: NS A300 with minimum grade of C or HS A220 with minimum grade of C.
Registration Restrictions: Faculty permission.
Crosslisted with: HS A433.
Special Fees:
Provides the theoretical foundation for health education and health promotion. Develops students' abilities to design and deliver health education programs.

**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 elders.

**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: 0.5 + 1.5
Prerequisites: NS A400 or concurrent enrollment.
Registration Restrictions: Permission for enrollment in Nursing Honors by Baccalaureate Chair and Nursing Baccalaureate Curriculum Committee.
Completion of all required 300 level nursing courses.
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.

**NS A441** Nursing Honors II: Project Implementation 2 CR
Contact Hours: 0.5 + 4.5
Prerequisites: NS A400 and NS A440.
Registration Restrictions: Permission for enrollment in Nursing Honors by Baccalaureate Chair and Nursing Baccalaureate Curriculum Committee.
Special Fees:
Completion and presentation of the project identified in NS A440. Includes application of basic research techniques and discovery for a question involving nursing practice and/or nursing management of a client or population in any health care setting.

**NS A442** Introduction to Forensic Nursing 3 CR
Contact Hours: 3 + 0
Prerequisites: 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: RN licensure in the state of Alaska.
Special Fees:
Provides an overview of forensic nursing. Explores the etiology of interpersonal violence, intentional injury, and trauma in relation to victim and/or perpetrator populations. Develops understanding of the collaborative and multidisciplinary role of this specialty.

**NS A451** Introduction to Neonatal Intensive Care Nursing 3 CR
Contact Hours: 3 + 0
Prerequisites: NS A401 or concurrent enrollment.
Introduction to neonatal critical care nursing. Topics include the pathophysiology and nursing management of common neonatal disease states, developmentally-focused nursing care of premature and newborn infants, and current issues and trends in neonatal nursing.

**NS A490** Selected Topics in Nursing Practice 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.
Major Restriction: Must be Nursing Science major.
Registration Restrictions: Nursing major or RN license in State of Alaska
Special Note: May repeat once with a change of topic.
Enhances and extends students' understanding of a selected topic.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
<th>Registration Restrictions</th>
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<tbody>
<tr>
<td>NS A601</td>
<td>Advanced Pathophysiology</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0&lt;br&gt;Registration Restrictions: Graduate standing or faculty permission.</td>
</tr>
</tbody>
</table>

Provides analysis and critical review of disease processes and resulting abnormal functioning across the lifespan. Critical thinking is used to interpret pathophysiologic changes that result in clinical manifestations indicative of illness.

| NS A602     | Advanced Health Assessment in Primary Care       | 3 CR         | Contact Hours: 2 + 3<br>Level Restriction: Must be Graduate - UAA level.                      |

Focuses on qualitative paradigms, traditions, philosophical foundations and methods for studying nursing and health-related phenomena. Examines the historical development of the major non-western and western health systems with implications for nursing practice. Places health-related behaviors within a cultural context and applies the models and research findings to culturally sensitive approaches to clients and families seeking professional nursing care. Describes areas of transcultural nursing research and evidenced-based practice.

| NS A616     | Role Development in Advanced Practice Nursing    | 2 CR         | Contact Hours: 2 + 0<br>Level Restriction: Must be Graduate - UAA level.              |

Focuses on psychopharmacological principles and therapeutic practices used to safely and effectively select, prescribe, and monitor psychotropic agents utilized in the primary care setting. Legend drugs, over-the-counter agents and complementary therapies will be discussed. Emphasis is on the pharmacodynamics of medications most commonly prescribed.

| NS A619     | Health Policy Issues in Advanced Practice Nursing| 2 CR         | Contact Hours: 2 + 0<br>Level Restriction: Must be Graduate - UAA level.              |

Focuses on public health policies and issues affecting health and illness prevention, health promotion, and change in relation to individuals, families, and populations.

| NS A620     | Nursing Research Methods                         | 4 CR         | Contact Hours: 4 + 0<br>Level Restriction: Must be Graduate - UAA level.              |

Focuses on research methodologies and design. Utilizes 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.

| NS A621     | Knowledge Development for Advanced Nursing Practice| 3 CR         | Contact Hours: 3 + 0<br>Level Restriction: Must be Graduate - UAA level.              |

Focuses on research methods and techniques. Utilizes 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.

| NS A622     | Biostatistics for Health Professionals            | 3 CR         | Contact Hours: 3 + 0<br>Prerequisites: NS A620.                                       |

Focuses on descriptive and inferential statistics. Utilizes statistical packages such as SPSS. Focuses on the development and application of descriptive and inferential statistics. Utilizes statistical packages such as SPSS. Focuses on data collection processes and approaches to data analysis. Explores scientific and ethical issues surrounding qualitative research.

| NS A625     | Principles of Epidemiology                        | 3 CR         | Contact Hours: 3 + 0<br>Level Restriction: Must be Graduate - UAA level.              |

Focuses on the scientific methods of identifying, describing, analyzing, and controlling the frequency and distribution of disease. Utilizes statistical packages such as SPSS. Focuses on the scientific methods of identifying, describing, analyzing, and controlling the frequency and distribution of disease. Utilizes statistical packages such as SPSS.

| NS A626     | Biostatistics for Health Professionals Lab        | 1 CR         | Contact Hours: 0 + 3<br>Prerequisites: (HS A625 or concurrent enrollment) or (NS A625 or concurrent enrollment). |

Focuses on the scientific methods of identifying, describing, analyzing, and controlling the frequency and distribution of disease. Utilizes statistical packages such as SPSS. Focuses on the scientific methods of identifying, describing, analyzing, and controlling the frequency and distribution of disease. Utilizes statistical packages such as SPSS.

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<thead>
<tr>
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<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites/Restrictions</th>
</tr>
</thead>
<tbody>
<tr>
<td>NS A631</td>
<td>Family Nurse Practitioner Focus on Women's Health and Obstetrics I</td>
<td>2 CR</td>
<td>Contact Hours: 1 + 4&lt;br&gt;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. 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 child-rearing families with a focus on wellness and prevention.</td>
</tr>
<tr>
<td>NS A632</td>
<td>Family Nurse Practitioner Focus on Pediatrics I</td>
<td>2 CR</td>
<td>Contact Hours: 1 + 4&lt;br&gt;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. 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.</td>
</tr>
<tr>
<td>NS A635</td>
<td>Family Nurse Practitioner Focus on Women's Health and Obstetrics II</td>
<td>2 CR</td>
<td>Contact Hours: 1 + 4&lt;br&gt;Prerequisites: NS A631.&lt;br&gt;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. Continuing preparation for expansion to primary care of all ages. Includes advanced history and physical assessment skills for female clients of all ages with a continuing 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 females and childbearing families with a focus on wellness, prevention, and primary care of common diseases.</td>
</tr>
<tr>
<td>NS A636</td>
<td>Family Nurse Practitioner Focus on Pediatrics II</td>
<td>2 CR</td>
<td>Contact Hours: 1 + 4&lt;br&gt;Prerequisites: NS A632.&lt;br&gt;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. 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>
</tr>
<tr>
<td>NS A640</td>
<td>Teaching and Learning in Nursing</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0&lt;br&gt;Prerequisites: NS A618 and NS A619 and NS A620 and NS A621.&lt;br&gt;Level Restriction: Must be Graduate - UAA level. Registration Restrictions: Graduate standing; completion of course prerequisites or prior master's in nursing. Special Fees. 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>
</tr>
<tr>
<td>NS A641</td>
<td>Curriculum Development and Evaluation</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0&lt;br&gt;Prerequisites: NS A618 and NS A619 and NS A620 and NS A621.&lt;br&gt;Level Restriction: Must be Graduate - UAA level. Registration Restrictions: Graduate standing; completion of course prerequisites or prior master's in nursing. Special Fees. 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>
</tr>
<tr>
<td>NS A643</td>
<td>Assessment and Evaluation in Nursing Education</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0&lt;br&gt;Prerequisites: [HS A625 or NS A625] and NS A640 and NS A641.&lt;br&gt;Level Restriction: Must be Graduate - UAA level. Registration Restrictions: Graduate standing. Special Fees. Examines 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>
</tr>
<tr>
<td>NS A644</td>
<td>Distance Education in Nursing</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0&lt;br&gt;Prerequisites: NS A640 and NS A641.&lt;br&gt;Level Restriction: Must be Graduate - UAA level. Registration Restrictions: Graduate standing. Special Fees. Examines 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>
</tr>
<tr>
<td>NS A647</td>
<td>Teaching Practicum in Nursing</td>
<td>3 CR</td>
<td>Contact Hours: 1 + 8&lt;br&gt;Prerequisites: NS A601 and NS A602 and NS A640 and NS A641 and NS A643 and NS A644.&lt;br&gt;Level Restriction: Must be Graduate - UAA level. Registration Restrictions: Graduate standing. Special Fees. Examines 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>
</tr>
<tr>
<td>NS A649</td>
<td>Integrative Health: Complementary/Alternative Methods of Healing</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0&lt;br&gt;Level Restriction: Must be Graduate - UAA level. Registration Restrictions: Nursing major or instructor permission; graduate standing. Examines the various philosophies, theoretical perspectives, concepts and contextual processes of human health and healing. Research findings based in traditional and emerging models of complementary/alternative healing will be critically reviewed. Students will explore and critique a range of healing arts relevant to advanced nursing practice with a holistic viewpoint.</td>
</tr>
<tr>
<td>NS A660</td>
<td>Family Nurse Practitioner I</td>
<td>4/6 CR</td>
<td>Contact Hours: 2 + 4 or 8 + 16&lt;br&gt;Prerequisites: NS A602.&lt;br&gt;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. Corequisite: NS A601. Special Fees. 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. 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>
</tr>
</tbody>
</table>
Course Descriptions

NS A661 Family Nurse Practitioner II 3/5 CR
Contact Hours: 2 or 4 + 12
Prerequisites: NS A660 with minimum grade of B.
Registration Restrictions: Enrollment in a graduate degree or certificate program in the School of Nursing. Current Alaska RN license; current CPR certification; individual malpractice insurance policy; current immunization per SON policy.
Post-Master’s Certificate students may take this course concurrently with NS A660.
Special Fees.
Special Note: For Post-Master’s Certificate students, licensure for advanced practice nurse in Alaska is required.
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.

NS A662 Family Nurse Practitioner III 5 CR
Contact Hours: 2 + 12
Prerequisites: NS A661.
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.
Special Fees.
Continued preparation for advanced nursing practice. Assessment, diagnosis, and treatment and/or referral of clients with disorders of the cardiovascular, endocrine, gastrointestinal, respiratory, musculoskeletal, integumentary, and neurological systems. Recognition and management of infections and acute and chronic diseases. Primary focus is on adults and those with chronic diseases.

NS A663 Family Nurse Practitioner IV 2-6 CR
Contact Hours: 0 or 2 + 8-16
Prerequisites: NS A662.
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.
Special Fees.
Summative preparation for advanced nursing practice. Assessment, diagnosis, and treatment or referral of clients with disorders of the cardiovascular, endocrine, gastrointestinal, respiratory, musculoskeletal, integumentary, and neurological systems. Prevention, recognition and management of infections and acute and chronic diseases, and care throughout the developmental stages of life. Includes care of clients throughout the lifespan.

NS A670 Advanced Psychiatric/Mental Health Nursing I 5 CR
Contact Hours: 4 + 4
Prerequisites: NS A601 and NS A602.
Registration Restrictions: Admission to graduate degree or certificate program in the School of Nursing. Current Alaska RN license; current CPR certification; current immunization per SON policy.
Special Fees.
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.

NS A671 Advanced Psychiatric/Mental Health Nursing II 5 CR
Contact Hours: 3 + 8
Prerequisites: NS A670.
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.
Special Note: For Post Master’s Certificate students, licensure for advanced practice nurse in Alaska is required.
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, followed by application in a clinical setting. Issues impacting the mental health of families are addressed.

NS A672 Advanced Psychiatric/Mental Health Nursing III 5 CR
Contact Hours: 2 + 12
Prerequisites: NS A671.
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 policy; current immunization per SON policy.
Special Fees.
Introduces 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.

NS A674 Advanced Psychiatric/Mental Health Nursing IV 5 CR
Contact Hours: 1 + 16
Prerequisites: NS A601 and NS A602 and NS A610 and NS A672.
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.
Special Note: For Post-Master’s Certificate students, licensure for advanced practice nurse in Alaska is required.
Emphasizes continuing role development and refinement of advanced practice competencies. An intensive clinical practicum provides the context for the integration synthesis, and application of essential competencies to the care of a population (individuals, groups, families, and aggregates) at risk of or experiencing a mental disorder or impairment. Class will be developed to provide individual and group supervision and examining opportunities, challenges and issues related to the advanced practice role.

NS A681 Analysis of Health Services 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Baccalaureate degree or senior level (last semester) in baccalaureate program.
Special Fees.
Special Note: Offered as Demand Warrants.
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), are discussed. Dimensions of policy making in health are also discussed.

NS A696 Individual Project 2 CR
Contact Hours: 1 + 3
Prerequisites: NS A618 and NS A619 and NS A620 and NS A621 and [HS A625 or NS A625].
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Enrollment in graduate nursing program.
Special Fees.
Special Note: Must be taken twice for credit for the Master of Science in Nursing degree.
Develops and implements a theory-based project in a clinical, educational or administrative setting. Identifies a topic of current concern within the specialty, reviews and synthesizes the relevant literature, examines and addresses a practice issue.

NS A699 Thesis 2 CR
Contact Hours: 1 + 3
Prerequisites: NS A618 and NS A619 and NS A620 and NS A621 and [HS A625 or NS A625].
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Enrollment in graduate nursing program.
Grade Mode: Pass/No Pass.
Special Fees.
Special Note: Must be taken twice for credit for the Master of Science in Nursing degree.
Develops, refines and implements a research proposal under the guidance of the thesis advisor and in conjunction with the thesis committee.
NURS - Nursing

Course Descriptions

Offered through the College of Health
Health Science Building (HSB), Room 101, 786-4582
www.uaa.alaska.edu/schoolofnursing

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 (ENG 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 in 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 (ENG 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 (ENG A111 with minimum grade of C and NURS A120 with minimum grade of C and NURS A120L with minimum grade of C 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 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 4 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 (ENG A111 with minimum grade of C and NURS A120 with minimum grade of C and NURS A120L with minimum grade of C and P and PSY A150 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.
Lab and clinical practicum for NURS A125. Focuses on use of patho-physiologic concepts, treatment options, and nursing process in caring for hospitalized adults with common health disruptions requiring alterations in lifestyle. Emphasizes nursing care of adults with increasingly complex health needs in acute care settings. Incorporates development influences, patient teaching and discharge planning, and prioritizing using Maslow’s Hierarchy of Needs.

NURS A127 LPN to AAS Nursing Bridge 1 CR
Contact Hours: 7 + 1
Prerequisites: (BIOL A111 with minimum grade of C and BIOL A122 with minimum grade of C and BIOL A240 with minimum grade of C and ENG A111 with minimum grade of C and PSY A150 with minimum grade of C).
Registration Restrictions: Current AAS LPN license, graduate of AVTECH LPN program, and admission to UAA Pre-nursing program.
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 on and practice with 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 (ENG A111 with minimum grade of C and NURS A120 with minimum grade of C and NURS A120L with minimum grade of C and PSY A150 with minimum grade of C).
Major Restriction: Must be Nursing major.
Registration Restrictions: Current admission to second semester of Associate in 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 A203 Preparing for Nursing Program Success 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Admission into either the UAA AAS or BS Nursing program or the permission of the program chair.
Crosslisted with: NS A203.
Explores ideas, strategies and skills that will assist the student in successful completion of the nursing program and the building of a successful nursing career.

NURS A220 Perinatal Nursing 3 CR
Contact Hours: 3 + 0
Prerequisites: (BIOL A111 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 (ENG A211 with minimum grade of C or concurrent enrollment) or (ENG A212 with minimum grade of C or concurrent enrollment) or (ENG 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 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.
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.

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/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 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 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 C and NURS A222 with minimum grade of C 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.
NURS A250L Psychiatric Nursing Laboratory 1 CR  Contact Hours: 0 + 3  Prerequisites: EN A203 with minimum grade of C and ENGL A211 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 C and NURS A222 with minimum grade of C and NURS A222L with minimum grade of P.  Major Restriction: Must be Nursing major.
 Registration Restrictions: This course may be elected to fulfill fourth semester of AAS nursing program. Completion of one social science elective with a minimum grade of C. Completion of one oral communication course and one additional GER course with minimum grade of C or concurrent enrollment.  Corequisites: NURS A225, NURS A225L, NURS A250 and NURS A255.  Grade Mode: Pass/No Pass.
 Special Fees:  Clinical practicum concurrent with NURS A250. Provides clinical experiences in care of the inpatient and outpatient psychiatric patients.

OSH A112 Introduction to Occupational Epidemiology 3 CR  Contact Hours: 3 + 0  Prerequisites: [MATH A105 with minimum grade of C or MATH A107 with minimum grade of C or MATH A108 with minimum grade of C or MATH A109 with minimum grade of C] and OSH A108 with minimum grade of C.
 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: 4 + 0  Prerequisites: [MATH A105 with minimum grade of C or concurrent enrollment] or (MATH A107 with minimum grade of C or concurrent enrollment) or (MATH A108 with minimum grade of C or concurrent enrollment) or (MATH A109 with minimum grade of C or concurrent enrollment)] and OSH A101 with minimum grade of C.
 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 with minimum grade of C.
 Assesses and evaluates workplace hazards. Investigates worker complaints and actual health and safety incidents. Includes practical applications and basic accident investigation.

OSH A211 Safety Program Assessment, Development and Implementation 4 CR  Contact Hours: 3 + 2  Prerequisites: OSH A101 with minimum grade of C and OSH A120 with minimum grade of C.
 Examines the role of safety programs in the workplace. Emphasizes safety program assessment, design, development, implementation and evaluation.

OSH A230 Principles of Ergonomics 3 CR  Contact Hours: 2 + 2  Prerequisites: [BIOL A100 with minimum grade of C or BIOL A102 with minimum grade of C or BIOL A111 with minimum grade of C or BIOL A115 with minimum grade of C] and OSH A201 with minimum grade of C.
 Examines workplace ergonomics, emphasizing types and sources of physiological stressors and their mitigation.

OSH A250 Hazardous Materials Operations 3 CR  Contact Hours: 2 + 2  Prerequisites: OSH A101 with minimum grade of C.
 Identifies the policies, procedures, and equipment needed to deal with hazardous materials. Emphasizes the types of hazards and the planning, organization, and training needed to work safely with hazardous materials.

OSH A295 Intensive Clinical Practicum 2 CR  Contact Hours: 4 + 64  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 as fourth semester AAS Nursing student. Must have completed one oral communication elective and one GER elective (or be concurrently enrolled). Complete one social science elective as a prerequisite.
 Corequisites: NURS A225, NURS A225L, NURS A250 and NURS A250L.
 Special Fees: Seminar course which examines the legal, ethical, and professional issues encountered in the practice of a registered nurse. Explores the role of the staff nurse within health care organizations. Examines professional nursing issues and knowledge necessary to function effectively in the staff nurse role and on health care teams. Includes legal limits and regulation of nursing practice along with trends in nursing.

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 and risk management, and incident prevention in the workplace. Emphasizes materials handling, electrical and machine safety, first response to fire and medical emergencies, safety and health hazards, and accident prevention.

OSH A111 Training Needs and Methods 3 CR  Contact Hours: 3 + 0  Evaluates safety and health training needs in the workplace. Emphasizes regulatory compliance.

OSH A111 Training Needs and Methods 3 CR  Contact Hours: 3 + 0  Evaluates safety and health training needs in the workplace. Emphasizes regulatory compliance.

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: 4 + 0  Prerequisites: [MATH A105 with minimum grade of C or concurrent enrollment] or (MATH A107 with minimum grade of C or concurrent enrollment) or (MATH A108 with minimum grade of C or concurrent enrollment) or (MATH A109 with minimum grade of C or concurrent enrollment)] and OSH A101 with minimum grade of C.
 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 with minimum grade of C.
 Assesses and evaluates workplace hazards. Investigates worker complaints and actual health and safety incidents. Includes practical applications and basic accident investigation.

OSH A211 Safety Program Assessment, Development and Implementation 4 CR  Contact Hours: 3 + 2  Prerequisites: OSH A101 with minimum grade of C and OSH A120 with minimum grade of C.
 Examines the role of safety programs in the workplace. Emphasizes safety program assessment, design, development, implementation and evaluation.

OSH A230 Principles of Ergonomics 3 CR  Contact Hours: 2 + 2  Prerequisites: [BIOL A100 with minimum grade of C or BIOL A102 with minimum grade of C or BIOL A111 with minimum grade of C or BIOL A115 with minimum grade of C] and OSH A201 with minimum grade of C.
 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: [MATH A105 with minimum grade of C or MATH A107 with minimum grade of C or MATH A108 with minimum grade of C or MATH A109 with minimum grade of C] and OSH A108 with minimum grade of C.
 Examines the equipment used in performing measurements of environmental factors in the workplace, including noise, lighting, vibration, chemical and heat stress. Emphasizes equipment types, applications and calibration. Evaluates environmental factors found in Alaskan workplaces.

OSH A250 Hazardous Materials Operations 3 CR  Contact Hours: 2 + 2  Prerequisites: OSH A101 with minimum grade of C.
 Identifies the policies, procedures, and equipment needed to deal with hazardous materials. Emphasizes the types of hazards and the planning, organization, and training needed to work safely with hazardous materials.

OSH A295 Intensive Clinical Practicum 2 CR  Contact Hours: 4 + 64  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 as fourth semester AAS Nursing student. Must have completed one oral communication elective and one GER elective (or be concurrently enrolled). Complete one social science elective as a prerequisite.
 Corequisites: NURS A225, NURS A225L, NURS A250 and NURS A250L.
 Special Fees: Seminar course which examines the legal, ethical, and professional issues encountered in the practice of a registered nurse. Explores the role of the staff nurse within health care organizations. Examines professional nursing issues and knowledge necessary to function effectively in the staff nurse role and on health care teams. Includes legal limits and regulation of nursing practice along with trends in nursing.

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 and risk management, and incident prevention in the workplace. Emphasizes materials handling, electrical and machine safety, first response to fire and medical emergencies, safety and health hazards, and accident prevention.

OSH A111 Training Needs and Methods 3 CR  Contact Hours: 3 + 0  Evaluates safety and health training needs in the workplace. Emphasizes regulatory compliance.

OSH A111 Training Needs and Methods 3 CR  Contact Hours: 3 + 0  Evaluates safety and health training needs in the workplace. Emphasizes regulatory compliance.
PADM - Public Administration

Offered through the College of Business and Public Policy
Edward & Cathryn Rasmussen Hall (RH), Room 304, 786-4171
www.uaa.alaska.edu/cbpp

Students taking any ACCT, BA, CIS, ECON, LGOP, LOG or PADM course will be charged a single lab fee of $34 for the semester. Applies to Elmendorf Air Force Base or Fort Richardson classes only when specifically noted on UAnet. Does not apply to Chugiak-Eagle River classes.

PADM A601 
Introduction to Public Administration

Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.
Introduces key concepts of leadership style, authority, collaboration and change.

PADM A602 
Seminar in Public Management

Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.
Focuses on organizational leadership and systems analysis, systems theory, information systems, procedure analysis, management planning, and management problem solving.

PADM A603 
Management Analysis

Contact Hours: 3 + 0
Registration Restrictions: Faculty permission.
Course introduces methods of empirical research, including research design, survey sampling, data collection and statistical analysis. There is a special emphasis on communicating results of analysis to administrators, policymakers and the public.

PADM A604 
Research Methods in Public Administration

Contact Hours: 3 + 0
Registration Restrictions: Introductory course in statistics with a minimum grade of C.
This course introduces methods of empirical research, including research design, survey sampling, data collection and statistical analysis. There is a special emphasis on communicating results of analysis to administrators, policymakers and the public.

PADM A606 
The Policymaking Process

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

Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.
Focuses on organizational theories and management approaches in the workplace. Examines theories of organizational, administrative and workplace behaviors, and ethics. Presents an in-depth study of organized behavior including concepts of leadership style, authority, collaboration and change.

PADM A618 
Public Accountability and Ethics

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

Contact Hours: 0 - 4 + 12
Registration Restrictions: Faculty permission.
Special Note: Offered as Demand Warrants.
Applied work experience in public administration or policy analysis. 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 and Labor Relations

Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.
Course deals systematically with nine canons of the American Bar Association as they address practical problems of legal assistants who work under the supervision of attorneys. Focuses upon rules and opinions directed at the practitioners of law in Alaska. Discussion of regulation by bar associations and attorneys.

PADM A628 
Public Financial Management

Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.
Introduces to the management and administration of public financial resources. The course focuses on finance issues currently faced by professionals who are responsible for administration of public funds.

PADM A632 
Public Policy Analysis

Contact Hours: 3 + 0
Registration Restrictions: Faculty permission. PADM A604 recommended.
Combines theory and practical approaches to public policy analysis. Students are trained to identify policy problems, to select an appropriate method for data analysis and to analyze public policy options.

PADM A640 
Dispute Resolution

Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Successful completion of the MPA comprehensive core program.
Demonstrates PADM student ability to synthesize MPA graduate-level coursework through a final capstone project. Refines student knowledge and skills to identify a client, define a topic, conduct research, and present and present a policy report. Integrates research, critical thinking and communication skills as well as experiential and theoretical learning.

PADM A671 
Selected Topics in Public Administration

Contact Hours: 1-3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Faculty permission or graduate standing.
Analyzes selected public administration issues. Topics will be announced in the published class schedules.

PADM A688 
Program Evaluation and Performance Measurement

Contact Hours: 3 + 0
Registration Restrictions: Graduate standing; one undergraduate or graduate statistics course; PADM A604 recommended.
Course topics include: needs assessment techniques, an introduction to organizational and systems analysis, systems theory, information systems, procedure analysis, management planning, and management problem solving.

PARL - Paralegal Studies

Offered through the College of Health
Consortium Library (LIB), Room 213, 786-1810
http://justice.uaa.alaska.edu

PARL A236 
Ethics and Paralegals

Contact Hours: 1 + 0
Prerequisites: LEGL A101 and LEGL A215.
Special Note: Offered Spring Semesters.
Course deals systematically with nine canons of the American Bar Association as they address practical problems of legal assistants who work under the supervision of attorneys. Focuses upon rules and opinions directed at the practitioners of law in Alaska. Discussion of regulation by bar associations and attorneys.
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 A214 with minimum grade of B or ENGL A311 with minimum grade of B or ENGL A312 with minimum grade of B or ENGL A313 with minimum grade of B or ENGL A414 with minimum grade of B or ENGL A487 with minimum grade of B] and LEGL A101 with minimum grade of C and LEGL A356 with minimum grade of C.  
Special Fees.  
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: LEGL A101.  
Administrative law and procedure in the context of federal, state and local agencies operating in Alaska.

PEP - Physical Education Professional

Offered through the Community and Technical College  
Eugene Short Hall (ESH), Room 125, 786-4083  
www.uaa.alaska.edu/peer

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: 0.5 + 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: 0.5 + 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.  
Principles of coaching, including: common teaching and learning styles, scientific foundations of physical activity, season planning, and the development of a personal coaching philosophy. Also examines common sports safety issues as well as basic injury prevention and treatment. Reviews guidelines and requirements for Alaska high school coaches.

PEP A117 Techniques in Personal Training 2 CR  
Contact Hours: 1 + 2  
Prerequisites: PEP A115 or concurrent enrollment.  
Special Fees.  
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.

PEP A130 Introduction to Coaching 3 CR  
Contact Hours: 3 + 0  
Special Fees.  
Special Note: Successful completion results in eligibility for certification as a high school coach in Alaska.

Explores the purpose and objectives of interscholastic athletics. Presents principles of coaching, including: common teaching and learning styles, scientific foundations of physical activity, season planning, and the development of a personal coaching philosophy. Also examines common sports safety issues as well as basic injury prevention and treatment. Reviews guidelines and requirements for Alaska high school coaches.

PEP A161 Wilderness First Responder 4 CR  
Contact Hours: 2 + 4  
Special Fees.  
Special Note: Students will be awarded nationally recognized WFR certificate upon successful completion of course and other certification requirements.

Provides knowledge and skills necessary to administer emergency and medical care in non-urban environments. Covers basic anatomy and physiology, assessment and treatment of injuries, appropriate short-term to multi-day patient care and evacuation considerations.

PEP A181 Introduction to Health, Physical Education and Recreation 3 CR  
Contact Hours: 3 + 0  
Special Note: A field outing may be required.

Introduces the history, philosophies, objectives and foundations of health, physical education, and recreation. Surveys career and professional development opportunities.

PEP A182 Technology in Health, Physical Education and Recreation 1 CR  
Contact Hours: 1 + 0  
Prerequisites: PEP A181.  
Registration Restrictions: Departmental approval

Demonstrates use of current technology while learning trends in various settings related to health, physical education and recreation. Develops knowledge, skills and abilities to use discipline-specific technology.

PEP A183 Wellness Principles 1 CR  
Contact Hours: 1 + 0  
Registration Restrictions: Departmental approval

Examines key concepts associated with the dimensions of personal wellness. Presents topics and activities for evaluation of wellness strategies for making behavior change.

PEP A184 Fundamental Motor Skills 1 CR  
Contact Hours: 1 + 0  
Registration Restrictions: Departmental approval

Introduces basic patterns used in mature motor patterns of fundamental movement. Presents phases leading to mature patterns. Applies basic observation techniques to analysis of performance.

PEP A230 Sport Ethics 1 CR  
Contact Hours: 1 + 0  
Emphasizes the role of the coach in building character, good sportsmanship, and positive values in athletes. Covers teachable moments, positive communication, and teamwork.

PEP A231 Drugs and Sport 1 CR  
Contact Hours: 0.5 + 1  
Emphasizes the role of the coach in preventing tobacco, alcohol, and other drug use among athletes. Covers how to communicate effective substance abuse prevention messages and respond to athletes who exhibit symptoms of concern.

PEP A233 Coaching Track and Field and Running 2 CR  
Contact Hours: 1.5 + 1  
Introduces track and field and running coaching techniques including creating a physical conditioning plan, developing skills and handling competitive events.

PEP A234 Coaching Wrestling 2 CR  
Contact Hours: 1.5 + 1  
Introduces wrestling coaching techniques, including creating a physical conditioning plan, developing skills, and handling competitive events.
PEP A235  Coaching Swimming and Diving  
Contact Hours: 1.5 + 1  
Prerequisites: PEP A135. Special Fees. 
Introduces swimming and diving coaching techniques, including creating a physical conditioning plan, developing skills, and handling competitive events.

PEP A236  Coaching Skiing  
Contact Hours: 1.5 + 1  
Special Fees.  
Introduces Nordic and alpine skiing coaching techniques, including creating a physical conditioning plan, developing skills, and handling competitive events.

PEP A237  Coaching Figure Skating  
Contact Hours: 1.5 + 1  
Prerequisites: PEP A137.  
Introduces figure skating coaching techniques, including creating a physical conditioning plan, developing skills, and handling competitive events.

PEP A238  Coaching Gymnastics  
Contact Hours: 1.5 + 1  
Introduces gymnastics coaching techniques, including creating a physical conditioning plan, developing skills, and handling competitive events.

PEP A239  Coaching Baseball/Softball  
Contact Hours: 1.5 + 1  
Prerequisites: PEP A141. Special Fees.  
Introduces baseball/softball coaching techniques, including creating a physical conditioning plan, developing skills, and handling competitive events.

PEP A240  Coaching Football  
Contact Hours: 1.5 + 1  
Introduces football coaching techniques, including creating a physical conditioning plan, developing skills, and handling competitive events.

PEP A241  Coaching Basketball  
Contact Hours: 1.5 + 1  
Prerequisites: PEP A142. Special Fees.  
Introduces basketball coaching techniques, including creating a physical conditioning plan, developing skills, and handling competitive events.

PEP A242  Coaching Soccer  
Contact Hours: 1.5 + 1  
Prerequisites: PEP A142. Special Fees.  
Introduces soccer coaching techniques, including creating a physical conditioning plan, developing skills, and handling competitive events.

PEP A243  Coaching Hockey  
Contact Hours: 1.5 + 1  
Prerequisites: PEP A143. Special Fees.  
Introduces hockey coaching techniques, including creating a physical conditioning plan, developing skills, and handling competitive events.

PEP A244  Coaching Volleyball  
Contact Hours: 1.5 + 1  
Prerequisites: PEP A144. Special Fees.  
Introduces volleyball coaching techniques, including creating a physical conditioning plan, developing skills, and handling competitive events.

PEP A251  Prevention and Care of Activity-Related Injuries  
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 Outdoor Recreation  
Contact Hours: 2 + 2  
Introduction to the field of outdoor recreation and leadership, including implications for individuals and groups in changing society. Examines philosophical, historical, theoretical, legal and ethical foundations of the field. Explores career opportunities and options. Examines leisure and recreation as an expression of culture, society and wellness.

PEP A264  Recreation Program Planning and Evaluation  
Contact Hours: 2 + 2  
Prerequisites: PEP A181 and PEP A262 and (PEP A280 or concurrent enrollment). Special Fees.  
Examines the fundamental conceptual and operational aspects of recreational program planning, delivery, and evaluation. Examines techniques and applications for a variety of leisure and recreational programming experiences to individuals or groups. Introduces assessing needs, budgeting, marketing, implementation, and evaluation of a wide range of leisure and recreational entrepreneurial, and managerial dimensions of providing recreation opportunities.

PEP A280  Leadership in Health, Physical Education and Recreation  
Contact Hours: 3 + 0  
Prerequisites: PEP A181.  
Registration Restrictions: Departmental approval 
Special Note: Community service and/or professional development required.  
Examines key concepts related to leadership in the HPER fields. Introduces preparation, short and long-term planning, observation skills, and evaluation skills. Surveys leadership techniques commonly used in the HPER fields.
PEP A287  Leadership in Outdoor Recreation Activities 2 CR  
Contact Hours: 1 + 2  
Prerequisites: PEP A280.  
Registration Restrictions: Departmental approval  
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  
Prerequisites: PEP A280.  
Registration Restrictions: Departmental approval  
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 experiences; 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 A365.  
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 A346  Lower Body Injury Assessment Skills 3 CR  
Contact Hours: 0.5 + 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: 0.5 + 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: 2 + 2  
Prerequisites: ENVI A303 or PHIL A303.  
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).  
Examines 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.  
Examines 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.  
Registration Restrictions: Completion of GER Tier 1 (basic college-level skills)  
courses and junior standing.  
Course Attributes: UAA GER Integrative Capstone.  
Examines the dynamic relationship between psychological issues and health  
behavior adherence and for 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.  
Examines 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: 2.5 + 1  
Special Note: Recommended for juniors or seniors who have had at least one  
course in anatomy, physiology, psychology, sociology or gerontology.  
Examines the physiological and psychological processes associated with  
aging as they bear on personal health and the health of others. Focuses on  
energizing, encouraging, and supporting the life and health behaviors of  
older adults. Includes a variety of methods and activities for adding physical  
activity and health promotion into instruction. Emphasizes clinical physiology,  
testing protocols and the evaluation of results, and the design of individual exercise  
prescriptions based upon the results.  

PEP A453  Health Promotion 3 CR  
Contact Hours: 3 + 0  
Prerequisites: BA A151 and PEP A181.  
Class Standing Restriction: Must be Junior or Senior.  
Level Restriction: Must be Undergraduate - UAA level.  
Registration Restrictions: Junior or senior status  
Focuses on understanding health behaviors and the development of  
treatment 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 4 CR  
Contact Hours: 3 + 2  
Prerequisites: PEP A385.  
Class Standing Restriction: Must be Junior or Senior.  
Registration Restrictions: Junior or senior status  
Special Fees.  
Provides techniques necessary for exercise test administration, evaluation, and  
recommendations for individuals. Emphasizes clinical physiology, testing protocols  
and the evaluation of results, and the design of individual exercise prescriptions  
based on the results.  

PEP A455  Cardiac Rehabilitation and Special Populations 4 CR  
Contact Hours: 3 + 2  
Prerequisites: PEP A385 and PEP A454.  
Class Standing Restriction: Must be Junior or Senior.  
Registration Restrictions: Junior or senior standing  
Special Fees.  
Focuses on exercise as an integral part of medicine by assisting in the  
diagnosis of cardiovascular disease and by serving as an adjunct to traditional  
medical practice in the treatment of persons with cardiovascular and other chronic  
diseases and disabilities. Emphasizes the pathophysiology and detection of  
diseases, medical management, and exercise therapy program design.  

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.
PES A164 Outdoor Recreation Administration 3 CR
Contact Hours: 3 + 0.5
Prerequisites: PEP A181 and PEP A262 and PEP A264 and PEP A280.
Analyzes of the administration, operation, policies, practices, and procedures of recreation planning and provider organizations. Course includes logistics, public policy, land use/management and permits, personnel recruitment, assignment, training, and evaluation, resource allocation, risk management, insurance, and scheduling. Examines development of organizational mission, values, strategic planning, funding sources, and facilities.

PES A166 Organizational Safety and Risk Management 3 CR
Contact Hours: 3 + 0
Prerequisites: PES A61 and PES A604 and (PEP A365 or concurrent enrollment) and PEP A340.
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.

PES A167A Climbing-Based Adventure Leadership 2 CR
Contact Hours: 0.5 + 3
Prerequisites: PES A161 and PES A365 and PER A146 and PER A147 and PER A148 and PER A181.
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.

PES A167C Land-Based Outdoor Leadership 2 CR
Contact Hours: 0.5 + 3
Prerequisites: PES A262 and PES A264 and PER A165 and PER A169 and [PER A146 or PER A147].
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.

PES A167D Water-Based Outdoor Leadership 2 CR
Contact Hours: 0.5 + 3
Prerequisites: PER A169 and [PER A151 or 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, judgment and safety.

PES A186 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.

PES A487 Administration and Supervision in Health, Physical Education and Recreation 3 CR
Contact Hours: 3 + 0
Prerequisites: PES 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.

PES A490 Selected Topics in Health, Physical Education and Recreation 1-6 CR
Contact Hours: 1.5 + 0.5
Registration Restrictions: Department approval
Special Note: Prerequisites may be required depending on selected topic. Course may be repeated with change in topic.
Examines selected topics in the health, physical education and recreation industry according to industry demand or faculty expertise.

PES A495 Internship in Health and Fitness Leadership 6 CR
Contact Hours: 0.5 + 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 2.75; 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.

PES A496 Internship in Outdoor Leadership 6 CR
Contact Hours: 0.5 + 16.5
Prerequisites: PEP A262 and PEP A264 and PEP A365 and PEP A464 and PEP A467C and PEP A467D and PEP A487.
Registration Restrictions: Minimum 2.75 GPA, senior status, department approval and current Wilderness First Responder certification.
Special Fees.
Provides advanced professional experience in an approved position with supervision and training in various aspects of outdoor leadership and recreation programming.

PES A645 Methods in Elementary Physical Education 3 CR
Contact Hours: 3 + 0
Prerequisites: EDFN A478 and EDFN A602.
Registration Restrictions: Departmental approval.
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.

PES A646 Methods in Secondary Physical Education 3 CR
Contact Hours: 3 + 0
Prerequisites: EDFN A478 and EDFN A602.
Registration Restrictions: Departmental approval.
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 secondary physical education classroom ecology.

PER - Physical Education & Recreation
Offered through the Community & Technical College
Eugene Short Hall (ESH), Room 125, 786-4083
www. uaa. alaska. edu/ hper

PER A100 Fitness for Life 2 CR
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 1 CR
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 1 CR
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 1 CR
Contact Hours: 0.5 + 1
Special Fees.
Introduces key concepts associated with lifetime fitness. Presents the concepts and technical skills to set up and participate in a regular aerobic walking program.

PER A106 Aerobics 1 CR
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 1 CR
Contact Hours: 0.5 + 1
Special Fees.
Introduces key concepts related to lifetime personal fitness. Presents a variety of 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 1 CR
Contact Hours: 0.5 + 1
Special Fees.
Introduces country line dancing as an effective way to improve cardiovascular fitness and muscular endurance. Covers basic dance terminology and conditioning exercise for specific muscles.

PER A113 Beginning Pilates 1 CR
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 A116 Circuit Training 1 CR
Contact Hours: 0.5 + 1
Special Fees.
Introduces key concepts related to lifelong personal fitness. Presents circuit training as a way to improve strength, physical conditioning, and general sports performance. Covers cardiopulmonary training, flexibility exercises, and safe techniques for improved muscular strength and endurance.

PER A117 Shape Up with Weights 1 CR
Contact Hours: 0.5 + 1
Special Fees.
Introduces key concepts related to lifelong personal fitness. Presents weight room resistance exercises to tone and condition major muscle groups. Introduces total program planning, including cardiopulmonary training, flexibility exercises, and healthy nutritional practices.

PER A118 Beginning Weight Training 1 CR
Contact Hours: 0.5 + 1
Special Fees.
Introduces key concepts related to lifelong personal fitness. Presents resistance exercises to strengthen and condition major muscle groups.

PER A120 Beginning Yoga 1 CR
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 1 CR
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 1 CR
Contact Hours: 0.5 + 1
Special Fees.
Introduces Tai Chi exercises designed to improve health, tranquility, energy, and strength.

PER A124 Beginning Karate 1 CR
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 1 CR
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 A127 Beginning Tae Kwon Do 1 CR
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: 0.5 + 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: 0.5 + 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: 0.5 + 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: 0.5 + 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: 0.5 + 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: 0.5 + 1
Special Fees.
Introduces proper breathing technique and basic strokes for those with little or no swimming background. Emphasizes personal water safety.

PER A137 Beginning Ice Skating 1 CR
Contact Hours: 0.5 + 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: 0.5 + 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: 0.5 + 1
Special Fees.
Introduces basic skills associated with social Latin dance. Covers various dances including Merenge, 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: 0.5 + 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: 0.5 + 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: 0.5 + 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: 0.5 + 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: 0.5 + 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.
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<tr>
<td>PER A148</td>
<td>Beginning Indoor Sport Climbing</td>
<td>1 CR</td>
<td>0.5 + 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PER A150</td>
<td>Water Safety and Rescue</td>
<td>1 CR</td>
<td>0.5 + 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PER A151</td>
<td>Beginning Canoeing</td>
<td>1 CR</td>
<td>0.5 + 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PER A152</td>
<td>Beginning River Rafting</td>
<td>1 CR</td>
<td>0.5 + 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PER A153</td>
<td>Beginning Sea Kayaking</td>
<td>1 CR</td>
<td>0.5 + 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PER A155</td>
<td>Fly Fishing</td>
<td>1 CR</td>
<td>0.5 + 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PER A160</td>
<td>Beginning Cross-Country Ski: Diagonal Stride</td>
<td>1 CR</td>
<td>0.5 + 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PER A161</td>
<td>Beginning Cross-Country Skate Skiing</td>
<td>1 CR</td>
<td>0.5 + 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PER A162</td>
<td>Beginning Telemark Skiing</td>
<td>1 CR</td>
<td>0.5 + 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PER A164</td>
<td>Skiing Alaska’s Backcountry</td>
<td>2 CR</td>
<td>1 + 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PER A165</td>
<td>Avalanche Hazard Recognition and Evaluation</td>
<td>1 CR</td>
<td>0.5 + 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PER A166</td>
<td>Avalanche hazard recognition and prevention</td>
<td>1 CR</td>
<td>0.5 + 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PER A167</td>
<td>Dog Mushing</td>
<td>1 CR</td>
<td>0.5 + 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PER A168</td>
<td>Winter Camping Alaska</td>
<td>1 CR</td>
<td>0.5 + 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PER A169</td>
<td>Four-Season Backpacking</td>
<td>3 CR</td>
<td>1 + 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PER A170</td>
<td>Backpack Alaska</td>
<td>3 CR</td>
<td>1 + 4</td>
<td></td>
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</tr>
</tbody>
</table>

Special Note: Requires ability to function comfortably in extremely cold and/or inclement weather. Students may need to rent or purchase additional equipment for this course. Students may need to rent or purchase additional gear for this course. Students may need to rent or purchase additional gear for this course. Students may need to rent or purchase additional gear for this course. Students may need to rent or purchase additional gear for this course. Students may need to rent or purchase additional gear for this course. Students may need to rent or purchase additional gear for this course. Students may need to rent or purchase additional gear for this course. Students may need to rent or purchase additional gear for this course. Students may need to rent or purchase additional gear for this course. Students may need to rent or purchase additional gear for this course. Students may need to rent or purchase additional gear for this course. Students may need to rent or purchase additional gear for this course. Students may need to rent or purchase additional gear for this course. Students may need to rent or purchase additional gear for this course. Students may need to rent or purchase additional gear for this course. Students may need to rent or purchase additional gear for this course. Students may need to rent or purchase additional gear for this course. Students may need to rent or purchase additional gear for this course.
Course Descriptions

PER A171 Outdoor Adventure in Alaska 2 CR
Contact Hours: 1 + 2
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.
Grade Mode: Pass/No Pass.
Special Note: Students must be 18 or older to enroll and must abide by all University and course safety rules.
A practical introduction to the basics of fishing, including equipment selection, types of line, lures, and files, and techniques geared toward Alaska lakes and streams. Includes wildlife safety, basic biology, and “caring for your catch.” Emphasizes risk assessment and safety skills.

PER A173 Beginning Mountaineering 1 CR
Contact Hours: 0.5 + 2
Prerequisites: PER A169 and PER A181.
Special Note: Requires excellent physical condition and the ability to function comfortably in extremely cold and/or inclement weather. Additional equipment may need to be purchased or rented for this course. Includes an overnight field outing.
Applies backpacking and climbing techniques to an alpine mountain environment. Includes instruction on alpine climbing, glacier-travel, and crevasse-rescue techniques. Introduces roped team travel and trip planning with an emphasis on risk assessment and hazard mitigation in an alpine environment.

PER A181 Crevasse Rescue Techniques 1 CR
Contact Hours: 0.5 + 1
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 A182 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.

PER A188 Wellness for Women 3 CR
Contact Hours: 3 + 0
Special Note: Students will apply concepts through physical activities outside of class time.
Introduces basic concepts for wellness including theories and definitions of optimal health. Includes topics such as substance abuse, sexually transmitted diseases, fitness, nutrition, mental health, cardiovascular disease, sexuality, and other significant health issues, with particular emphasis on the needs and concerns of women.

PER A190 Selected Topics in Health, Physical Education and Recreation 1-4 CR
Contact Hours: 1-4 + 0-8
Registration Restrictions: Department approval
Special Note: Course may be repeated with change in topic.
Examines selected topics in the health, physical education and recreation industry according to industry demand or faculty expertise.

PER A220 Intermediate Yoga 1 CR
Contact Hours: 0.5 + 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: 0.5 + 1
Prerequisites: PER A123.
Special Fees.
Presents intermediate level Tai Chi exercises designed to improved health, tranquility, energy, and strength.

PER A225 Intermediate Kung Fu 1 CR
Contact Hours: 0.5 + 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 A227 Intermediate Taekwondo 1 CR
Contact Hours: 0.5 + 1
Prerequisites: PER A127.
Special Fees.
Presents intermediate level Taekwondo principles and applications. Training and discipline on the physical, mental, and spiritual levels will be covered.

PER A232 Intermediate Golf 1 CR
Contact Hours: 0.5 + 1
Prerequisites: PER A132.
Special Fees.
Emphasizes game strategy and develops intermediate golf skills. Applies principles of golf through active participation.

PER A234 Swimming Conditioning 1 CR
Contact Hours: 0.5 + 1
Special Fees.
Develops and refines swimming skills, physical conditioning, and knowledge of training and competition. Designed for intermediate to competitive level swimmers.

PER A238 Intermediate Foil Fencing 1 CR
Contact Hours: 0.5 + 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: 0.5 + 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: 0.5 + 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: 0.5 + 1
Prerequisites: PER A143.
Special Fees.
Develops intermediate level power skating techniques and hockey skills. Applies defensive and offensive strategies and tactics.

PER A244 Intermediate Volleyball 1 CR
Contact Hours: 0.5 + 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.

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PER A247  Intermediate Ice Climbing  2 CR
Contact Hours: 1 + 2
Prerequisites: PER A147.
Special Note: Requires excellent physical condition and the ability to perform comfortably in extremely cold and/or inclement weather. Field sessions include all-day clinics and may involve considerable travel distances from Anchorage. It is recommended students purchase their own climbing gear for the class.

Builds on the skills and knowledge gained in Beginning Ice Climbing. Introduces equipment, techniques, risk assessment and management and mitigation skills associated with lead climbing waterfall ice. Covers techniques to safely and efficiently ascend and descend a multi-pitch ice climb. Covers building appropriate anchors, climbing physics, belaying, protection strategies, rope work, station management, rappelling and improvised rescue. Emphasizes risk assessment and technical skill acquisition.

PER A252  Intermediate River Rafting  2 CR
Contact Hours: 0.5 + 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.

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: 0.5 + 4.5
Prerequisites: PER A153.
Special Fees.
Special Note: Participants must demonstrate proficient sheltered coastal kayaking skills at course start. Requires excellent backcountry camping skills and the ability to function comfortably in inclement weather. Wilderness camping will be included in the course. Participants may be required to purchase or rent additional gear. CPR and first aid training is highly recommended.

Provides foundational open water sea kayaking skills for individuals with sheltered coastal kayaking skills. Introduces open water crossings, paddling around exposed headlands, and exposure to cliffed-out shore lines with limited beach landings. Emphasizes development of efficient strokes, practical self-rescue techniques, understanding the marine environment, trip planning and risk assessment and management.

PER A272  Advanced Weight Training  1 CR
Contact Hours: 0.5 + 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 A275  Advanced T'ai Chi  1 CR
Contact Hours: 0.5 + 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 A281  Advanced Hockey  1 CR
Contact Hours: 0.5 + 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

Offered through Kenai Peninsula College
156 College Road, Soldotna, Alaska 99669, (907) 262-0330
www.kpc.alaska.edu

PETR A155  Blueprint Reading  3 CR
Contact Hours: 3 + 0
Registration Restrictions: MATH A054 or placement in MATH A055.

Presents details of the installation and application of continuous process instruments in closed feedback control loops. Includes practice of functional check-out procedures on physical hardware. Introduces ladder logic used for discrete control of processes.

PETR A244  Industrial Process Instrumentation IV  3 CR
Contact Hours: 3 + 0
Prerequisites: PETR A240.

Major Restriction: Must be Industrial Proc Instrumenttn or Process Technology major.

Registration Restrictions: Degree-seeking Industrial Process Instrumentation or Process Technology students.

Introduces experienced technicians to 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.

PHAR - Pharmacy Technology

Offered through the College of Health
Allied Health Sciences Building (AHS), Room 161, 786-6928
www.uaa.alaska.edu/alliedhealth/academics/pharmacy.cfm

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
Prerequisites: PHAR A101.

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. Focuses 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.

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.

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.
PHIL A101 Introduction to Logic 3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Humanities Requirement.
Develops formal and informal reasoning skills. Introduces deductive logic via statement logic, analyzes arguments and introduces scientific and inductive reasoning, reviews common fallacies and methods for evaluating arguments.

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 A212 History of Philosophy II 3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Humanities Requirement.
Survey of philosophy from the Scientific Revolution through German Idealism (Modern Period). Traces the development of scientific, metaphysical, epistemological and ethical thought with emphasis on historical texts.

PHIL A231 Truth, Beauty, and Goodness 3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A111 or concurrent enrollment.
Crosslisted with: LSIC 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.

PHIL A301 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.
Course Attributes: UAA GER Humanities Requirement.
An introduction to major theories in normative ethics and metaethics, and the arguments of important moral philosophers. Emphasis on critical reasoning, as well as evaluation and analysis of arguments. Includes the application of ethical theory to contemporary moral issues, such as rights and distributive justice, environmental and animal issues, abortion, terrorism, and euthanasia.

PHIL A302 Biomedical Ethics 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Junior standing.
An in-depth exploration of current bioethical issues affecting the delivery of health care services. Theories of ethics and related principles are explored as a basis for professional decision-making and public policy determination. The focus of the course is the process of ethical inquiry and its relevance for contemporary health practices, research and education.

PHIL A303 Environmental Ethics 3 CR
Contact Hours: 3 + 0
Crosslisted with: ENVI A303.
Historical and comparative analysis of Western, non-Western, indigenous and Native American philosophies, concerning the intrinsic, aesthetic and use values of nature and the land. Contemporary environmental ethics, including deep ecology, the land ethic, ecofeminism, and animal rights theories will be examined in detail. There will also be a focus on the ethical issues surrounding contemporary environmental controversies, such as land management, wildlife management, wilderness designation, sustainability, biodiversity and species preservation, private property and public commons, environmental racism, human overpopulation, development versus preservation, laboratory use of animals, vivisection, animal farming, subsistence, and sports hunting.

PHIL A304 Business Ethics 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Junior standing.
Examines moral issues raised by contemporary business practice. Topics include moral justifications and critiques of the market system, the nature and scope of corporate responsibility, ethical issues in the workplace (e.g. whistle-blowing, sexual harassment, affirmative action, etc.), and environmental implications of business practices.

PHIL A305 Professional Ethics 3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A111 with minimum grade of C.
Course Attributes: UAA GER Humanities Requirement.
Focuses on the duties of professionals to their clients and society, and examines the dilemmas that are created when these duties come in conflict with one another and with the duties of general morality. Uses case studies highlighting issues in engineering, information technology, law, medicine, journalism and other professions.

PHIL A309 Philosophy of Mind 3 CR
Contact Hours: 3 + 0
An examination of the mind/body problem, the nature of consciousness, self-knowledge, mental content, mental causation, cognitive science, personal identity, and agency.

PHIL A313 Eastern Philosophy and Religion 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 Eastern philosophical and religious traditions, particularly Hinduism, Buddhism, Daoism and Confucianism. Includes studying basic concepts, tenets and practices of these traditions and related modern developments.

PHIL A314 Western Religions 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 three Western monotheisms—Judaism, Christianity, and Islam. Covers basic tenets, practices and histories of the monotheisms. Examines the intersections of religion with contemporary concerns such as gender, ethnicity, and violence.

PHIL A317 Metaphysics 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Six credits with minimum grade of C from PHIL A101, PHIL A201, PHIL A211, PHIL A212 or PHIL 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: Six credits with minimum grade of C from PHIL A101, PHIL A201, PHIL A211, PHIL A212 or PHIL 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 A321 Philosophy of Religion 3 CR
Contact Hours: 3 + 0
Prerequisites: PHIL A101 with minimum grade of C or PHIL A201 with minimum grade of C or PHIL A211 with minimum grade of C or PHIL A212 with minimum grade of C or PHIL A301 with minimum grade of C.

An advanced study of current issues in philosophy of religion including topics such as the existence of God, the nature of divine attributes, the problem of evil, science and religion, the meaningfulness of religious language, the epistemology of religious experience, and non-western perspectives on religion, with an emphasis on critical reasoning, argument evaluation, and analysis.

PHIL A350 Contemporary Social and Political Philosophy 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses and junior standing (at least 60 credit hours).

PHIL A390 Selected Topics in Philosophy 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Upper-division standing.

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.

PHIL A401 Aesthetics 3 CR
Contact Hours: 3 + 0
An investigation into the nature of art and the creative process from both an historical and theoretical perspective, utilizing especially the philosophy of the ancient Greeks, the Romantic thinkers and contemporary semiotics.

PHIL A406 Philosophy Law 3 CR
Contact Hours: 3 + 0
Registration Restrictions: JUST A315 or 6 credits in Philosophy, and junior standing.

PHIL A415 Feminist Philosophy 3 CR
Contact Hours: 3 + 0
Registration Restrictions: WS A200 or 6 credits in philosophy, and junior standing.

PHIL A421 Philosophy of the Sciences 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Junior or senior standing.

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.

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.

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.

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, 9 credits of philosophy in addition to the prerequisites, and faculty permission.

PHIL A607 Ethics 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.

PHYS - Physics
Offered through the College of Arts and Sciences
ConocoPhillips Integrated Sciences Building (CPSB), Room 101, 786-1238
www.uaa.alaska.edu/physicscandastronomy

PHYS A101 Physics Poets 3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A105.
Course Attributes: UAA GER Natural Sciences Requirement.
Special Note: Does not fulfill the Natural Sciences component of the CAS B.S. Degree.

PHYS A115 Physical Science 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Placement into MATH A105 or higher.

PHYS A101
Prerequisites: MATH A105.
Course Attributes: UAA GER Natural Sciences Requirement.
Special Note: Does not fulfill the Natural Sciences component of the CAS B.S. Degree.

PHYS A115
Physical Science 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Placement into MATH A105 or higher.

PHYS A115
Prerequisites: MATH A105.
Course Attributes: UAA GER Natural Sciences Requirement.
Special Note: Does not fulfill the Natural Sciences component of the CAS B.S. Degree.

PHYS A101
Prerequisites: MATH A105.
Course Attributes: UAA GER Natural Sciences Requirement.
Special Note: Does not fulfill the Natural Sciences component of the CAS B.S. Degree.

PHYS A115
Physical Science 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Placement into MATH A105 or higher.

PHYS A115
Prerequisites: MATH A105.
Course Attributes: UAA GER Natural Sciences Requirement.
Special Note: Does not fulfill the Natural Sciences component of the CAS B.S. Degree.

PHYS A101
Prerequisites: MATH A105.
Course Attributes: UAA GER Natural Sciences Requirement.
Special Note: Does not fulfill the Natural Sciences component of the CAS B.S. Degree.

PHYS A115
Physical Science 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Placement into MATH A105 or higher.

PHYS A115
Prerequisites: MATH A105.
Course Attributes: UAA GER Natural Sciences Requirement.
Special Note: Does not fulfill the Natural Sciences component of the CAS B.S. Degree.

PHYS A101
Prerequisites: MATH A105.
Course Attributes: UAA GER Natural Sciences Requirement.
Special Note: Does not fulfill the Natural Sciences component of the CAS B.S. Degree.

PHYS A115
Physical Science 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Placement into MATH A105 or higher.

PHYS A115
Prerequisites: MATH A105.
Course Attributes: UAA GER Natural Sciences Requirement.
Special Note: Does not fulfill the Natural Sciences component of the CAS B.S. Degree.

PHYS A101
Prerequisites: MATH A105.
Course Attributes: UAA GER Natural Sciences Requirement.
Special Note: Does not fulfill the Natural Sciences component of the CAS B.S. Degree.

PHYS A115
Physical Science 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Placement into MATH A105 or higher.

PHYS A115
Prerequisites: MATH A105.
Course Attributes: UAA GER Natural Sciences Requirement.
Special Note: Does not fulfill the Natural Sciences component of the CAS B.S. Degree.

PHYS A101
Prerequisites: MATH A105.
Course Attributes: UAA GER Natural Sciences Requirement.
Special Note: Does not fulfill the Natural Sciences component of the CAS B.S. Degree.

PHYS A115
Physical Science 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Placement into MATH A105 or higher.

PHYS A115
Prerequisites: MATH A105.
Course Attributes: UAA GER Natural Sciences Requirement.
Special Note: Does not fulfill the Natural Sciences component of the CAS B.S. Degree.

PHYS A101
Prerequisites: MATH A105.
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.
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.
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 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 Sciences 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
Corequisite: PHYS A211.
Grade 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
Corequisite: PHYS A212.
Grade 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: MATH A302 with minimum grade of C and PHYS A212 with minimum grade of C.
Special Fees.
Introduction to modern physics, primarily special relativity and quantum mechanics. Applications of these topics to the quantum structure of atoms, molecules, and solids; lasers; nuclear/particle physics and cosmology.

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.
Special Fees.
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
www.uaa.alaska.edu/schoolofengineering/programs/pm

PM A601  Project Management Fundamentals  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate level standing, Special Fees.
Special Note: It is highly recommended that PM A601 be taken in the first semester.
Fundamental concepts of project process, stakeholders and organization environment necessary for successful project management. Team-based term projects will be developed, discussed, and presented. Major project management software will be introduced.

PM A602  Application of Project Management Processes  3 CR
Contact Hours: 3 + 0
Prerequisites: PM A601 or concurrent enrollment.
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate level standing and PM Department approval. Special Fees
Application of project management processes from project inception through closeout. Integration of project management processes in all nine Knowledge Areas through use of hands-on, end-to-end project case studies. Demonstrates mastery of project leadership, project requirements definition, stakeholder management, change control, schedule management, risk management, professional responsibility, effective communication and teamwork.

PM A603  Project Initiation and Planning  3 CR
Contact Hours: 3 + 0
Prerequisites: PM A601 and PM A602.
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: PM Department approval and graduate level standing. Special Fees.
Explore in depth Project Management (PM) Knowledge Areas, tools and techniques, and the necessary considerations when initiating and planning complex projects. Introduce tools, methods and critical issues associated with the initiation and planning of a project management plan. Students will function in teams and will be challenged with preparing and planning projects with real-world relevance.

PM A604  Project Executing, Monitoring and Control  3 CR
Contact Hours: 3 + 0
Prerequisites: PM A601 and PM A602.
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: PM Department approval and graduate level standing. Special Fees.
Explore in depth Project Management (PM) Knowledge Areas, tools and techniques, and the necessary considerations when in the executing, monitoring and controlling phases of basic and complex projects. Introduce tools, methods and critical issues associated with the execution, monitoring and controlling of a project management plan. Students will function as teams and will be challenged with monitoring and controlling projects with real-world relevance.

PM A605  Operational Integration and Project Closure  3 CR
Contact Hours: 3 + 0
Prerequisites: PM A603 and PM A604.
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: PM Department approval and graduate level standing. Special Fees.
Explore in depth Project Management (PM) Knowledge Areas, tools and techniques, and the necessary considerations for operational integration and closure processes of complex projects. Introduce tools, methods and critical issues associated with the operation integration and closure processes of completing a project management plan. Students will function in teams and will be challenged with re-prioritizations and re-assignments projects across various industries with real-world relevance.

PM A610  Project Scope Management  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate level standing, Special Fees.
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 A651 Advanced Construction Project Management 3 CR
Contact Hours: 3 + 0
Prerequisites: PM A601.
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate level standing and PM Department approval. Special Fees.
Advanced application of project management principles and processes used in the strategic selection, planning and management of construction and development projects from concept through operation. Identification, selection and application of field engineering systems and procedures to effectively meet construction project objectives.

PM A686A Capstone Project: Initiating and Planning 3 CR
Contact Hours: 3 + 0
Prerequisites: PM A603.
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate level standing and PM Department approval Special Fees.
Initiating, planning and research component of a sponsored, student-selected and faculty-approved capstone project undertaken to research and/or contribute new concepts, tools and capabilities to address relevant project management challenges. Demonstrates mastery of project management principles, processes, tools/techniques and cumulative knowledge gained from prior coursework as specifically applied to project initiating and planning processes.

PM A686B Capstone Project: Executing, Controlling and Closing 3 CR
Contact Hours: 3 + 0
Prerequisites: PM A604 and PM A686A.
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate level standing and PM Department approval Special Fees.
Executing, controlling and closing component of a sponsored, student-selected and faculty-approved capstone project undertaken to research and/or contribute new concepts, tools and capabilities to address relevant project management challenges. Course results will demonstrate mastery of project management principles, processes, and tools/techniques and cumulative knowledge gained from prior coursework as specifically applied to project initiating and planning processes.

PM A690 Selected Topics in Project Management 3 CR
Contact Hours: 3 + 0
Prerequisites: PM A604.
Registration Restrictions: Admission to the MSPM program or ESPM Department approval.
Special Fees.
Special Note: May be repeated with a change in subtitle.
Exploration of advanced issues, unique areas and specialized topics related to project management.

PM A695 Project Management Internship 1-6 CR
Contact Hours: 0 + 3-18
Prerequisites: PM A603 or PM A604.
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate level standing and ESPM Department approval.
Provides students with opportunities to practice project management skills in a professional environment. Professional work experience designed to provide students with the opportunity to investigate practical applications of project management tools and techniques within an organization. Assignments and projects arranged with cooperating organizations and agencies.

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

Offered through Matanuska-Susitna College
8295 East College Drive, Palmer, Alaska 99645, (907) 745-9774
matsu.alaska.edu/office/student-services/%20degree-programs/paramedical-technology

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.
Grade Mode: Pass/No Pass.
Corequisite: PMED A242.
Acceptance into the PMED Program.
Prerequisites: BIOL A111 with minimum grade of C and BIOL A111L and BIOL A112 with minimum grade of C and BIOL A112L.
Acceptance into the PMED Program.
Corequisite: PMED A241.
Grade Mode: Pass/No Pass.
Paramedic skills are performed in acute care settings.

PMED A251 Paramedicine II 8 CR
Contact Hours: 7 + 2
Prerequisites: PMED A241 and PMED A242.
Corequisite: PMED A252.
Integrates pathophysiological 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 I 4 CR
Contact Hours: 0 + 8
Prerequisites: PMED A241 and PMED A242.
Corequisite: PMED A253.
Grade Mode: Pass/No Pass.
Paramedic skills are performed in hospital settings, specifically in emergency departments, operating rooms, intensive care/critical care units, labor and delivery units, pediatric units, and psychiatric wards.

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 vehicule 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.
Paramedic skills are performed in hospital settings, specifically in emergency departments, operating rooms, intensive care/critical care units, labor and delivery units, pediatric units, psychiatric wards, and on air ambulances.

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/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.  
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 Note: Concurrent enrollment in PRPE A080 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 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 Reading 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.  
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  
Registration Restrictions: Appropriate score on reading placement test.  
Provides basic strategies for reading comprehension, vocabulary development, and textbook skills necessary for success in freshman college classes.

**PRPE A080** Basic Writing 2-4 CR  
Contact Hours: 2-4 + 0  
Registration Restrictions: Appropriate score on 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: 0.5-1.5 + 1-3  
Prerequisites: ASSET Writing Skills with score of 30.  
Grade Mode: Pass/No Pass.  
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.  
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  
Registration Restrictions: Appropriate score on English placement test.  
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 1-1 CR  
Contact Hours: 1-3 + 0  
Prerequisites: PRPE A076 with minimum grade of C.  
Registration Restrictions: If prerequisite is not satisfied, then appropriate score on reading placement test is required.  
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.

**PRPE A107** Introduction to College Reading 3 CR  
Contact Hours: 3 + 0  
Prerequisites: PRPE A076 with minimum grade of C.  
Registration Restrictions: If prerequisite is not satisfied, then appropriate score on reading placement test is required.  
Improves literal and critical reading skills, academic vocabulary, and textbook comprehension and retention. Explores the connection between reading and writing needed for success in college classes.

**PRPE A108** Introduction to College Writing 3 CR  
Contact Hours: 3 + 0  
Prerequisites: [PRPE A076 with minimum grade of C and PRPE A086 with minimum grade of C] or [Accuplacer-Reading Comp with score of 605 and Accuplacer-Sentence Skills with score of 075].  
Registration Restrictions: If prerequisite is not satisfied, then appropriate scores on reading and writing placement tests required.  
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 Process Safety, Health, and Environmental Awareness 3 CR  
Contact Hours: 3 + 0  
Introduction to safety, health and environmental awareness within the process industry. Examines types of hazards and applicable government regulations, and current industry standards and practices. Analyzes the potential for harm to an individual and to the environment due to unsafe conditions. Covers various types of preventative procedures, systems and equipment.

**PRT A130** Process Technology I: Equipment 4 CR  
Contact Hours: 4 + 0  
Prerequisites: PRT A101 and (MATH A105 or concurrent enrollment).  
Major Restriction: Must be Industrial Proc Instrumentation or Mechanical Technology or Petroleum Technology or Process Technology major.  
Registration Restrictions: Admitted students in Process Technology AAS major, Industrial Process Instrumentation AAS major, Petroleum Technology Undergraduate Certificate program or Mechanical Technology Undergraduate Certificate program  
Examines various types of process equipment through an in-depth analysis of construction, components and operation. Covers process flows, piping diagrams, economic impact, plus safety and environmental aspects. Surveys preventative maintenance and troubleshooting procedures.
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 Instrumenttn 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
Major Restriction: Must be Petroleum Technology or Process Technology major.
Registration Restrictions: Admitted students in Petroleum Technology Undergraduate Certificate program or Process Technology AAS major.


PRT A170  Renewable Energy Production and Operation  3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A055.

Surveys renewable energy production systems and their operation. Includes technical development, economic viability, grid integration, energy storage, and location issues. Overview of Alaska renewable energy production systems.

PRT A230  Process Technology II: Systems  4 CR
Contact Hours: 3 + 2
Prerequisites: PRT A130 and PRT A140.
Major Restriction: Must be Industrial Proc Instrumentatn or Petroleum Technology or Process Technology major.
Registration Restrictions: Admitted students in Process Technology AAS major, Industrial Process Instrumentation AAS major or Petroleum Technology Undergraduate Certificate program.

Examines how individual components interact as part of a specific process system. Covers how specific process systems integrate and function within a process facility. Reviews the scientific principles incorporated in the proper working of process systems. Surveys a selection of process industries with emphasis directed toward those located in Alaska.

PRT A231  Process Technology III: Operations  4 CR
Contact Hours: 3 + 2
Prerequisites: PRT A144 and PRT A230 and (PRT A250 or concurrent enrollment).
Major Restriction: Must be Petroleum Technology or Process Technology major.
Registration Restrictions: Admitted students in Process Technology AAS major or Petroleum Technology Undergraduate Certificate program.

Analyses the operator duties and responsibilities that occur in a process operation with emphasis focused on the unit (outside) operator position. Examines the different operational phases found in a process operation. Covers the operation of a variety of Alaska process industries and an overview of their operator duties.

PRT A250  Process Troubleshooting  3 CR
Contact Hours: 3 + 0
Prerequisites: (PRT A144 or concurrent enrollment) and PRT A230.
Major Restriction: Must be Industrial Proc Instrumenttn or Petroleum Technology or Process Technology major.
Registration Restrictions: Admitted students in Process Technology AAS major, Petroleum Technology Undergraduate Certificate program or Industrial Process Instrumentation AAS major.

Introduces the concept of troubleshooting and analyzes how instrumentation such as indicators, variables and controllers can be used for effective troubleshooting. Develops troubleshooting skills that can be used effectively throughout the process industry.

PRT A255  Quality Concepts for the Process Industry  1 CR
Contact Hours: 1 + 0
Prerequisites: PRT A230 or concurrent enrollment.
Major Restriction: Must be Process Technology major.
Registration Restrictions: Admitted students in Process Technology AAS major.

Examines quality concepts, tools and methods used in the process industry and covers the effectiveness of their implementation and continued use. Investigates root cause analysis problem solving techniques. Examines methods necessary to facilitate effective teams and teamwork interaction.

**PS - Political Science**

*Offered through the College of Arts and Sciences*

Social Sciences Building (SSB), Room 367, 786-4897
www.uaa.alaska.edu/politicalscience

**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 Northern Politics  3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A111 or PS A102.

Detailed comparative analysis of political systems, political actors, and political institutions across the northern region, to contrast such entities and evaluate the complex range of issues relevant to the region and the international community.

**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 A323** International Organizations  3 CR
Contact Hours: 3 + 0
Prerequisites: PS A101 or PS A102.

Introduction to the theory and practice of international organizations.
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 philosophical 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 Marsilius, 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 the 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.
Introduces students to American constitutional law through a study of the history of the Constitution and selected landmark Supreme Court cases. Topics covered are separation of powers, judicial review, civil rights and liberties, property and economic rights and others.

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 recertification.
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 or Senior.
Registration Restrictions: Upper division standing.
Crosslisted with: AKNS A346.
Special Note: May be used to fulfill the Alaska studies requirement for teacher certification.
An 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.
An introduction to the problems of managing agencies and implementing policies in local, state, and federal government. History and current practices of public administration and the effects of the social, economic, and political environments on administration, with an emphasis on Alaska.

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].
Crosslisted with: SOC A351.
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 variety 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 firm grounding in rigorous and ethical social science research. Examines various social science research methods, including surveys, experiments, content analyses, interviews and focus groups, and explores methodological challenges, such as hypothesis testing, measurement issues and sampling strategies.

PS A411  Tribes, Nations, and Peoples  3 CR
Contact Hours: 3 + 0
Prerequisites: AKNS A201 or PS A102.
Crosslisted with: AKNS A411.
Examines the history and development of Native American tribes, nations, and people, 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  3 CR
Contact Hours: 3 + 0
Prerequisites: PS A323 with minimum grade of C.
Examines the development of international law in the international community and analyzes issues such as nation-state sovereignty, human rights, the use of force, and international criminal law to demonstrate the application of international law.

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 A102.  
Registration Restrictions: Junior standing.  
May be stacked with: PSY 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 A102.  
Class Standing Restrictions: Must be Junior or Senior.  
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 A102.  
May be stacked with: PSY 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  
www.uaa.alaska.edu/psych  

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 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, maturation, and development across the lifespan. Special attention is given to the effects of broader sociocultural influences on development. Classical and contemporary theories relating to development across the lifespan are considered.  

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 A190  Introductory Topics in Psychology  1 CR  
Special Note: May be repeated for a maximum of 6 credits with a change of subtitles. Some topics might have an additional course fee.  
Introduction to a special topic in psychology of general interest to the community. Presented by researchers and/or behavioral health experts. Specific titles as announced.  

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 A260  Statistics for Psychology  3 CR  
Contact Hours: 3 + 0  
Prerequisites: [MATH A105 with minimum grade of C or MATH A107 with minimum grade of C or MATH A108 with minimum grade of C or MATH A172 with minimum grade of C or MATH A200 with minimum grade of C] and PSY A111 with minimum grade of C.  
Special Note: Concurrent enrollment in PSY A260L is strongly recommended. Students must earn a grade of C or higher in PSY A260 before being admitted to PSY A261, PSY A335 and/or psychology capstone courses.  
Provides basic descriptive and inferential statistical techniques used in psychology. Covers scales of measurement, central tendency, variability, normal distributions, standard scores, correlation, regression, hypothesis testing, parametric and nonparametric tests for independent and dependent groups, and one- and two-way analysis of variance.  

PSY A260L  Statistics for Psychology Lab  1 CR  
Contact Hours: 0 + 2  
Prerequisites: [MATH A105 with minimum grade of C or MATH A107 with minimum grade of C or MATH A108 with minimum grade of C or MATH A172 with minimum grade of C or MATH A200 with minimum grade of C] and PSY A111 with minimum grade of C.  
Registration Restrictions: Either prior completion or concurrent enrollment in PSY A260.  
Special Fees.  
Special Note: Either prior completion of PSY A260 or concurrent enrollment in PSY A260 is required. Students must earn a grade of C or higher in PSY A260L before being admitted to PSY A261, PSY A335 and/or psychology capstone courses.  
Laboratory that builds on the material covered in PSY A260, giving hands-on experience with data-analysis software. Includes the use of software for graphing, descriptive statistics, correlation, simple regression, t-tests, analysis of variance, and chi-square.  

PSY A261  Research Methods in Psychology  4 CR  
Contact Hours: 3 + 3  
Prerequisites: ENGL A111 with minimum grade of C and PSY A111 with minimum grade of C and PSY A260 with minimum grade of C and PSY A260L with minimum grade of C.  
Special Note: Students must earn a grade of C or higher in PSY A261 before being admitted to PSY A335 and/or psychology capstone courses.  
The lecture component introduces the scientific approach to studying behavior and mental processes and covers and practices, data collection and analysis, and APA style writing. The laboratory component provides applied experience with designing research projects and data collection as well as analysis, interpretation, and reporting of results.
PSY A313 Psychology of Women 3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A111 with minimum grade of C. Class Standing Restriction: Must be Junior or Senior.
Registration Restrictions: Junior or senior level standing or 6 credits of psychology.
Examines women’s physical, social, and emotional development across the lifespan from cultural, social, and biological perspectives. The course covers important facets of women’s lives, including love and relationships, sexuality, pregnancy and motherhood, physical and mental health, education and work, and discrimination and violence against women.

PSY A316 Motivation and Emotion 3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A111.
Special Fees.
Examines the basic theories and phenomena associated with motivational states and the behavior that results from them. Human motives are described and related to various forms of behavior. Characteristics of emotional states are identified.

PSY A329 Positive Psychology 3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A111 with minimum grade of C and [PSY A111 or PSY A150].
Survey of the subfield of psychology which focuses on optimizing human potential and psychological functioning – with an emphasis on research findings. Topics covered include the character strengths and virtues of wisdom and knowledge, courage, humanity, justice, temperance, and transcendence.

PSY A345 Abnormal Psychology 3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A111.
Introduces the psychology of abnormal behavior through research and clinical applications using a biopsychosocial model. Psychological disorders are presented within their multidimensional aspects, including historical, genetic, and developmental contexts. Topics also include history, assessment, suicide, psychopharmacology, mental institutions, psychotherapy, and prevention as well as contemporary legal issues.

PSY A355 Learning and Cognition 4 CR
Contact Hours: 3 + 3
Prerequisites: [PSY A111 with minimum grade of C and PSY A150 with minimum grade of C and PSY A260 with minimum grade of C and PSY A260L with minimum grade of C and PSY A261 with minimum grade of C and ENGL A111 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].
Special Note: The required laboratory includes work in both learning and cognition, and requires that students be familiar with research design, statistical calculations, and APA style.
Overview of major learning principles, including classical and operant conditioning. Also includes a contemporary review of the memory system, the representation of knowledge, skill acquisition, memory retrieval, forgetting, and aspects of language processing.

PSY A362 Social Science Statistics 4 CR
Contact Hours: 3 + 2
Prerequisites: [PSY A260 with minimum grade of C or STAT A252 with minimum grade of C or STAT A253 with minimum grade of C and STAT A252 with minimum grade of C and STAT A253 with minimum grade of C and [PSY A261 with minimum grade of C or PS A361 with minimum grade of C or SOC A361 with minimum grade of C].
Crosslisted with: SOC A362.
Provides a foundation in descriptive and inferential statistics used in social science research. Students identify appropriate statistics, calculate statistics manually and with SPSS, and interpret each statistic.

PSY A365 Child and Adolescent Development 3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A111 with minimum grade of C and [PSY A111 or PSY A150].
Focuses on physical, cognitive, emotional, and social development in childhood and adolescence. Surveys theoretical views of child and adolescent development and the effects of genes, maturation, environment and socialization with an emphasis on research findings.

PSY A366 Perception 3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A111 and PSY A261.
Special Fees.
Examines current theories and phenomena which effect how we perceive the world around us. Explores the capacities and limitations of the sensory apparatus, particularly vision. Considers implications of the human tendency to "misperceive" situations.

PSY A368 Personality 3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A111 with minimum grade of C and [PSY A111 or PSY A150].
Survey of modern and contemporary theories of personality and personality development. Focuses on how and why people differ in the ways they think, feel, and behave. Emphasizes research findings on the measurement of personality and biological and social bases of personality.

PSY A370 Behavioral Neuroscience 3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A111 with minimum grade of C and [PSY A111 with minimum grade of C or PSY A150 with minimum grade of C and [BIOL A102 with minimum grade of C or BIOL A111 with minimum grade of C or BIOL A115 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].
Class Standing Restriction: Must be Junior or Senior.
Registration Restrictions: Junior or senior standing.
Course Attributes: UAA GER Integrative Capstone.
Special Note: Although this course is one option for a university-wide integrative capstone, it does not meet the Psychology major capstone requirement.
Examines how behavior and cognition are mediated by biological processes. Covers neural activity, the organization of the nervous system, psychopharmacology, and biological bases of normal and abnormal behaviors.

PSY A372 Community Psychology 3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A111.
Registration Restrictions: One other 3-credit psychology course.
Focus on the impact of social and environmental factors on behaviors. Emphasis on interaction theories and research and the application to communications, dynamics of power, confrontation and conflict, and creative problem solving.

PSY A375 Social Psychology 3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A111 with minimum grade of C and [MATH A105 or MATH A107 or MATH A108 or MATH A127 or MATH A200] and [PSY A111 or PSY A150].
Focuses on individuals in social situations and the scientific study of how individuals think about, influence, and relate to one another. Includes theory and research on subjective beliefs about the self and the social world; attitudes and behaviors; genes and culture; conformity; persuasion; group dynamics; prejudice; aggression; attraction; and altruism.

PSY A380 Psychology of Stress and Coping 3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A111.
Registration Restrictions: One other 3-credit psychology course.
Special Fees.
Examines the use of self-regulation techniques in the management of stress. Topics include cognitive behavior strategies, goal setting, time management, assertiveness training, relaxation techniques, biofeedback, diet, exercise, and alternative health practices.

PSY A398 Individual Research 3 CR
Contact Hours: 1 + 6
Prerequisites: PSY A260 and PSY A260L and PSY A261.
Registration Restrictions: Faculty permission.
Special Fees.
Special Note: May be repeated for a maximum of 9 credits.
Under the supervision of a faculty member either (a) initial participation on a team where the student helps carry out a research project by a faculty member in psychology, or (b) initial attempt by the student to design and carry out an empirical research project in psychology.

PSY A412 Foundations of Modern Psychology 3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A111 with minimum grade of C and PSY A150 with minimum grade of C and PSY A260 with minimum grade of C and PSY A260L with minimum grade of C and PSY A261 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.
Special Note: Course meets the departmental capstone requirement for the Psychology major.
Provides an overview of psychology’s history that leads up to a discussion of the most significant issues in contemporary psychology. The seminar format provides a historical perspective that is used to understand key issues in current psychological theory and research.
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 3 CR
Contact Hours: 1 + 6
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] and PSY A111 with minimum grade of C and PSY A150 with minimum grade of C and PSY A260 with minimum grade of C and PSY A260L with minimum grade of C and PSY A261 with minimum grade of C.
Registration Restrictions: Instructor permission
Special Fees.
Special Note: Meets the departmental capstone requirement for the Psychology major.
Arranged placement in supervised settings that provide psychological experience. 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: [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] and PSY A111 with minimum grade of C and PSY A150 with minimum grade of C and PSY A260 with minimum grade of C and PSY A260L with minimum grade of C and PSY A261 with minimum grade of C.
Registration Restrictions: Two of the following courses: PSY A313, PSY A316, PSY A345, PSY A355, PSY A366, PSY A370, PSY A375
Special Note: Meets the departmental capstone requirement for the Psychology major.
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 A442 Psychopathology of Childhood and Adolescence 3 CR
Contact Hours: 3 + 0
Prerequisites: [EDSE A212 or PSY A365] and ENGL A111 with minimum grade of C and PSY A345.
Focuses on the psychological disorders of childhood and adolescence, including the classification of disorders and their diagnosis, etiology, and treatment and psychological resilience, intervention, and the importance of program evaluation. Emphasizes research findings.

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 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.
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 with minimum grade of C and [PSY A260 with minimum grade of C or STAT A252 with minimum grade of C].
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 Advanced Topics in Psychology 1-3 CR
Contact Hours: 1-3 + 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 different topics (different subtitles).
Advanced coverage of a special topic in psychology of interest to those with previous coursework in psychology. Presented by researchers and/or behavioral health experts. Specific titles as announced. Some topics might have an additional course fee.

PSY A492 Senior Seminar: Contemporary Topics in Psychology 3 CR
Contact Hours: 3 + 0
Registration Restrictions: 12 credits of psychology.
May be stacked with: PSY A690.
Special Note: May be repeated with a change in subtitle for a maximum of 6 credits.
In-depth, discussion-oriented seminar for senior students who are pursuing a major or minor in psychology. Uses original-source materials and journal articles about a contemporary issue in psychology. Specific titles to be announced. Some topics might have an additional course fee.

PSY A495 Applied Behavior Analysis Practicum 3 CR
Contact Hours: 1 + 9
Prerequisites: PSY A445 with minimum grade of B.
Registration Restrictions: Instructor permission
Arranged placement in supervised settings that provide Applied Behavior Analytic (ABA) services. Focus on behavior change procedures, data collection and graphing, program development, functional behavior assessment, and behavior intervention plans.

PSY A498 Individual Research 3 CR
Contact Hours: 1 + 6
Prerequisites: PSY A398 or PSY A420.
Registration Restrictions: Faculty permission.
Special Fees.
Special Note: May be repeated for a maximum of 9 credits.
Under the supervision of a faculty member either a) advanced participation on a team where the student helps carry out a research project by a faculty member in Psychology, or b) advanced attempt by the student to design and carry out an empirical research project in psychology.
Course Descriptions

PSY A499  Senior Thesis  3 CR
Contact Hours: 0 + 9
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] and PSY A111 with minimum grade of C and PSY A150 with minimum grade of C and PSY A260 with minimum grade of C and PSY A260L with minimum grade of C and PSY A261 with minimum grade of C and PSY A420L.
Registration Restrictions: Instructor approval.
Special Note: May be repeated for a maximum of 6 credits.

Independent research under faculty supervision. Culminates in a document prepared to APA publication standards. Presentation at a research conference 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.

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 interconnection 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 A463.

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.

Presents an overview of attention, memory, appraisal, and emotion with applications to clinical psychology in a cultural context. Cultural influences on emotional experience and cognition are explored. The etiology and treatment of psychological disorders with significant cognitive and affective disturbance are explored.

PSY A608  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 theories, methods, and applications of program evaluation and community consultation as tools for facilitating systemic and programmatic changes in community and clinical settings. Seminar covers techniques of entry into various settings and designing program evaluations in collaboration with various community organizations.

PSY A617  Program Evaluation and Community Consultation II  3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A616.

Registration Restrictions: Admission to the Ph.D. Program in Clinical-Community Psychology.

The second in a two-course series, introducing the principles and dynamics involved in various types of consultative relationships in community and clinical settings, with a focus on cross-cultural and ethical issues. Covers methods of program evaluation implementation and use of program evaluation findings for consulting with relevant stakeholders.

PSY A622  Multicultural Psychopathology  3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A616.

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 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.
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.
Deeplens 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.
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 A620.
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 9 credits.
A supervised clinical practicum experience in psychological interview, diagnosis, and psychotherapy. Applied techniques focusing on delivery of clinical services in traditional or non-traditional clinical settings. Cultural factors are considered in each of these areas.

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 9 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 A623.
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 I 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, logistic regression, and cluster analysis.
PSY A665 Psychotherapy Practicum 1-3 CR
Contact Hours: 2 + 10-20
Prerequisites: (PSY A62 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.

PSY A670 Psychotherapy Internship 3 CR
Contact Hours: 2 + 20
Prerequisites: PSY A665.
Registration Restrictions: Admission to MS Clinical Psychology graduate program; candidacy status, only with instructor permission. 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 A677 Multidisciplinary Seminar in Children’s Mental Health 1 CR
Contact Hours: 1 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing Crosslisted with: EDSE A677 and SWK A677. Special Note: Course is one credit per semester over two sequential semesters.
Provides an interdisciplinary approach to working with children and families in a variety of behavioral/mental health and educational settings.

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. Special Fees.
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. Instructor permission available for individuals with professional experience in substance abuse treatment.
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. Instructor permission available for individuals with professional experience in substance abuse treatment.
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.
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 A653.
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 + 40
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.
Deepens understanding and application of assessment and intervention techniques in diverse settings. Students are placed in clinical or community settings for 40 hours per week to apply and sharpen skills. Students work under a local supervisor who manages student caseloads and assignments in collaboration with the course instructor.

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. Special Fees.
Prepares 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 A690 Advanced Topics in Psychology 1-3 CR
Contact Hours: 1-3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing in psychology. May be stacked with: PSY A480 and PSY A482. Special Note: May be repeated for a maximum of 6 credits with different topics (different subtitles).
Special topics of interest in psychology offered to those with graduate standing in psychology. Presented by researchers and/or behavioral health experts. Designed for graduate students seeking advanced training in special areas of clinical psychology. Specific titles to be announced.

PSY A691 Children’s Mental Health Systems of Care 3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing Crosslisted with: EDSE A691 and SWK A691.
Expands systems of care as a coordinated network of community-based services and supports that are organized, multidisciplinary, and in partnership with youth and family. Addresses the cultural and linguistic needs of families in order to meet the challenges of children and youth with serious mental health needs.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Contact Hours</th>
<th>Registration Restrictions</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTA A101</td>
<td>Fundamentals of Physical Therapy</td>
<td>2 CR</td>
<td></td>
<td>Contact Hours: 2 + 0</td>
<td>Departmental approval</td>
<td>Introduces the profession of physical therapy, to include the history, scope of practice, professionalism, the American Physical Therapy Association (APTA), ethical behavior, the health care team, interpersonal communication and documentation in a medical record.</td>
</tr>
<tr>
<td>PTA A105</td>
<td>Tests and Measures</td>
<td>3 CR</td>
<td></td>
<td>Contact Hours: 1.5 + 3</td>
<td>Departmental approval</td>
<td>Introduces common standardized tests and measures used to determine the interventions required for the plan of care developed by the supervising physical therapist.</td>
</tr>
<tr>
<td>PTA A110</td>
<td>Kinesiology and Biomechanics</td>
<td>3 CR</td>
<td></td>
<td>Contact Hours: 2 + 2</td>
<td>Departmental approval</td>
<td>Presents human anatomy with an emphasis on the musculoskeletal system, identification of structures and their relationship to function, normal and abnormal biomechanical principles of joint patterns and gait. Explores human movement during performance of activities, especially the geometry of movement (kinematics) and the forces influencing movement (kinetics).</td>
</tr>
<tr>
<td>PTA A120</td>
<td>Rehabilitation I</td>
<td>3 CR</td>
<td></td>
<td>Contact Hours: 1.5 + 3</td>
<td>Departmental approval</td>
<td>Introduces the clinical manifestations and common management strategies for diseases/disorders of the musculoskeletal, endocrine, integumentary, cardiovascular and pulmonary systems as they pertain to physical therapy interventions.</td>
</tr>
<tr>
<td>PTA A130</td>
<td>Physical Therapy Interventions I</td>
<td>4 CR</td>
<td></td>
<td>Contact Hours: 2 + 4</td>
<td>Departmental approval</td>
<td>Introduces adaptive/assistive devices and equipment, gait training, activities of daily living (ADLs), wheelchair skills, isolation/standard precautions, aseptic technique, draping, transfers, passive range of motion (PRM), and mechanical modalities.</td>
</tr>
<tr>
<td>PTA A150</td>
<td>Psychosocial Aspects of Health Care</td>
<td>2 CR</td>
<td></td>
<td>Contact Hours: 2 + 0</td>
<td>Departmental approval</td>
<td>Introduces health-related human behavior to include coping and adjustment behaviors in acute and chronic illness, and the role that culture and family systems play in response to illness or injury.</td>
</tr>
<tr>
<td>PTA A195</td>
<td>Clinical Practicum I</td>
<td>1 CR</td>
<td></td>
<td>Contact Hours: 0 + 3</td>
<td>Departmental approval</td>
<td>Provides the Physical Therapist Assistant student an opportunity to observe and participate in a structured clinical setting under the supervision of a licensed physical therapist or physical therapist assistant. Provides an opportunity for the student to perform tests and interventions, and apply critical thinking skills developed in prior coursework.</td>
</tr>
<tr>
<td>PTA A210</td>
<td>Therapeutic Exercise</td>
<td>4 CR</td>
<td></td>
<td>Contact Hours: 2 + 4</td>
<td>Minimum grade of C</td>
<td>Prepares the student for transition into the workforce. Includes discussion of the national Physical Therapist Assistant (PTA) exam, employment, Alaska practice act, professional development, employment opportunities and community service. Presents challenges and opportunities involved with providing physical therapy in the state of Alaska.</td>
</tr>
<tr>
<td>PTA A220</td>
<td>Rehabilitation II</td>
<td>3 CR</td>
<td></td>
<td>Contact Hours: 1.5 + 3</td>
<td>Minimum grade of C</td>
<td>Introduces clinical manifestations and common management strategies for diseases/disorders of the neurological, immune, lymphatic, hepatic/biliary, hematologic, gastrointestinal and genitourinary systems as they pertain to physical therapy interventions.</td>
</tr>
<tr>
<td>PTA A250</td>
<td>Neurological Interventions Across the Lifespan</td>
<td>3 CR</td>
<td></td>
<td>Contact Hours: 2 + 2</td>
<td>Departmental approval</td>
<td>Introduces fundamentals of growth, development and aging, with implications for physical therapy. Focuses on neurological interventions used throughout the lifespan for individuals with abnormal development, neurological injuries and neurological disorders.</td>
</tr>
<tr>
<td>PTA A292</td>
<td>Physical Therapist Assistant Seminar</td>
<td>2 CR</td>
<td></td>
<td>Contact Hours: 2 + 0</td>
<td>Minimum grade of C</td>
<td>Provides continued supervised physical therapy experience in a healthcare setting.</td>
</tr>
<tr>
<td>PTA A295A</td>
<td>Clinical Practicum II</td>
<td>5 CR</td>
<td></td>
<td>Contact Hours: 0 + 15</td>
<td>Departmental approval</td>
<td>Provides continued supervised physical therapy experience in a healthcare setting.</td>
</tr>
<tr>
<td>PTA A295B</td>
<td>Clinical Practicum III</td>
<td>5 CR</td>
<td></td>
<td>Contact Hours: 0 + 15</td>
<td>Departmental approval</td>
<td>Provides continued supervised physical therapy experience in a healthcare setting.</td>
</tr>
</tbody>
</table>
RADT - Radiologic Technology

Course Descriptions

Offered through the College of Health
Allied Health Sciences Building (AHS), Room 151B, 786-6940
www.uaa.alaska.edu/alliedhealth/academics/mis/radtech

RADT A101 Radiation Protection and Biology for Limited Radiography Professionals 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Must be 18 years or older
Prerequisites: RADT A101.
Introduces theory and application of diagnostic radiography for limited radiographers. Includes medical and legal responsibilities of radiography, principles of radiation protection, equipment operation and maintenance, image production and evaluation, and patient care and management.

RADT A102 Principles of Radiography for Limited Practice I 3 CR
Contact Hours: 3 + 0
Prerequisites: RADT A101.
Applies the concepts of technique selection, radiographic accessories, exposure and processing, and radiation protection. Radiographic anatomy, patient care skills, body mechanics, and radiographic positioning skills will be emphasized.

RADT A103 Radiographic Procedures for Limited Practice II 3 CR
Contact Hours: 3 + 0
Prerequisites: RADT A101.
Offers the opportunity to apply the concepts of technique selection, radiographic accessories, exposure and processing, and radiation protection. Specific radiographic anatomy, patient care skills, body mechanics, and radiographic positioning skills will be emphasized. Application areas include procedures in abdomen, abdomen and pelvic skeleton.

RADT A111 Introduction to Radiologic Technology and Patient Care 3 CR
Contact Hours: 2.5 + 1
Registration Restrictions: Department approval.
Special Fees.
Provides an overview of radiography and the practitioner’s role in the health care delivery system. Examines principles, practices, and policies of health care organizations, basic concepts of patient care, occupational safety, patient consent, and medical ethics and law as it relates to the profession.

RADT A131 Radiographic Procedures I 3 CR
Contact Hours: 2 + 3
Registration Restrictions: Department approval
Provides instruction regarding basic principles of radiographic procedures in performing examinations of the chest, abdomen, skeleton, and pelvic girdle. Introduces the principles of radiation protection. Incorporates radiographic terminology and anatomy and allows for demonstration, practice, and evaluation of techniques in a laboratory environment.

RADT A132 Radiographic Procedures II 3 CR
Contact Hours: 2 + 3
Prerequisites: RADT A131.
Registration Restrictions: Department approval
Special Fees.
Provides instruction regarding basic principles of radiographic procedures in performing examinations of the spine, bony thorax, alimentary tract, genitourinary system, and associated specialized procedures. Incorporates radiographic terminology and anatomy and allows for demonstration, practice, simulation, and evaluation of techniques in a laboratory environment.

RADT A133 Radiographic Procedures III 3 CR
Contact Hours: 2 + 2
Prerequisites: RADT A132.
Registration Restrictions: Department approval.
Special Fees.
Provides instruction regarding basic principles of radiographic procedures in performing skull procedures and Computed Tomography for the radiographer. Introduces sectional anatomy for the radiographer and incorporates radiographic terminology and anatomy allowing for demonstration, practice, and evaluation of performance in a laboratory environment.

RADT A151 Medical Imaging Physics 2 CR
Contact Hours: 2 + 0
Registration Restrictions: Department approval.
Prerequisites: RADT A131 and RADT A151.
Introduces the fundamental knowledge of atomic structure and terminology, the nature and characteristics of radiation, x-ray production, and the fundamentals of photon interactions with matter. Includes introduction to accessory devices that influence image quality and patient exposure.

RADT A161 Fundamentals of Medical Imaging I 3 CR
Contact Hours: 3 + 0
Prerequisites: RADT A131 and RADT A151.
Introduces principles regarding factors that govern and influence the production and recording of radiographic images. Film and electronic imaging with related accessories will be emphasized. Provides concepts that emphasize the importance of imaging standards, discussion of problem solving techniques for image evaluation, and factors that affect image quality.

RADT A171 Fundamentals of Medical Imaging II 3 CR
Contact Hours: 3 + 0
Prerequisites: RADT A161.
Introduces principles regarding factors that govern and influence the production and recording of radiographic images. Film and electronic imaging with related accessories will be emphasized. Provides concepts that emphasize the importance of imaging standards, discussion of problem solving techniques for image evaluation, and factors that affect image quality.

RADT A195A Radiography Practicum I 2 CR
Contact Hours: 1 + 8
Registration Restrictions: Department approval.
Grade Mode: Pass/No Pass.
Special Fees.
Provides an opportunity to observe, participate, and apply basic radiographic skills in a structured and supervised health care environment, including patient interaction in the performance of examinations of the chest, abdomen, and lower extremities. Duties are assigned by the UAA instructor and supervised by an ARRT registered radiologic technologist.

RADT A195B Radiography Practicum II 3 CR
Contact Hours: 0 + 16
Registration Restrictions: Department approval.
Grade Mode: Pass/No Pass.
Special Fees.
Provides structured and supervised application of radiographic skills in a health care facility, including patient interaction in the performance of examinations of the spine, thorax, upper and lower gastrointestinal, and genitourinary systems. Provides opportunity for continued development of previously gained practicum experience. Duties are assigned by the UAA instructor and supervised by an ARRT registered radiologic technologist.

RADT A195C Radiography Practicum III 3 CR
Contact Hours: 0 + 13
Registration Restrictions: Department approval.
Grade Mode: Pass/No Pass.
Special Fees.
Provides structured and supervised application of radiographic skills in a health care facility, including patient interaction in the performance of examinations of the cranium, as well as trauma, mobile, and pediatric radiography. Provides opportunity for continued development of previous experience gained in the clinical environment. Duties are assigned by UAA instructor and supervised by an ARRT registered radiologic technologist.

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.

University of Alaska Anchorage 2013-2014 Catalog
www.uaa.alaska.edu
### Course Descriptions

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<tr>
<th>Course Code</th>
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</tr>
</thead>
<tbody>
<tr>
<td>RADT A272</td>
<td>Quality Control in Medical Imaging</td>
<td>2 CR</td>
<td>2 + 0</td>
<td>-</td>
<td>Department approval</td>
</tr>
<tr>
<td></td>
<td>Introduces various quality management standards and procedures required in the radiographic and fluoroscopic image process. Discusses management, collection and analysis of quality control data and/or test instrumentation. Includes governmental standards and guidelines that govern accreditation, licensure and provider standards.</td>
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<tr>
<td>RADT A280</td>
<td>Medical Imaging Pathology</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>-</td>
<td>A133</td>
</tr>
<tr>
<td></td>
<td>Provides an introduction to the theories of disease causation and the pathophysiology of disorders that compromise healthy systems. Etiology, pathophysiology, responses, clinical manifestations, radiographic appearance, and management of alterations in body systems are presented. Multiple imaging modalities for pathologic correlation are included.</td>
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</tr>
<tr>
<td>RADT A282</td>
<td>Current Issues in Radiologic Technology</td>
<td>1 CR</td>
<td>0 + 3</td>
<td>-</td>
<td>A133, A195C</td>
</tr>
<tr>
<td></td>
<td>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.</td>
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</tr>
<tr>
<td>RADT A295A</td>
<td>Radiography Practicum IV</td>
<td>5 CR</td>
<td>0 + 24</td>
<td>-</td>
<td>A195C</td>
</tr>
<tr>
<td></td>
<td>Grade Mode: Pass/No Pass. Special Fees.</td>
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<tr>
<td></td>
<td>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.</td>
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<tr>
<td>RADT A295B</td>
<td>Radiography Practicum V</td>
<td>5 CR</td>
<td>0 + 24</td>
<td>-</td>
<td>A295A</td>
</tr>
<tr>
<td></td>
<td>Grade Mode: Pass/No Pass. Special Fees.</td>
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<tr>
<td></td>
<td>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.</td>
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<tr>
<td>RADT A311</td>
<td>Mammoigraphy for Imaging Professionals</td>
<td>2/3 CR</td>
<td>2 or 0 + 3</td>
<td>-</td>
<td>Registration approval</td>
</tr>
<tr>
<td></td>
<td>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).</td>
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<tr>
<td></td>
<td>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. Preparies the students to sit for the ARRT National Certification Examination, which is required by the MQSA Standards.</td>
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<tr>
<td>RE A020</td>
<td>Applied Physics for Sustainable Energy</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>-</td>
<td>A100 or concurrent enrollment</td>
</tr>
<tr>
<td></td>
<td>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.</td>
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</tr>
<tr>
<td>RE A010</td>
<td>Introduction to Diesel Engines</td>
<td>3 CR</td>
<td>2 + 2</td>
<td>-</td>
<td>A100</td>
</tr>
<tr>
<td></td>
<td>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.</td>
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</tr>
<tr>
<td>RE A130</td>
<td>Introduction to Small Wind Systems</td>
<td>1 CR</td>
<td>1 + 0</td>
<td>-</td>
<td>A100</td>
</tr>
<tr>
<td></td>
<td>Presents basics of the design, installation and operation of small wind systems with an emphasis on residential-scale systems. Introduces physics related to wind energy, ways of harvesting and using wind energy, turbine and site selection, energy storage vs. grid-tie considerations, system components, installation techniques, cost/benefit considerations, and safety.</td>
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<tr>
<td>RE A140</td>
<td>Home Energy Basics</td>
<td>1 CR</td>
<td>1 + 0</td>
<td>-</td>
<td>A100</td>
</tr>
<tr>
<td></td>
<td>Presents an overview of space heating and electricity use and production for Alaskan homes and small businesses. Includes fundamentals of building energy flows, energy efficiency and methods for decreasing fossil fuel consumption. Introduces the relationship between efficiency measures and renewable energy systems.</td>
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<tr>
<td>RE A200</td>
<td>Power Generation Systems</td>
<td>3 CR</td>
<td>2 + 2</td>
<td>-</td>
<td>A102</td>
</tr>
<tr>
<td></td>
<td>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.</td>
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<tr>
<td>RE A201</td>
<td>Power System Management</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>-</td>
<td>A101 or concurrent enrollment and A200 or concurrent enrollment</td>
</tr>
<tr>
<td></td>
<td>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.</td>
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<tr>
<td>RE A203</td>
<td>Sustainable Energy Project Development</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>-</td>
<td>A100</td>
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<tr>
<td></td>
<td>Synthesizes facets of project development and management within the context of sustainable energy projects.</td>
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<tr>
<td>RE A210</td>
<td>Cold Climate Construction</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>-</td>
<td>A100</td>
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<tr>
<td></td>
<td>Covers design, construction and basic building science related to understanding, planning, and constructing or retrofitting a durable home in a difficult climate.</td>
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</tbody>
</table>

### RE - Renewable Energy

Offered through Matanuska-Susitna College
8295 East College Drive, Palmer, Alaska 99645, (907) 745-9774
http://matsu.alaska.edu/office/student-services/degree-programs/renewable-energy

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Contact Hours</th>
<th>Prerequisites</th>
<th>Registration Restrictions</th>
</tr>
</thead>
<tbody>
<tr>
<td>RE A100</td>
<td>Introduction to Sustainable Energy</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>-</td>
<td>A100</td>
</tr>
<tr>
<td></td>
<td>Introduces students to the field of sustainable energy. Topics include current energy use, principles of energy conservation and efficiency, renewable energy resources, technologies, storage and hardware options, regulations, applicable codes, and career pathways.</td>
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<tr>
<td>RE A101</td>
<td>Industrial Safety for Renewable Energy</td>
<td>2 CR</td>
<td>2 + 0</td>
<td>-</td>
<td>-</td>
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<tr>
<td></td>
<td>Emphasizes electrical and industrial safety for working in the renewable energy industry. Topics include hazard awareness, regulations, and mitigation skills.</td>
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</tr>
</tbody>
</table>
RH - Refrigeration & Heating

Offered through Matanuska-Susitna College
8295 East College Drive, Palmer, Alaska 99645, (907) 745-9774
http://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
Offered only at Matanuska-Susitna College.
Focuses on physical laws applied to refrigeration and heating. Introduces practical aspects of psychrometrics, 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 and RH A126.
Offered only at Matanuska-Susitna College.
Provides an understanding of commercial refrigeration systems including hot gas defrosting, lubrication, contaminants, 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 and RH A132.
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.
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 A109.
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 A225.
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 A203.
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.

RUSS - Russian
Offered through the College of Arts and Sciences
Administration/Humanities Building (ADM), Suite 287, 786-4030
www.uaa.alaska.edu/languages

RUSS A101  Elementary Russian 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 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 A102  Elementary Russian II  4 CR
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  4 CR
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 intermediate level. Students critically examine diverse cultural perspectives. Course conducted in Russian.

RUSS A202  Intermediate Russian II  4 CR
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  1 CR
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.
Special Note: May be repeated once for credit.
A maintenance and skills enhancement course for intermediate students of Russian, designed primarily to help them to retain and solidify what they have learned in Elementary Russian. With the focus on oral communication, the course emphasizes speaking, listening comprehension, and vocabulary building.

RUSS A301  Advanced Russian I  4 CR
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.
Special Note: Course conducted in Russian.
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  4 CR
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.
Special Note: Course conducted in Russian.
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  3 CR
Contact Hours: 3 + 0
Prerequisites: RUSS A202.
Registration Restrictions: RUSS A301 and RUSS A302 strongly recommended.
Special Fees.
Special Note: Course conducted in Russian. May be repeated for credit with a change of subtitle.
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 Russian  3 CR
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. Up to 3 credits can count toward a minor or major in Languages with an emphasis in Russian. Course conducted in Russian.
A focused examination of a single aspect of the Russian language.

RUSS A427  Post-Soviet Culture and Society  3 CR
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.
Special Note: Course conducted in English.
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.

RUSS A490  Selected Topics in Russian Culture  3 CR
Contact Hours: 3 + 0
Prerequisites: RUSS A302 with minimum grade of C.
Special Note: May be repeated for credit with change in subtitle. Course conducted in Russian.
Focuses on critical analysis of diverse cultural and artistic traditions from Russian-speaking communities using a variety of disciplinary methodologies (e.g., historical, cultural, socio-political) and related terminology. Enhances Russian language skills in writing, reading, speaking, listening and cross-cultural literacy.

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  3 CR
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.

SOC A110  Introduction to Gerontology: Multidisciplinary Approach  3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Social Sciences Requirement.
A multidisciplinary course that provides an introduction to gerontology. Covers many aspects of aging including those associated with biology, physiology, medical care, psychology, culture, sociology, and social policies.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>SOC A201</td>
<td>Social Problems and Solutions</td>
<td>3 CR</td>
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<tr>
<td></td>
<td>Contact Hours: 3 + 0</td>
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<tr>
<td></td>
<td>Course Attributes: UAA GER Social Sciences Requirement.</td>
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<tr>
<td></td>
<td>Survey of contemporary social problems. Focuses on the causes and consequences of social problems and examines processes through which social problems are identified, prioritized, and addressed.</td>
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<tr>
<td>SOC A202</td>
<td>Social Institutions</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td></td>
<td>Course Attributes: UAA GER Social Sciences Requirement.</td>
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<td></td>
<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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<tr>
<td>SOC A230</td>
<td>Demography</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td></td>
<td>Course Attributes: UAA GER Social Sciences Requirement.</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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<tr>
<td>SOC A251</td>
<td>Crime and Delinquency</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td></td>
<td>Prerequisites: JUST A110 or SOC A101.</td>
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<tr>
<td></td>
<td>Crosslisted with: JUST A251.</td>
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<tr>
<td></td>
<td>Course Attributes: UAA GER Social Sciences Requirement.</td>
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<tr>
<td></td>
<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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<tr>
<td>SOC A252</td>
<td>Women and Social Action</td>
<td>3 CR</td>
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<tr>
<td></td>
<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: SOC A101 with minimum grade of C or WS A200 with minimum grade of C.</td>
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<td>Crosslisted with: WS A252.</td>
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<tr>
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<td>Examines the evolving role of women in contemporary organizations and social movements with an emphasis on leadership.</td>
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<tr>
<td>SOC A253</td>
<td>Sociology of Gender</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td></td>
<td>Prerequisites: SOC A101 or PSY A111.</td>
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<td>Special Fees.</td>
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<td></td>
<td>Examines effects of social class, ethnicity, race and gender on identity and socialization in adolescence.</td>
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<tr>
<td>SOC A307</td>
<td>Sociology of Law</td>
<td>3 CR</td>
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<tr>
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<td>Contact Hours: 3 + 0</td>
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<tr>
<td></td>
<td>Prerequisites: SOC A101.</td>
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<td></td>
<td>Special Note: May be repeated twice for credit with a change in subtitle.</td>
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<td></td>
<td>Analysis of contemporary social issues from a variety of sociological perspectives.</td>
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<tr>
<td>SOC A309</td>
<td>Urban Sociology</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<tr>
<td></td>
<td>Prerequisites: SOC A101.</td>
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<tr>
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<td>Special Note: Offered Alternate Fall Semesters.</td>
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<tr>
<td></td>
<td>Provides a historical and contemporary overview of selected social, political, and economic factors that influence the provision of health care in America.</td>
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<td></td>
<td>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.</td>
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<tr>
<td>SOC A310</td>
<td>Sociology of Aging</td>
<td>3 CR</td>
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<tr>
<td></td>
<td>Contact Hours: 3 + 0</td>
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<tr>
<td></td>
<td>Prerequisites: SOC A101 or SOC A110.</td>
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<tr>
<td></td>
<td>Special Note: Offered Fall and Spring Semesters.</td>
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<tr>
<td></td>
<td>Examines 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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</tbody>
</table>
SOC A380  Sociology of Globalization  3 CR  
Contact Hours: 3 + 0  
Prerequisites: ANTH A101 with minimum grade of C or ANTH A202 with minimum grade of C or GEOG A101 with minimum grade of C or INTL A101 with minimum grade of C or SOC A101 with minimum grade of C.  
Globalization refers to a variety of political, economic, cultural and social changes which transform the world through increasingly interconnected flows of information, capital, goods, services, labor and culture in dense global networks. This course covers the processes and consequences of globalization through an interdisciplinary framework.

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 or Senior.  
Registration Restrictions: Must be senior standing.  
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 with minimum grade of C.  
Exams how society is organized in ways that either contribute to sustainability or hinder it.

SOC A405  Social Change  3 CR  
Contact Hours: 3 + 0  
Prerequisites: SOC A101.  
Explores principal theoretical perspectives, sources, processes, patterns, and consequences of social change in society. Emphasizes the nature of social change and its effect on the well-being of people and their environment.

SOC A407  Power in the Workplace: The Sociology of Formal Organizations  3 CR  
Contact Hours: 3 + 0  
Prerequisites: SOC A101 with minimum grade of C or SOC A201 with minimum grade of C or SOC A202 with minimum grade of C.  
Registration Restrictions: Prior completion of 6 credit required Social Science GER.  
Examines formal organizations as social structures created for the purposes of acquiring, distributing, manipulating, maintaining, expanding and legitimizing power. Explores the theory, language and methodology of organizational studies. Considers organizational interrelationships among purposes, structures, functions, members and stakeholders. Historical framework and contemporary models of organizational theory and behavior are analyzed.

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 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: [PS A361 with minimum grade of C or SOC A361 with minimum grade of C] and SOC A402 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.  
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 or Senior.  
Registration Restrictions: Junior or senior 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](http://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 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 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 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.  
Special Note: Course conducted in Spanish.  
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.  
Special Note: Course conducted in Spanish.  
Continuation of first semester in advanced Spanish. Further refines listening, speaking, reading, and writing skills for effective interaction in communicatively complex situations. Students critically analyze diverse cultural topics.
Course Descriptions

SPAN A310 Selected Topics: Literary Trends and Traditions 3 CR
Contact Hours: 3 + 0
Prerequisites: SPAN A302 with minimum grade of C.
Special Fees.
Special Note: May be repeated once for credit with a change of subtitle. Course conducted in Spanish.

Focuses on diverse literary traditions of multiple Spanish-speaking communities. Critical analysis applied through a variety of disciplinary methodologies (e.g., historical, cultural, artistic). Terminology is explored and developed. Enhances Spanish language skills in writing, reading, speaking, listening, and cultural literacy.

SPAN A320 Studies in Contemporary Cultures 4 CR
Contact Hours: 4 + 0
Prerequisites: SPAN A302 with minimum grade of C.
Special Fees.
Special Note: Course may be repeated once for credit with change of subtitle. Course conducted in Spanish.

Examines contemporary works through various media (print, electronic and audiovisual) of multiple Spanish-speaking communities. Critical analysis through a variety of disciplinary methodologies (e.g., historical, cultural, artistic); terminology also explored and developed. Enhances Spanish language skills in writing, reading, speaking, listening, and cultural literacy.

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 of subtitle. Course conducted in Spanish.

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 Selected Topics: Studies in Hispanic Literature and Culture 3 CR
Contact Hours: 3 + 0
Prerequisites: SPAN A302 with minimum grade of C.
Special Fees.
Special Note: May be repeated twice for credit with a change of subtitle. Course conducted in Spanish.

Focuses on the intensive study of authors, literary movements, periods and genres in their historical and cultural contexts. Enhances Spanish language skills in reading, listening, writing, speaking and cultural literacy.

SPAN A470 Spanish Linguistics: History of the Language 3 CR
Contact Hours: 3 + 0
Prerequisites: SPAN A302 with minimum grade of C.
Special Fees.
Special Note: Course conducted in Spanish.

Focuses on the fundamental areas of Spanish linguistics: phonology, morphology, syntax, and semantics. The diachronic evolution of the Spanish language is examined from its origins in the Iberian Peninsula to its present manifestations spanning continents in a globalized world. Special attention is given to sociolinguistic theory as a means by which to analyze and understand linguistic change and dialectal variation as reflective of historical, political, and cultural influences.

SPAN A490 Selected Topics: Hispanic Culture and Civilization 3 CR
Contact Hours: 3 + 0
Prerequisites: SPAN A302 with minimum grade of C.
Special Fees.
Special Note: Course may be repeated twice for credit with a change of subtitle. Course conducted in Spanish.

Focuses on critical analysis of diverse artistic traditions from Spanish-speaking communities using a variety of disciplinary methodologies (e.g., historical, cultural, socio-political) and related terminology. Enhances Spanish language skills in writing, reading, speaking, listening and cross-cultural literacy.

STAT A252 Elementary Statistics 3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A105 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.
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.

A calculus-based introduction to probability and statistics with emphasis on scientific applications. Topics include probability, probability distributions for discrete and continuous random variables, joint distributions, mathematical expectation, moment generators, functions of random variables, estimation, and the study of power and significance of hypothesis tests.

STAT A253 Applied Statistics for the Sciences 4 CR
Contact Hours: 4 + 0
Prerequisites: MATH A107 or MATH A109.
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.

Intensive survey course with applications for the sciences. Topics include descriptive statistics, probability, random variables, binomial, Poisson and normal distributions, estimation and hypothesis testing of common parameters, analysis of variance for single factor and two factors, correlation, and simple linear regression. A major statistical software package will be utilized.

STAT A307 Probability and Statistics 4 CR
Contact Hours: 4 + 0
Prerequisites: MATH A201 with minimum grade of C or MATH A272 with minimum grade of C.
Course Attributes: UAA GER Quantitative Skill Requirement.

A calculus-based introduction to probability and statistics with emphasis on scientific applications. Topics include probability, probability distributions for discrete and continuous random variables, joint distributions, mathematical expectation, moment generators, functions of random variables, estimation, and the study of power and significance of hypothesis tests.

STAT A308 Intermediate Statistics for the Sciences 3 CR
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 3 CR
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 3 CR
Contact Hours: 3 + 0
Prerequisites: STAT A308.
Special Fees.

Simple and multiple regression, statistical inferences in regression, matrix formulation of regression, polynomial 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.

### STAT A490 Selected Topics in Statistics
- **Contact Hours:** 1-3 + 0
- **Registration Restrictions:** Instructor’s permission and a designated STAT course.
- **Special Fees:**
  - Special Note: Depending on topics selected, use of a statistical software package may be required. May be repeated for credit with a change of subject title.

### STAT A601 Statistical Methods
- **Contact Hours:** 3 + 0
- **Prerequisites:** STAT A252 or STAT A253.
- **Registration Restrictions:** Instructor approved introductory statistics course.
- **Special Fees:**
  - Parametric and nonparametric statistical methods in research for graduate students majoring in natural sciences or social sciences. The topics are selected from, but not restricted to, contingency tables and Chi-square tests, correlation, simple linear regression and multiple regression, design and analysis of experiments, logistic regression, and introduction to multivariate statistics. A major statistical software package is used as a tool to aid calculations required for many of the techniques. A research project is required from each student as part of the course requirement.

## SWK - Social Work

### SWK A206 Introduction to Social Work
- **Contact Hours:** 3 + 0
- **Prerequisites:** HUMS A106 or SWK A106.
- **Description:** Introduces the profession of social work and its place in the social welfare establishment. 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.
- **Description:** 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
- **Contact Hours:** 1-3 + 0
- **Special Note:** May be repeated for credit with a change of topics for a maximum of 6 credits.
- **Description:** Introduction to special topics related to social work practice.

### SWK A330 Social Work Practice I
- **Contact Hours:** 3 + 2
- **Prerequisites:** SWK A206.
- **Description:** 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
- **Contact Hours:** 3 + 0
- **Prerequisites:** SWK A330.
- **Description:** 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
- **Contact Hours:** 3 + 0
- **Prerequisites:** PSY A150 and [BIOL A102 or BIOL A111 or BIOL A112 or BIOL A115 or BIOL A116 or LIBS A102 or LIBS A201].
- **Description:** 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
- **Contact Hours:** 3 + 0
- **Prerequisites:** ENGL A111 and [HUMS A106 or SWK A106].
- **Description:** 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
- **Contact Hours:** 3 + 0
- **Prerequisites:** SWK A206.
- **Description:** 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
- **Contact Hours:** 3 + 0
- **Prerequisites:** EDSE A212 with minimum grade of C or PSY A150 with minimum grade of C.
- **Description:** Provides an in-depth overview of child welfare policies, public and private social services, and empirically supported child welfare practices within the context of the social work profession.

### SWK A410 Trauma in Childhood
- **Contact Hours:** 3 + 0
- **Prerequisites:** EDSE A212 or PSY A365.
- **Description:** Provides students with an understanding of the psychobiological, developmental and social implications of trauma exposure throughout childhood and adolescence. Introduces students to the principles of prevention, intervention and resiliency as related to childhood trauma.
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 A473  Geriatric Social Work Practice  3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: Departmental approval required  
May be stacked with: SWK A673.  
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 A481  Case Management in Social Work Practice  3 CR  
Contact Hours: 3 + 0  
Prerequisites: SWK A330.  
Covers the processes of 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 A431.  
Registration Restrictions: Admission to the BSW program at the University of Alaska Anchorage.  
Corequisite: SWK A430.  
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.  
Continuation of 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 planning, implementing, evaluating, and terminating client system intervention.  
Application of social work roles and readiness for entry into the profession are key objectives.

SWK A498  Advanced Community-Based Research  3 CR  
Contact Hours: 1 + 4  
Prerequisites: SWK A424.  
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 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.
Covers 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.
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 A641  Child Trauma  3 CR
Contact Hours: 3 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.
Understanding of the impact of trauma on children using contextual approach. Emphasis on child trauma from developmental, ecological, etiological, epidemiological, systemic, neurobiological, physiological, and psychodynamic approaches. Examine different theoretical approaches to child trauma and child trauma treatment and examine intervention approaches at the level of the individual, family and system. Emphasis on trauma in the context of attachment, relationships and development and issues related to diagnosis and assessment.

SWK A642  Human Behavior in the Social Environment  3 CR
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 a MSW practice course.
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.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWK A651</td>
<td>Social Work Practice in Addictions and Mental Health</td>
<td>3 CR</td>
<td>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 they relate to supervisory management will also be explored.</td>
</tr>
<tr>
<td>SWK A654</td>
<td>Supervisory Management in Social Work</td>
<td>3 CR</td>
<td>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.</td>
</tr>
<tr>
<td>SWK A656</td>
<td>Treatment of Families</td>
<td>3 CR</td>
<td>Focuses on knowledge and skills related to leadership and decision making for potential leaders of social service organizations. Emphasizes 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.</td>
</tr>
<tr>
<td>SWK A659</td>
<td>Leadership and Decision Making in Social Work</td>
<td>3 CR</td>
<td>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.</td>
</tr>
<tr>
<td>SWK A660</td>
<td>Financial Leadership for Social Work Administrators</td>
<td>2 CR</td>
<td>Equips 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.</td>
</tr>
<tr>
<td>SWK A661</td>
<td>Marketing in the Social Sector</td>
<td>2 CR</td>
<td>Prepares students for the application of family and couple therapy in clinical settings. Theoretical concepts, assessment methods, and intervention techniques will provide students the ability to formulate interventions with families and couples.</td>
</tr>
<tr>
<td>SWK A662</td>
<td>Financial Resource Development for Social Services</td>
<td>2 CR</td>
<td>Prepares students for advanced clinical social work in a variety of settings with adults suffering from behavioral disorders and problems coping with environmental stressors. Focuses upon skills for assessment, application of evidence-based interventions and evaluation.</td>
</tr>
<tr>
<td>SWK A665</td>
<td>Comparative Group Work</td>
<td>3 CR</td>
<td>Explores the multiple roles practiced by social workers who provide social work services in a school setting with special emphasis on practice with populations at risk and culturally diverse students and families. Provides a comprehensive knowledge and understanding of providing social work services in a school setting.</td>
</tr>
<tr>
<td>SWK A666</td>
<td>Clinical Social Work with Adults</td>
<td>2 CR</td>
<td>Prepares students for advanced clinical social work in a variety of settings with adults suffering from behavioral disorders and problems coping with environmental stressors. Focuses upon skills for assessment, application of evidence-based interventions and evaluation.</td>
</tr>
<tr>
<td>SWK A667</td>
<td>Clinical Group Therapy</td>
<td>2 CR</td>
<td>Provides an overview of telehealth with an emphasis on telebehavioral health in Alaska. Includes topics on the history of telehealth and current legal, technical and logistical considerations to prepare leaders in the expanding field of telehealth. Includes hands-on experience with telehealth technology and clinical exercises.</td>
</tr>
<tr>
<td>SWK A668</td>
<td>Social Work Services in Schools</td>
<td>3 CR</td>
<td>Prepares students for advanced clinical social work in a variety of settings with adults suffering from behavioral disorders and problems coping with environmental stressors. Focuses upon skills for assessment, application of evidence-based interventions and evaluation.</td>
</tr>
</tbody>
</table>

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**Course Descriptions**

[www.uaa.alaska.edu](http://www.uaa.alaska.edu)
SWK A686  Social Work Services in Alaska Schools  1 CR
Contact Hours: 1 + 0
Level Restriction: Must be Graduate - UAA level.
Registration Restrictions: Graduate standing.
Provides an in-depth knowledge and understanding of providing social work services in school settings in Alaska. Explores the multiple roles of social workers who provide services in rural and urban schools in Alaska.

SWK A690  Selected Topics in Social Work  1-3 CR
Contact Hours: 1-3 + 0
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 A691  Children's Mental Health Systems of Care  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
Crosslisted with: EDSE A691.
Expands systems of care as a coordinated network of community-based services and supports that are organized, multidisciplinary, and in partnership with youth and family. Addresses the cultural and linguistic needs of families in order to meet the challenges of children and youth with serious mental health needs.

SWK A698  MSW Research Project  3 CR
Contact Hours: 1 + 9
Prerequisites: HS A628 or 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/cte/academics/bst

TECH A101  Introduction to Technological Principles  3 CR
Contact Hours: 2 + 2
Prerequisites: MATH A107 or MATH A109.
Introduces basic physical properties commonly found in a technical field. Emphasizes data collection and test equipment procedures.

TECH A295  Technical Internship  1-6 CR
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  3 CR
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  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Tier 1 basic college-level skills
Special Fees.
Provides 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  3 CR
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  1-9 CR
Contact Hours: 0 + 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  3 CR
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  3 CR
Contact Hours: 3 + 0
Prerequisites: [MATH A107 or MATH A109] and TECH A305.
Comprehensive study of the principles and practices of project planning, implementation, and control as applied by technicians and technical managers.

TECH A443  Quality Leadership  3 CR
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  3 CR
Contact Hours: 1 + 8
Prerequisites: TECH A305.
Registration Restrictions: TECH A305.
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.

TECH A490  Selected Topics in Technology Management  1-3 CR
Contact Hours: 1-3 + 0
Registration Restrictions: Faculty approval required.
Special Note: May be repeated with a change of topic for a maximum of 9 credits.
Provides customized development training in areas related to technology management. Course content is determined by specific industry needs.

TECH A495  Technical Internship  1-3 CR
Contact Hours: 0 + 5-15
Registration Restrictions: Faculty approval required.
Crosslisted with: VE A405.
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.
THR - Theatre

Offered through the College of Arts and Sciences
Fine Arts Building (ARTS), Room 302, 786-1792
www.uaa.alaska.edu/theatreanddance

THR A111  Introduction to the Theatre  3 CR
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  3 CR
Contact Hours: 2 + 3
Prerequisites: THR A121 and THR A122.
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  2 CR
Contact Hours: 1 + 2
Crosslisted with: DNCE A124.
Prerequisites: THR A121.
A range of time periods, from the 1920s to the present.

THR A131  Theatrical Production Techniques  3 CR
Contact Hours: 2 + 2
Prerequisites: THR A131.
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 A151  Makeup for the Theatre  3 CR
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  1-3 CR
Contact Hours: 0 + 3-9
Registration Restrictions: Faculty permission and audition.
May be stacked with: THR A395.
Special Note: Can be repeated with a change of project for up to 9 credits.
Participation in mainstage productions as member of technical staff. Credit for scene crew, light crew, props, costume crew, makeup crew, stage management, and publicity.

THR A211  Movement for the Actor  3 CR
Contact Hours: 3 + 0
Prerequisites: THR A121.
Study of movement and its specific relationship to acting skills. Work includes analysis of nonverbal communication and developmental physical skills.

THR A221  Movement for the Actor  3 CR
Contact Hours: 3 + 3
Special Fees.
Continuation of THR A221 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.

THR A222  Voice for the Actor  3 CR
Contact Hours: 3 + 0
Prerequisites: THR A121.
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 A243  Scene Design  3 CR
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  3 CR
Contact Hours: 2 + 2
Prerequisites: THR A131.
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 design.

THR A295  Theatre Practicum: Technical  1-3 CR
Contact Hours: 0 + 3-9
Special Note: May be repeated for a maximum of 9 credits.
Participation in mainstage productions as member of technical staff. Credit for scene crew, light crew, props, costume crew, makeup crew, stage management, and publicity.

THR A306  Stage Management  3 CR
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  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.
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  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.
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  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses.
Study and practice of script development for the stage. Class will involve staged readings of student work.

THR A321  Meisner Acting Technique  3 CR
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  3 CR
Contact Hours: 3 + 0
Prerequisites: THR A222.
Continuation of THR A222 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.

THR A328  Acting Shakespeare  3 CR
Contact Hours: 2 + 3
Prerequisites: THR A121.
Special Note: THR A221 and THR A222 are recommended.
Intensive exploration of text-based analysis of Shakespearean characters. Emphasis will be placed on scene and character study in a studio setting.
THR A329  Combat for the Stage  3 CR
Contact Hours: 2 + 3
Prerequisites: THR A121 with minimum grade of C and THR A221 with minimum grade of C.
Special Fees.
   An introduction to the art of fighting in the theatre including basic techniques from among the following combat disciplines: unarmed, quarterstaff, single rapier, rapier and dagger, or broadsword. Emphasis is placed on safety and acting the fight as well as the effectiveness illusion of violence.

THR A330  Combat for the Stage II  3 CR
Contact Hours: 2 + 3
Prerequisites: THR A329.
Special Fees.
   A continuation of the study begun in THR A329, Combat for the Stage. Students review unarmed and rapier and dagger techniques, and are taught broadsword and/or quarterstaff and small sword combat. Emphasis is placed throughout on safety as well as the effectiveness of the illusion of violence.

THR A347  Lighting Design  3 CR
Contact Hours: 3 + 0
Prerequisites: THR A329.
Special Fees.
   Theory and practice of the design and execution of lighting and associated electrical effects for the stage.

THR A357  Costume Design and Construction II  3 CR
Contact Hours: 1 + 4
Prerequisites: THR A257.
Special Fees.
   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.
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.

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.
Special Note: May be repeated with a change of project for up to 9 credits.
   Performance practicum for juniors and seniors. Advanced participation in mainstage productions as an actor, director, dancer, choreographer 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.
   Study of theatre history from ancient Greece to 1800. The history and the influence of different cultures, traditions and technology on the development of the theatre as a social institution.

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.
   Continuation of THR A411. Theatre history from 1800 to modern.

THR A431  Directing I  3 CR
Contact Hours: 3 + 0
Prerequisites: THR A243 and THR A257 and THR A306.
   Study of the history, theories and methods of stage direction. Culminates in the staging of a scene from a dramatic work.

THR A435  Directing II  3 CR
Contact Hours: 3 + 0
Prerequisites: THR A431.
Special Note: May be repeated once for credit.
   Advanced study of the history, theories and methods of stage direction. Culminates in the staging of a play.

THR A445  Advanced Theatre Production  3 CR
Contact Hours: 0 + 6
Prerequisites: THR A131.
Registration Restrictions: Theatre major and junior level.
   Advanced technical theatre course with selected emphasis in scenery design, lighting, stagecraft, costume, or directing.

THR A480  Theatre Internship  5-15 CR
Contact Hours: 0 + 15-45
Registration Restrictions: Junior standing and permission of department chair.
Special Note: May be repeated for credit with change of project subject.
   Advanced theatre production course with emphasis as selected by students in directing, acting, scenery and lighting, costume design and construction, or theatre management.

THR A490  Selected Topics in Performance  3 CR
Contact Hours: 3 + 0
Prerequisites: THR A121.
Special Note: May be repeated for credit with change of subtitle.
   Current topics in theatrical performance addressing special demands of the theatre season or special faculty expertise.

THR A491  Selected Topics in Technical Theatre  3 CR
Prerequisites: THR A243 or THR A257.
Special Fees.
   Special Note: May be repeated with change of subtitle for a maximum of 12 credits.
   Current topics in technical theatre theory and practice. Includes studio work.

THR A492  Senior Seminar  3 CR
Contact Hours: 3 + 0
Prerequisites: 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.
Special Note: May be repeated once for credit with a change in subtitle.
   Intensive examination of a topic in Theatre or Dance including the historical, cultural, social and political influences on each aspect of the performance area: writing, acting, movement and design with an emphasis on its relevance to a contemporary audience.

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.
Special Note: May be repeated with change of project for 9 credits.
   Technical practicum for juniors and seniors. Emphasis is on participation in a mainstage production as a significant member of the technical/production crew or design team.

THR A498  Individual Research  3 CR
Contact Hours: 1 + 6
Registration Restrictions: Junior standing in Theatre and department chair's signature.
   Independent research on a specific topic or area of theatre culminating in a research paper. Participation in professional conferences and competition strongly recommended.

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.
   Independent or collaborative research project on a specific topic or area of theatre culminating in the presentation of a live theatre performance or design execution. Continuation and application of the research completed in THR A498 and required for the Theatre Honors Program. Participation in professional competitions strongly encouraged.
## VE - Vocational Education

**Offered through the Community & Technical College**  
University Center (UC), Room 130, 786-6423  
[www.uaa.alaska.edu/ctc](http://www.uaa.alaska.edu/ctc)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>CR</th>
<th>Contact Hours</th>
<th>Prerequisites</th>
<th>Registration Restrictions</th>
<th>Special Fees</th>
<th>Crosslisted with</th>
<th>Major Restriction</th>
</tr>
</thead>
<tbody>
<tr>
<td>VETT A101</td>
<td>Introduction to the Veterinary Profession</td>
<td>1</td>
<td>1 + 0</td>
<td>VETT A101 or concurrent enrollment</td>
<td>Faculty approval required.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VETT A103</td>
<td>Veterinary Office Procedures</td>
<td>3</td>
<td>3 + 0</td>
<td>VETT A101 or concurrent enrollment</td>
<td>Provides hands-on experience</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VETT A102</td>
<td>Basic Handling and Behavior: Small Animals</td>
<td>2</td>
<td>2 + 0</td>
<td>VETT A101 or concurrent enrollment</td>
<td>Introduces general topics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VETT A123</td>
<td>Basic Handling and Behavior: Large Animals</td>
<td>2</td>
<td>2 + 0</td>
<td>VETT A101 or concurrent enrollment</td>
<td>Introduces large-animal nutrition and care.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VETT A124</td>
<td>Introduction to Small Animals</td>
<td>3</td>
<td>3 + 0</td>
<td>VETT A101 or concurrent enrollment</td>
<td>Topics include an introduction to restraint,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VETT A125</td>
<td>Introduction to Large Animals</td>
<td>3</td>
<td>3 + 0</td>
<td>VETT A101 or concurrent enrollment</td>
<td>Introduces critical patient management and procedures.</td>
<td></td>
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</tr>
</tbody>
</table>

## VETT - Veterinary Assisting

**Offered through Matanuska-Susitna College**  
8295 East College Drive, Palmer, Alaska 99645, (907) 745-9774  
[http://matsu.alaska.edu/office/student-services/ degree-programs/ veterinary-assistant](http://matsu.alaska.edu/office/student-services/degree-programs/veterinary-assistant)

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Crosslisted with</th>
<th>Major Restriction</th>
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<tbody>
<tr>
<td>VETT A201</td>
<td>Veterinary Anatomy and Physiology</td>
<td>4</td>
<td>3 + 2</td>
<td>VETT A101 or concurrent enrollment</td>
<td>Faculty approval required.</td>
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<td></td>
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</tr>
<tr>
<td>VETT A295</td>
<td>Veterinary Assistant Practicum</td>
<td>3</td>
<td>0 + 9</td>
<td>VETT A101 or concurrent enrollment</td>
<td>Faculty approval required.</td>
<td></td>
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</tr>
</tbody>
</table>

## WELD - Welding Technology

**Offered through the Community & Technical College**  
Gordon Hartlieb Hall (GHH), Room 111, 786-6475  
[www.uaa.alaska.edu/transportation](http://www.uaa.alaska.edu/transportation)

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Contact Hours</th>
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<th>Major Restriction</th>
</tr>
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<tbody>
<tr>
<td>WELD A101</td>
<td>Gas and Arc Welding</td>
<td>4</td>
<td>2 + 6</td>
<td></td>
<td>Arc welding experience can substitute for prerequisites.</td>
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<td></td>
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<tr>
<td>WELD A102</td>
<td>Pipe Welding</td>
<td>4</td>
<td>1 + 6</td>
<td>WELD A101 or WELD A103.</td>
<td>Provides training and hands-on experience</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WELD A103</td>
<td>Arc Welding: Low-Hydrogen Electrodes</td>
<td>4</td>
<td>1 + 6</td>
<td>WELD A101 or WELD A103.</td>
<td>Provides training and hands-on experience</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WELD A104</td>
<td>Pipe Certification</td>
<td>4</td>
<td>1 + 6</td>
<td>WELD A101 or WELD A103.</td>
<td>Provides training and hands-on experience</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WELD A105</td>
<td>Wire Welding</td>
<td>4</td>
<td>1 + 6</td>
<td>WELD A101 or WELD A103.</td>
<td>Provides training and hands-on experience</td>
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</tbody>
</table>

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*This catalog information assumes a well-structured, readable format with clear course descriptions, prerequisites, and contact hours. It is designed to facilitate easy navigation and understanding of the course offerings.*
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
Prerequisites: WELD A112.
Special Fees.
Introduces the welding of mild steels with covered electrodes. Includes welding safety, electric arc welding equipment, electrode identification and selection, basic joint design, and welding practice on carbon steel plate.

WELD A114  Welding of High Strength Steels  4 CR
Contact Hours: 2 + 6
Prerequisites: WELD A112.
Special Fees.
Builds on knowledge and techniques covered in WELD A112. Introduces the welding of high strength steels with covered electrodes. Includes welding safety, low alloy electrode selection, welding joint design, and alloy steel specifications.

WELD A117  Basic Pipefitting  4 CR
Contact Hours: 3 + 2
Prerequisites: WELD A112.
Special Fees.
Introduces theory and practice 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 field of welding and fabrication for manufactured products.

WELD A121  Pipe Welding Vertical-Down SMAW  4 CR
Contact Hours: 2 + 6
Prerequisites: WELD A112.
May be stacked with: WELD A122.
Introduces vertical-down shielded metal arc welding (SMAW) techniques on carbon steel pipe using EXX 10 electrodes. Includes information on pipe material specifications, pipe fittings and assembly, welder qualification and American Petroleum Institute (API) Standard 1104 requirements.

WELD A122  Pipe Welding Vertical-Up SMAW  4 CR
Contact Hours: 2 + 6
Prerequisites: WELD A112.
May be stacked with: WELD A121.
Introduces vertical-up shielded metal arc welding (SMAW) on carbon and alloy steel pipe using EXX 10 and EXX18 electrodes. Includes information on high-strength alloy pipe specifications and weld/welder evaluation/qualifications defined in ASME IX and ANSI/ASME B31.3.

WELD A157  Technical Drawings for Welders  3 CR
Contact Hours: 3 + 0
Prerequisites: WELD A101.
Provides instruction in interpreting various drawings that are commonly used for construction projects that require welded assemblies.

WELD A161  Gas Metal Arc Welding (GMAW)  4 CR
Contact Hours: 2 + 6
Prerequisites: WELD A112 or WELD A161.
Introduces gas metal arc welding (GMAW) techniques for joining a number of metals. Includes information on power supplies, wire feed equipment, shielding gases, filler metal selection, and electrical characteristics of the arc.

WELD A162  Flux Cored Arc Welding (FCAW)  4 CR
Contact Hours: 2 + 6
Prerequisites: WELD A112 or WELD A161.
WS - Women's Studies

Offered through the College of Arts and Sciences
Social Sciences Building (SSB), Room 355, 786-4837
www.uaa.alaska.edu/womensstudies

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 A252  Women and Social Action  3 CR
Contact Hours: 3 + 0
Prerequisites: SOC A101 with minimum grade of C or WS A200 with minimum grade of C.
Crosslisted with: SOC A252.
Examines the evolving role of women in contemporary organizations and social movements with an emphasis on leadership.

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.
Discusses 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.
Board of Regents
Office of Regents’ Affairs
Brandi Berg, Executive Officer
University of Alaska
202 Butrovich Building
P.O. Box 755300
Fairbanks, Alaska 99775-5300

The Regents of the University of Alaska are appointed by the Governor and approved by the Legislature.

Patrick K. Gamble, President, University of Alaska

<table>
<thead>
<tr>
<th>Name</th>
<th>Term Expires</th>
</tr>
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<tbody>
<tr>
<td>Dale Anderson, Regent, Juneau</td>
<td>2021</td>
</tr>
<tr>
<td>Timothy C. Brady, Regent, Anchorage</td>
<td>2015</td>
</tr>
<tr>
<td>Fuller Cowell, Regent, Anchorage</td>
<td>2015</td>
</tr>
<tr>
<td>Kenneth J. Fisher, Regent, Sitka</td>
<td>2017</td>
</tr>
<tr>
<td>Mari Freitag, Student Regent, Fairbanks</td>
<td>2013</td>
</tr>
<tr>
<td>Jyotsna Heckman, Regent, Fairbanks</td>
<td>2019</td>
</tr>
<tr>
<td>Mary K. Hughes, Regent, Anchorage</td>
<td>2017</td>
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<tr>
<td>Patricia Jacobson, Regent, Kodiak</td>
<td>2015</td>
</tr>
<tr>
<td>Gloria O’Neill, Regent, Anchorage</td>
<td>2021</td>
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<td>Michael Powers, Regent, Fairbanks</td>
<td>2019</td>
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<tr>
<td>Kirk Wickersham, Regent, Anchorage</td>
<td>2015</td>
</tr>
</tbody>
</table>

Principal Administrative Officers
Thomas Case, Chancellor
Elisha (Bear) Baker IV, Provost and Vice Chancellor
Renée Carter-Chapman, Senior Vice Provost for Institutional Effectiveness
Megan Olson, Vice Chancellor for University Advancement
Bruce Schultz, Vice Chancellor for Student Affairs
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Faculty and Administration

ABAZA, OSAMA A.
Professor, Civil Engineering, School of Engineering, University of Toledo, B.S. (1983); M.S. (1984); Brigham Young University, Ph.D. (1994).

ADAMS, HEATHER
Assistant Professor, English, College of Arts and Sciences. Mount Union College, B.A. (2000); University of Maryland, M.A. (2008); Middlebury College Bread Loaf School of English, M.A. (2008); Pennsylvania State University, Ph.D. (2012).

ADAMS, RICHARD H.

AGUINIGA, DONNA
Assistant Professor, Social Work, College of Health. Eastern New Mexico University, B.S. (1998); Boise State University, M.S.W. (2001); University of Texas at Austin, Ph.D. (2010).

ALESSA, LILIAN
Professor, Biological Sciences, College of Arts and Sciences. University of British Columbia, B.Sc. (1990), Ph.D. (1997).

ALEVY, JONATHAN E.

ALLEN, MARY D.

ALLEN-JONES, VARA D.
Assistant Professor, Counseling. Savannah State College, B.A. (1983); Georgia Southern University, M.Ed. (1988).

ALSEA, CARLOS J.

AMA, MICHHIRO
Assistant Professor, Languages, College of Arts and Sciences. Hawaii Pacific University, B.A. (1991); Otani University, M.A. (1999); University of California, Ph.D. (2007).

ANDERSON, KELLY A.
Associate Professor, Dental Hygiene, College of Health. University of Kentucky, B.S. (1992); M.S. (1994).

ANDES, DONNA K.

ANTHONY, RAYMOND X.
Associate Professor, Philosophy, College of Arts and Sciences. Millikin University, B.A. (1994); Purdue University, M.A. (1998), Ph.D. (2003).

ARAJI, SHARON K.

ARES, NANCY

ARD, SARADELL A.

ARMSTRONG, CYNTHIA L.

ARNOLD, ELIZABETH
Assistant Professor, Journalism and Public Communication, College of Arts and Sciences. Colgate University, B.A. (1992).

AUFRICHT, STEVEN E.

BAILEY, JEFF G.

BAILEY, RAYMOND P.
Professor, Anatomy, WWAMI School of Medical Education, College of Health. University of California, B.A. (1966); California State College, M.A. (1969); The John Hopkins University School of Medicine, Ph.D. (1973).

BAKER IV, ELISHA R.

BALL, RACHEL

BALLAIN, OSAMA A.

BANCHERO, ALEJANDRA
Associate Professor, Journalism and Public Communication, College of Arts and Sciences. Trinity University, B.A. (1992); Northwestern University, M.S. (1993); Benedictine College, M.B.A. (2000).

BANE, GILBERT W.
BARNES, ALLAN R.

BARNETT, ELIZABETH C.
Associate Professor, Dental Hygiene, College of Health. Idaho State University, B.S. (1974).

BARTLEY, JO ANN

BASCOM, DEREK

BAUER, STEPHANIE

BEHREND, DONALD

BELL, HOLLY A.

BENNION, BRIAN E.

BENNINGFIELD, TIMOTHY
Term Assistant Professor, Fire and Emergency, College of Health. Northern Kentucky University, B.A. (2009); Western Kentucky University, M.A. (2012).

BERBERICH, DEIDRE R.S.

BERNER, BARBARA J.
Director, School of Nursing. Associate Professor, Nursing, College of Health. St. Anselm College School of Nursing, B.S. (1967); Oregon Health Sciences University, M.S. (1983); Boston University, Ed.D. (1994).

BERMAN, MATTHEW D.

BERSCH, GRETCHEN T.
Professor Emerita, Adult and Developmental Education. University of Alaska Fairbanks, B.S. (1967); University of Alaska Anchorage, M.Ed. (1973); Florida State University, Ph.D. (1990).

BHAM, GHULAM H.
Assistant Professor, Civil Engineering, School of Engineering, University of Engineering and Technology, Karachi, B.E. (1993); University of Illinois, Urbana-Champaign, M.S. (1997), Ph.D. (2003).

BHATTACHARYYA, NALINAKSHA

BILLAUD, JEAN-PAUL

BISH, NANCY K.

BJARTMARSDDOTTIR, ANNA

BLATCHFORD, EDGAR
Associate Professor, Journalism and Public Communication, College of Arts and Sciences. Alaska Methodist University, B.A. (1973); Columbia University, M.S. (1988); University of Washington, J.D. (1976).

BOECKMANN, ROBERT J.

BOEZE-TOBIN, DEBORAH D.
Associate Professor, Biology, Kenai Peninsula College, Kachemak Bay Campus. University of Illinois, B.S. (1991); Florida Atlantic University, M.S. (1994); University of Missouri, Ph.D. (2005).

BOGGS, KEITH W.

BOLSON, BARBARA

BORAAS, ALAN S.

BORTZ, ERIC
Assistant Professor, Biological Sciences, College of Arts and Sciences. Carnegie Mellon University, B.A. (1994); University of California Los Angeles, Ph.D. (2000).

BOURNE, DOUGLAS

BOWIE, DAVID

BRANDEIS, JASON M.

BRACKMAN, EMILY

BRANNON, PAGE L.

BRAUN-ALLEN, JUANNA E.

BREINING, JEANE, M.

BREMNER, SALLY J.

BREMS, CHRISTIANE

BRIDGES, ANNE
Professor, Dietetics and Nutrition, Community and Technical College. London University, B.S. (1972); Reading University, M.S. (1978), Ph.D. (1988).

BROADY, SYLVIA C.
Professor Emerita, Journalism and Public Communication. Michigan State University, B.A. (1948); Wayne State University, M.E. (1956); Michigan State University, Ph.D. (1962).

BROCK, JENNIFER
Associate Professor, Mechanical Engineering, School of Engineering. Ohio State University, B.S. (2003), M.S. (2005), Ph.D. (2009).

BROWN, BARBARA E.B.

BRUNER, MARK C.

BUCHANAN, BRET HAN Y.
Term Assistant Professor, Nursing, College of Health. University of Colorado Health Sciences, B.S. (1991); University of Alaska Anchorage, M.S. (1997); Chatham University, D.N.P. (2010).

BUCK, LOREN

BUCKLAND, MICHAEL P.
Assistant Professor, Aviation Technology, Community and Technical College. Wayland Baptist University, B.S. (1988).

BUCKLEY, MARYLYN HANF
Professor Emerita, Education. San Jose State University, B.A. (1957); University of California, Berkeley, M.A. (1968), Ph.D. (1971).
BUKOWSKI, ARTHUR E.
Professor Emeritus, Mathematics. Ohio University, B.S. (1966), M.S. (1968); University of New Mexico, Ph.D. (1972).

BUNSEN, TERESA D.
Associate Professor, Special Education, College of Education. Angelo State University, B.S. (1984); North Texas State University, M.Ed. (1985); University of North Texas, Ph.D. (1989).

BURKE, TRACEY K.

BURKHEAD, JASON L.
Assistant Professor, Biological Sciences, College of Arts and Sciences. Indiana University, B.S. (1995); Colorado State University, M.S. (2001), Ph.D. (2003).

BURNS, JENNIFER M.
Professor, Biological Sciences, College of Arts and Sciences. University of California, A.B. (1990); University of Washington, M.S. (1992); University of Alaska Anchorage, Ph.D. (1997).

CARRY-HOLLY, HEATHER

CALLAHAN, JEFFREY C.

CALLISON, KORI
Assistant Professor, Human Resources Management, College of Business and Public Policy. San Diego State University, B.A. (2007); University of Houston, M.A. (2010), Ph.D. (2012).

CAO, YONG
Professor, Business Administration, College of Business and Public Policy. Northwest University, M.S.C. (1989); University of Alaska Anchorage, M.B.A. (1996); University of Iowa, Ph.D. (2002).

CAPOZZI, ROCKY P.

CAREY, OMER L.

CARLE, DARIA O.

CARLIGREN, DANIEL
Assistant Professor, Theatre and Dance, College of Arts and Sciences. Southern Oregon University, B.F.A. (2001); University of Oregon, M.F.A. (2012).

CARLSON, MATTHEW L.
Associate Professor, Biology, College of Arts and Sciences. Willamette University, B.S. (1994); University of Alaska Fairbanks, Ph.D. (2002).

CARMON, BERNICE W.
Associate Professor, Nursing, College of Health. Bennett College, B.S. (1971); Case Western Reserve University, B.S. (1977); University of North Carolina, M.P.H. (1972); University of Alaska Anchorage, M.S. (1992).

CARRAHER, SARAH
Assistant Professor, Anthropology, College of Arts and Sciences. University of Alaska Anchorage, B.A. (2003); Louisiana State University, M.A. (2006); McMaster University, Ph.D. (expected 2013).

CARROLL-COBB, SANDRA

CARROTHERS, LEE ANNE
Term Assistant Professor, Physical Therapy Assistant, College of Health. University of California, Davis, B.S. (1984); University of Southern California, Los Angeles, M.S. (1986); California Graduate Institute, Ph.D. (1996).

CARTER, CHRISTINA E.

CARTER-CHAPMAN, RENÉE M.

CASE, THOMAS

CASON, JACQUELINE E.

CASTON, ANNE
Term Associate Professor, Creative Writing and Literary Arts, College of Arts and Sciences. St. Mary’s College of Maryland, B.A. (1993); Warren Wilson College, M.F.A. (1995).

CATES, KEITH A.

CAUSEY, DOUGLAS

CENEK, MARTIN

CHAMARD, SHARON E
Associate Professor, Justice, College of Health. Saint Mary’s University, B.A. (1993); Rutgers University, M.A. (1997), Ph.D. (2003).

CHANG, PING-TUNG
Professor, Mathematics, Matanuska-Susitna College. National Taiwan Normal University, B.Ed. (1960); Indiana State University, M.S. (1966); Georgia State University, Ph.D. (1977).

CHARLES, GEORGE P.

CHOY, CAMBID J TAI-YOUNG

CHRISTIAN, BARBARA M.

CIEPLAK, DEBRA
Term Assistant Professor, School of Allied Health, College of Health. University of Pittsburgh, B.S. (1996).

CLARK, DENNIS

COCHRAN, GRANT R.

COLBERG, TALIS
Director, Matanuska-Susitna College. Pacific Lutheran University, B.A. (1979); Pepperdine University School of Law, J.D. (1983); University of Alaska Fairbanks, Ph.D. (2008).

COLT, STEPHEN G.

CONDON, JOEL
Term Assistant Professor, Architectural Engineering and Technology, Community and Technical College. University of California, Berkeley, B.A.; University of New Mexico, M.Arch. (1999).

CONDON, ROBERT E.

CONNORS, JOSEPH F.

COOK, SAMUEL A.
Assistant Professor, Mathematics, College of Arts and Sciences. Reed College, B.A. (1992); Colorado State University, M.S. (1995); Oregon State University, Ph.D. (2009).

COULTER, CATHY A.
COUNCELLOR, APRIL  
Term Assistant Professor, Alutiiq Language and Culture, Kodiak College.  

COURTNEY, RALPH E.  

CRAWFORD, RONALD M.  

CROSSLIN, KRISTINE J.  

CULLIN, MATTHEW J.  
Assistant Professor, Mechanical Engineering, School of Engineering. Lehigh University, B.S. (2006), Ph.D. (2009).

CULVER, SANDRA M.  

CUNNINGHAM, PATRICK M.  

CYPHER, JACK L.  

DALRYMPLE, THOMAS A.  
Assistant Professor, Accounting, College of Business and Public Policy. Loyola University, B.S. (1978); Arizona State University, M.B.A. (1998).

DANNENBERG, DAVID  
Director, Faculty Technology Center. Term Assistant Professor, Education. Maryville College, B.A. (1992); North Carolina State University, M.S. (1996); Virginia Polytechnic Institute and State University, Ph.D. (expected 2013).

DAVID, ERIC JOHN R.  

DAVES, M. HILARY  

DAVIS, DEBORAH C.  

DAVIS JR., DONALD I.  
Professor Emeritus, Geomatics, School of Engineering. Ferris State University, B.S. (1981); Purdue University, M.S. (1983).

DAVIS, LEANNE M.  

DEDYCH, PETER T.  

DEFENDORF, CRAIG  

DEISHER, JON  

DELA PAPP, TINA D.  

DENISON, SHERI A.  

DENNISON, ELIZABETH J.  

DERRY, JAMES S.  
Term Assistant Professor, Aviation Technology, Community and Technical College. Pennsylvania State University, B.S. (1966); University of Alaska Anchorage, M.S. (1975).

DESAI, ALPANA M.  

DIN, HERMINIA W.  
Professor, Art Education, College of Arts and Sciences. Fu Jen Catholic University, B.S. (1990); Southeastern University, M.P.A. (1993); Ohio State University, Ph.D. (1998).

DIRKS, M. ANGELA  

DOEBLER, TIMOTHY W.  
Director, Culinary Arts and Hospitality. Associate Professor, Culinary Arts and Hospitality, Community and Technical College. University of the State of New York, B.S. (1992); University of Alaska Anchorage, M.S. (1997).

DONKER, HAN  
Professor, Accounting, College of Business and Public Policy. Free University of Amsterdam, The Netherlands, M.S. (1988); Tilburg University, The Netherlands, Ph.D. (2001).

DONOVAN, SHANNON M.  
Assistant Professor, Environmental Studies, College of Arts and Sciences. University of New Hampshire, B.S. (1996); West Virginia University, M.S. (2000); University of Idaho, Ph.D. (2007).

DOOGAN, MICHAEL  

DOOLEY, DAWN P.  

DORROUGH, DALE S.  
Associate Professor, Political Science, College of Arts and Sciences. Tufts University, M.A. (1991); University of British Columbia, Ph.D. (2002).

DOTSON, AARON  
Assistant Professor, Civil Engineering, School of Engineering. University of Arizona, B.S. (2003); Arizona State University, M.S.E. (2005), Ph.D. (2008).

DOWING, SCOTT  

DOWRICK, PETER W.  

DOYLE, MARIE C.  

DRASKOVICH, MARGARET S.  
Associate Professor, Nursing, Kodiak College. LaRoche College, B.S.N. (1984); University of South Florida, M.P.H. (1994); University of Alaska Anchorage, M.S. (1999).

DRINKA, DENNIS E.  
Associate Professor, Computer Information Systems, College of Business and Public Policy. University of Illinois, B.S. (1973); University of Texas, Ph.D. (1990).

DRISCOLL, DAVID L.  

DRISCOLL, ELIZABETH M.  

DUDDELESTON, KHRYSTSYNE N.  
Associate Professor, Biological Sciences, College of Arts and Sciences. Virginia Polytechnic Institute and State University, B.S. (1990), M.S. (1995); Oregon State University, Ph.D. (1998).

DULIN, PATRICK L.  

DUNSCOMB, PAUL E.  

DUTTA, UTPAL  
<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Education</th>
</tr>
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<tbody>
<tr>
<td>Dybdahl, Claudia S.</td>
<td>Professor, Elementary Education</td>
<td>University of Connecticut, B.A. (1966); College of New Rochelle, M.S. (1978); University of Arizona, Ph.D. (1982).</td>
</tr>
<tr>
<td>Edecombe, David P.</td>
<td>Professor, Theatre, College of Arts and Sciences.</td>
<td>California Western University, B.A. (1973); San Diego State University, M.A. (1975); Kent State University, Ph.D. (1986).</td>
</tr>
<tr>
<td>Edwards, Nelta M.</td>
<td>Associate Professor, Sociology, College of Arts and Sciences.</td>
<td>Portland State University, B.A. (1988); University of Texas, M.A. (1992); Arizona State University, Ph.D. (2000).</td>
</tr>
<tr>
<td>Ehrlich, Sandra G.</td>
<td>Assistant Professor, Business Communications, College of Business and Public Policy.</td>
<td>University of Missouri, B.S. (1981); Northwestern University, M.S. (1982); Webster University, D.Mgt. (2009).</td>
</tr>
<tr>
<td>Engel, Margritt A.</td>
<td>Professor Emerita, Languages.</td>
<td>McKendree College, B.A. (1959); Southern Illinois University, M.A. (1960); University of Texas, Austin, Ph.D. (1975).</td>
</tr>
<tr>
<td>Everett, Naomi S.</td>
<td>Assistant Professor, Culinary Arts and Hospitality, Community and Technical College.</td>
<td>University of Alaska Anchorage, B.A. (2010).</td>
</tr>
<tr>
<td>Fagan, Patricia C.</td>
<td>Associate Professor, Languages, College of Arts and Sciences.</td>
<td>Georgetown University, B.S. (1986); University of Virginia, M.A. (1990); Boston College, Ph.D. (2001).</td>
</tr>
<tr>
<td>Fenger, Martha R.</td>
<td>Associate Professor, Nursing, College of Health.</td>
<td>South Dakota State University, B.S.N. (1970); University of Wisconsin, M.S.N. (1986).</td>
</tr>
<tr>
<td>Fitterling, James M.</td>
<td>Associate Professor, Psychology, College of Arts and Sciences.</td>
<td>Pennsylvania State University, B.S. (1973); Psychological Studies Institute, M.Ed. (1979); Georgia State University, M.A. (1981), Ph.D. (1986).</td>
</tr>
<tr>
<td>Forster, Suzanne M.</td>
<td>Professor, English, College of Arts and Sciences.</td>
<td>Wayne State University, B.A. (1972); University of Alaska Anchorage, M.F.A. (1989); Indiana University of Pennsylvania, Ph.D. (2002).</td>
</tr>
<tr>
<td>Forstoft, Hardy Ryan</td>
<td>Assistant Professor, Justice, College of Business and Public Policy.</td>
<td>Amherst College, B.A. (1993); University of Minnesota, Ph.D. (2000); Stanford Law School, J.D. (2001).</td>
</tr>
<tr>
<td>Foster, Larry M.</td>
<td>Professor, Mathematics, College of Arts and Sciences.</td>
<td>Oklahoma Baptist University, B.S. (1972); University of Alabama, M.S. E. (1993), M.S. E. (1996); Oklahoma State University, M.S. (1973), Ph.D. (1978).</td>
</tr>
<tr>
<td>Fox, Deborah H.</td>
<td>Associate Professor, English, College of Arts and Sciences.</td>
<td>Matanuska-Susitna College. Utah State University, B.A. (1985); University of Arkansas, M.A. (1993); Macquarie University, Ph.D. (2004).</td>
</tr>
<tr>
<td>Frozentu, Julie A.</td>
<td>Associate Professor, Biological Sciences, Prince William Sound Community College.</td>
<td>Oregon State University, B.S. (1990); Washington State University, Ph.D. (2000).</td>
</tr>
<tr>
<td>Furilla, Robert</td>
<td>Associate Director, WWAMI School of Medical Education.</td>
<td>Professor, Biological Sciences, College of Health. University of Massachusetts, B.A. (1977); University of Alaska Fairbanks, M.S. (1980); University of British Columbia, Ph.D. (1986).</td>
</tr>
<tr>
<td>Garton, Susan C.</td>
<td>Associate Professor, Educational Leadership, College of Education.</td>
<td>Kansas State University, B.S. (1969); University of Iowa, M.S. (1978), Ph.D. (1983).</td>
</tr>
</tbody>
</table>
GATLABAYAN, MARIECRIS  

GEISTAUTS, GEORGE A.  

GERHARDT, MACHELLE  
Assistant Professor, Nursing, College of Health. University of Mary, B.S. (1997).

GERKEN, SARAH A.  

GIERKO, GENNADY A.  
Professor, Geomatics, School of Engineering, Novosibirsk Institute for Engineers in Geodesy, M.S. (1984); Moscow Institute for Engineers in Geodesy, Ph.D. (1987).

GILL, DARLENE L.  

GLEASON, JANET L.  
Assistant Professor, Nursing, College of Health. Montana State University, B.S. (1981); University of Phoenix, M.S. (2006).

GODREY, STEVEN M.  

GOLDSMITH, O. SCOTT  

GONZALES, MARIANO  

GONZALEZ, VIVIAN M.  

GORDON, KATHLEEN J.  

GORSUCH, EDWARD LEE  

GOTTSCHALK, BOBBIE J.  

GRABER, F. ELIZABETH  

GRAMSE, SHANNON G.  

GRAY, DOROTHY  

GRAY, KEN  

GREEN, AMY M.  
Associate Professor, Culinary Arts and Hospitality, Community and Technical College. Northern Arizona University, B.S. (1992); Alaska Pacific University, M.A. (2002); Walden University, D.Ed. (2012).

GREEN, G. HAYDEN  

GREEN, JUDITH F.  

GREGA, PATRICIA R.  

GRIFFIN, JARED A.  
Assistant Professor, English, Kodiak College. Dallas Baptist University, B.A. (2003); M.Ed. (2004); Texas Christian University, Ph.D. (2009).

GRIFFIS, KIMBERLY  
Term Assistant Professor, Computer Information and Office Systems, Community and Technical College. Lake Superior State University, B.S. (1993); Northern Arizona University, M.Ed. (2003).

GROGAN, PAMELA J.  

GUETTABI, MOUCINE  
Term Assistant Professor, Economics, ISER, College of Business and Public Policy,. University of Central Oklahoma, B.A. (2004); Oklahoma State University, Ph.D. (2012).

HA, SONGHO  

HAHN, MARI  

HAIG, JOAN M.  
Professor, Mathematics, College of Arts and Sciences. State University of New York, B.S. (1968); Kansas State University, M.S. (1970); Deakin University Australia, Ph.D. (2012).

HAIGH, JANE G.  

HAINES, LEWIS E.  
Provost Emeritus Southcentral Region, Professor Emeritus, Education. Middlebury College, B.A. (1943); Columbia Teachers College, M.A. (1950); Washington State University, Ph.D. (1960).

HALLORAN, THOMAS  
Assistant Professor, English, Prince William Sound Community College. Wheaton College, B.A. (2001); Mary Immaculate College, University of Limerick, Ireland, M.A. (2003); Louisiana State University, Baton Rouge, Ph.D. (2009).

HAMEL, SCOTT E.  
Assistant Professor, Civil Engineering, School of Engineering, Worchester Polytechnic Institute, B.S. (2000); University of Colorado, M.S. (2005).

HAMPSON, KYLE W.  
Assistant Professor, Economics, College of Business and Public Policy. University of South Carolina, B.A. (1998); George Mason University, Ph.D. (2003).

HAMRICK, KENNETH E.  
Term Instructor, Human Services, College of Health. Western Michigan University, B.S. (1977).

HANEY, HENRY W.  
Assistant Professor, Process Technology, Kenai Peninsula College.

HANEY, RONALD W.  

HANSON, DIANE K.  
Associate Professor, Anthropology, College of Arts and Sciences. Western Washington University, B.A. (1977); University of Alaska Anchorage, M.A. (1981); Simon Fraser University, Ph.D. (1991).

HANSON, ROBIN H.  

HARADA, HIROKO  

HARDEE, ALBERTA M.  
Associate Professor, Mathematics, College of Arts and Sciences. Southeast Missouri State University, B.S. (1979); University of Missouri, M.S. (1983), Ph.D. (1987).

HARMAN, THOMAS J.  
HARRIS, JAN C.  

HARRISON, RYAN P.  

HART, LORI A.  

HARTMAN, IAN  
Assistant Professor, History, College of Arts and Sciences. University of Pittsburgh, B.A. (2004); University of Illinois at Urbana-Champaign, Ph.D. (2011).

HARVILLE, BARBARA A.  

HAWFIELD, MICHAEL C.  
Associate Professor, History, Kenai Peninsula College, Kachemak Bay Campus. Lynchburg College Virginia, B.A. (1968); University of North Carolina, M.A. (1972).

HAYCOX, STEVE W.  

HAZELTON, NICHOLAS W.  
Professor, Geomatics, School of Engineering. The University of Melbourne, B.S. (1979), Ph.D. (1992).

HEASLEY, LESLIE W.  

HENDRIX, THOMAS J.  

HENSEL, GLORIA J.  

HERRECK, PAUL E.  

HICKS, NATHANIEL  
Assistant Professor, Physics, College of Arts and Sciences. Washington State University, B.S. (1998); University of California, Los Angeles, M.S. (2000), Ph.D. (2006).

HIGH, JANICE M.  
Associate Professor, English, Kenai Peninsula College. Mankato State University, B.S. (1973); Louisiana State University, M.A. (1992).

HILPERT, JOHN M.  
Professor Emeritus, Engineering Management. Oregon State University, B.S. (1938); George Washington University, M.A. (1947); University of Iowa, Ph.D. (1956).

HINTERBERGER, TIMOTHY J.  

HIRSCHMANN, ERIK T.  

HIRSCHBERG, DIANE B.  
Associate Professor, Education Research, ISER, College of Business and Public Policy. University of California, B.A. (1987); Columbia University, School of International and Public Affairs, MPA (1990); University of California, Ph.D. (2001).

HITCHINS, DIDDY R.  

HOANCA, BOGDAN  
Professor, Computer Information Systems, College of Business and Public Policy. Institute of Bucharest, E.E. (1992); Syracuse University, M.S. (1994); University of Southern California, Ph.D. (1999).

HODGES SNYDER, ELIZABETH  

HOFFMAN, ALLEN C.  
Term Assistant Professor, Air Traffic Control, Community and Technical College. University of Oregon, B.S.Ed. (1979).

HOFFMAN, JEFF A.  
Associate Professor, Mechanical Engineering, School of Engineering, Michigan Technological University, B.S. (1990); University of Wisconsin, M.S. (1996), Ph.D. (1998).

HOGAN, WILLIAM  
Dean, College of Health. State University of New York at Buffalo, B.A. (1971); West Virginia University, M.S.W. (1980).

HOLLINGSWORTH, JEFFREY P.  
Assistant Professor, Geomatics, School of Engineering. Ferris State College, B.S. (1981); University of Colorado, M.S. (2011).

HOLLIS-BUCHANAN, KATHRYNN  
Assistant Professor, Business, Kodiak College. Seattle University, B.A. (1998); Keller Graduate School of Management, M.B.A. (2007).

HOLM, MARGARET E.  

HOLMBERG, ERIC G.  

HONG, PATRICIA A.  
Professor Emerita, Nursing, University of Maryland, B.S. (1972); University of Washington, M.A. (1976).

HORN, STEPHEN L.  

HOWARD, MEGAN W.  
Term Assistant Professor, Biological Sciences, College of Arts and Sciences. Case Western Reserve University, B.S. (2001); University of Colorado Health Sciences Center, Ph.D. (2008).

HOWARD, VERONICA  
Assistant Professor, Psychology, College of Arts and Sciences. Northern Michigan University, B.S. (2005); University of Kansas, M.A. (2012), Ph.D. (expected 2013).

HOWE, E. LANCE  
Associate Professor, Economics, ISER, College of Business and Public Policy. Liberty University, B.S. (1993); Central Michigan University, M.A. (1996); University of Southern California, Ph.D. (2002).

HSIAO, WEL-YING  

HU, HSING-WEN  
Assistant Professor, Mathematics, College of Education. National Hsinchu Teachers College, B.Ed. (1994); National Taipei Teachers College, M.Ed. (1998); University of Massachusetts, Ed.D (2005).

HUDSON, HEATHER E.  
Professor, Public Policy, College of Business and Public Policy. University of British Columbia, B.A.; Stanford University, M.A., Ph.D.; University of Texas, J.D.

HUGHES, EILEEN K.  

HULL, ROGER K.  
Term Instructor, Project Management, School of Engineering. Auburn University, B.S. (1968).

HUSKEY, TERRY LEE  

II, MIKI  
Assistant Professor, Biological Sciences, College of Arts and Sciences. Kagoshima University, B.S. (1992), M.S. (1994); Kyushu University, Ph.D. (2002).

ILIFF, CHARLES H.  

INNES-TAYLOR, CATHERINE E.  

IPPOLITO, MARIA F.  
JACHE, ANN  
Term Assistant Professor, Sociology, College of Arts and Sciences. William Penn College, B.A. (1974); Marquette University, M.A. (1979); University of Notre Dame, Ph.D. (1987).

JACKSTADT, STEPHEN L.  

JACOBS, WILLIAM A.  

JANKE, JILL R.  

JANIS, MARY K.  

JEFFERY, BRIAN D.  
Term Assistant Professor, Theatre and Dance, College of Arts and Sciences.

JEFFRIES, FRANK L.  

JEN, TIEN-CHIEN  
Dean, School of Engineering, National Cheng-Kung University, Taiwan, B.S. (1982); National Tsing-Hua University, Taiwan, M.S. (1987); University of California Los Angeles, Ph.D. (1993).

JENNIFER  

JESTER, TIMOTHY E.  

JOHN, MARK E.  

JOHN, PAUL R.  

JOHN, RHONDA M.  
Professor, Health Sciences, College of Health. Arizona State University, B.S. (1979); Pace University, M.S. (1985); University of Arizona, M.Ph. (1998); University of North Carolina, Ph.D. (2001).

JOHNSON, STANLEY W.  
Dean Emeritus, College of Arts and Sciences. Graceland College, A.A. (1948); Whitworth College, B.A. (1950); University of Missouri, M.Ed. (1956); University of Nebraska, Ed.D. (1962).

JOHNSON, STEVEN L.  
Director, Seawolf Debate Program. Associate Professor, Communication, College of Arts and Sciences. Moorhead State University, B.A. (1990); Colorado State University, M.A. (1992).

JOHNSON, VIRGINIA R.  

JOHNSON, GAILE  

JOHNSON, JANET M.  

JOHNSON-PETTY, MARIANNE  
Director, Student Health and Counseling Center. Case Western Reserve University, B.S. (1994); University of Alaska Anchorage, M.S. (2010).

JONES, CYNTHIA G.  
Term Assistant Professor, Nursing, College of Health. Regents College, B.S.N. (1996); University of Alaska Anchorage, M.S.N. (2000).

JONES, GARTH N.  

JONES, JAYNE  

JUNG, CHRISTOPHER  

KALINA, SUSAN M.  

KALKOWSKI, MELVIN P.  

KAMACHELE, RON  
Director, Human Resources. Linfield College, B.A. (1988); Chapman University, M.S. (1997).

KANAMORI, YOSHITO  

KAPLAN, SUSAN H.  

KAPPS, BRUNO M.  

KARAHAN, GOKAN  

KARPILO, LACY N.  

KAULITZ, GARRY C.  

KEATING, KEVIN M.  

KELLEY, COLLEEN  
Assistant Professor, Nursing, College of Health. Bethel College, B.S.N. (1986); Indiana University, M.S.N. (2002).

KELLEY, LAURA W.  

KELLY, DOUGLAS  
Assistant Professor, Journalism and Public Communications, College of Arts and Sciences. Ohio State University, B.A. (1988); University of Michigan, M.L.S. (1989); University of Maine, Ph.D. (2012).

KELLY, TERRANCE  
Assistant Professor, Philosophy, College of Arts and Sciences. Saint Joseph’s University, B.A. (1992); Saint Louis University, Ph.D. (1998).

KENDRICK, LORNA D.  
Associate Professor, Nursing, College of Health. Loma Linda University, B.S. (1989); Georgia State University, M.S. (1995); University of California at Los Angeles, Ph.D. (2003).

KENDRICK, RICHARD  
KILIC, ZEYNEP
Assistant Professor, Sociology, College of Arts and Sciences. Middle East Technical University, B.S. (1992); Arizona State University, M.A. (1997), Ph.D. (2006).

KILPATRICK, DONNA J.

KIM, SEONG DAE
Assistant Professor, Project Management, School of Engineering. Sungkyunkwan University, B.S. (1999), M.S. (2002); Texas A&M University, Ph.D. (2009).

KIMURA, SAM ISAMU

KIPP-LAVEA, BETTINA R.
Associate Professor, Counseling, Kenai Peninsula College. University of Alaska Anchorage, B.A. (1990); Alaska Pacific University, M.S. (1997).

KIRK, SARAH J.

KITTLE, RITA M.

KLAMSER, CAROL L.

KLING, DANIEL T.

KLISKEY, ANDREW D.

KNALL, CINDY M.
Associate Professor, WWAMI School of Medical Education, College of Health. George Washington University, B.A. (1985); University of Colorado, Ph.D. (1994).

KNAPP, GUNNAR P.
Interim Director, Professor, Economics, ISER, College of Business and Public Policy. Yale University, B.A. (1975), Ph.D. (1981).

KNOTT, CATHERINE

KNUDSEN, KRISTIN S.
Assistant Professor, Justice, College of Health. University of California, Los Angeles, B.A. (1975); Santa Clara University School of Law, J.D. (1978).

KOCHIS, CLAIR
Term Assistant Professor, Mathematics, Kenai Peninsula College. University of North Carolina at Wilmington, B.S. (1995); Colorado State University, M.S. (2001); Grand Canyon University, M.Ed. (2008).

KOCHIS, RICHARD

KONKEL, RICHARD STEVEN
Associate Professor, Health Sciences, College of Health. University of Colorado Boulder, B.S. (1972); Harvard University, M.C.P. (1975); Massachusetts Institute of Technology, Ph.D. (1991).

KOPACZ, EVA Y.

KOSHIYAMA, LYNN K.

KOZAK, DIANE

KREBS, JOCelyn E.
Professor, Biological Sciences, College of Arts and Sciences. Bard College, B.A. (1991); University of California, Ph.D. (1997).

KRUSE, JOHN A.
LINTON, PATRICIA W.  

LISZKA, JAMES J.  

LIU, HELEN  
Professor, Civil Engineering, School of Engineering. Beijing Polytechnic University, B.S. (1963), M.S. (1981); State University of New York, Ph.D. (1990).

LORONTO, NICOLAO O.  

LÓPEZ-GONZALEZ, MAYRA  

LOWE, MARIE E.  

LU, GANHU  

LU, YONGGANG  

LUND, JOHN A.  
Assistant Professor, Electrical Engineering, School of Engineering. Washington State University, B.S. (2004); University of Washington, M.S. (2006).

LUPFER, GWEN J.  

LUTTERMAN, JOHN.  
Assistant Professor, Music, College of Arts and Sciences. Lawrence University, B.M; Mannes College of Music, M.M.; Stony Brook University, D.M.A. (1989); University of California Davis, Ph.D. (2000).

LYNES-HAYES, PATRICIA A.  
Term Assistant Professor, Nursing, College of Health. Seton Hall University, B.S. (1962); Vanderbilt University, M.S. (1976), Ph.D. (1983).

LYONS, THERESA S.  

MAAS, DAVID C.  

MACKY, MELODIE A.  

MADDEN, MARK E.  

MADIGAN, ROBERT J.  

MADSEN, ELIZABETH K.  

MAGEN, RANDY H.  

MANN, CHERYL M.  

MANN, KRISTINE E.  

MANNION, HEIDI A.  
Professor, Medical Laboratory Technology, College of Health. Panama Canal College, Balboa, B.S. (1976); University of Alaska Anchorage, M.S. (2000); Virginia Commonwealth University, Ph.D. (2006).

MAPAYE, JOY C.  

MAPSON, JO-ANN  
Term Assistant Professor, Creative Writing and Language Arts, College of Arts and Sciences. California State University, B.A. (1977); Vermont College of Norwich University, M.F.A. (1992).

MARSHALL, DARRIN L.  

MARTIN, PAULA J.S.  

MARTIN, STEPHANIE L.  
Term Research Assistant Professor, Economics, ISER, College of Business and Public Policy. Occidental College, B.A. (1980); University of Southern California, M.P.L. (1985); University of Texas, Ph.D. (2005).

MARTINSON, MARK  

MASANOVIC, NATASA  
Associate Professor, Languages, College of Arts and Sciences. Bogazici University, Istanbul, B.A. (1992), M.A. (1995); Purdue University, Ph.D. (2002).

MASEDA GARCIA, REBECA  

MASELKO, JERZY  

MASON, J. DAVID  
Professor, Accounting, College of Business and Public Policy. Colorado State University, B.S. (1977); M.S. (1980); University of Colorado, Ph.D. (1993).

MASSAY, GLENN F.  

MASSINGHAM, DENNIS M.  

MCCARRISTON, LINDA J.  

MCCLUNG, ROBERT  
Term Assistant Professor, Radiologic Technology, College of Health. Bellevue University, B.S. (1997); University of La Verne, M.S. (2003).

MCCOY, MARK  
Assistant Professor, Chemistry, College of Arts and Sciences. University of Alaska Anchorage, B.S. (2003); University of California Davis, Ph.D. (2008).

MCCOY, ROBERT O.  

MCDONALD, BEATRICE  
Professor Emerita. State Teachers College, B.S. (1933); Boston University, B. Ed. (1934).

MCDONELL, ROBERT  

MCDOWELL, CHRISTINA L.  

MC Gee, RONALD N.  
Associate Professor, Journalism and Public Communication, College of Arts and Sciences. Indiana University, B.A. (1979); Ball State University, M.A. (1981).

MC GILL, COLIN M.  

MCKAY, J. ELLEN  
NARANG, KAMAL L.  

NASH, CAROL A.  
Associate Professor, Nursing, College of Health. University of Massachusetts, B.S. (1966); Colorado Women's College, B.A. (1975); Salem State College, M.S. (1997).

NAUANN, TERRY R.  
Associate Professor, Geology, College of Arts and Sciences. California State Polytechnic University, B.A. (1983); University of Nevada, M.S. (1987); University of Idaho, Ph.D. (1998).

NELSON, TERRY A.  

NELSON, WILLIAM G.  

NG, JACOB  

NICKLES, JON  
Term Instructor, Biology, College of Arts and Sciences. Michigan State University, B.S. (1967), M.S. (1968); Southern Illinois University, M.S. (1975).

NIX, NANCY A.  

NIXON, JESSIE  

NOBLE, RAYMOND O.  

NUNNALLY, JOSEPH C.  

O'DELL, KATHLEEN D.  

OKESON, AL  
Director Emeritus, Matanuska-Susitna College. Concordia College, B.A. (1956); St. Cloud State University, M.S. (1964).

O'LEARY, JOAN D.  

OLIVARES, WALTER G.  
Associate Professor, Music, College of Arts and Sciences. Texas Tech University, B.A. (1976), M.M. (1977).

OLFESSON, JOHN A.  
Professor, Civil Engineering, School of Engineering. Clarkson College of Technology, B.S. (1968); Syracuse University, M.S. (1972); University of Maine, Ph.D. (1977).

OLSON, MEGAN  
Vice Chancellor, University Advancement. St. Lawrence University, B.A (1993).

OLSON, STEPHANIE M.  

OLSON, TERRI S.  
Associate Professor, Nursing, College of Health. Loretto Heights College, B.S.N. (1976); Arizona State University, M.S.N. (1983).

OLSSON, PETER Q.  

O'MALLEY, MAUREEN B.  
Associate Director, School of Nursing. Associate Professor, Nursing, College of Health. William Patterson College, B.S. (1976); University of Southern California, M.S. (1983); Rush University, Ph.D. (2002).

ORLEY, SOREN  
Associate Professor, Accounting, College of Business and Public Policy. Montana State University, B.S. (1982); University of Alaska Anchorage, M.B.A. (2006).

ORR, SYLVIA M.  

ORTEGA, IRAIEMA  

OSTER, CARLA J.  

OSTERHOUDET, CURTIS.  
Assistant Professor, Physics, College of Arts and Sciences. Western State College of Colorado, B.A. (1999); Washington State University, Ph.D. (2007).

OWENS-MANLEY, JUDITH  

OZURU, YASUHIRO  

PACE, KIMBERLY J.  

PAJOT, MICHAEL E.  

PANTALEONE, JAMES T.  

PARIS, ANTHONY J.  

PARKER, NADINE M.  

PARNELL, RYAN C.  

PARRISH, M. GREG  

PARRY, DOUG J.  
Professor, Communication, College of Arts and Sciences. University of the Pacific, B.A. (1979); West Virginia University, M.A. (1981); Ohio University, Ph.D. (1990).

PARTRIDGE, BRIAN C.  

PASCH, ANNE  

PATERNA, LYNN S.  
Assistant Professor, Human Services, College of Health. Indiana University, B.S. (1967); University of Alaska Anchorage, M.S. (1995).

PATTERSON-TURNER, REBECCA H.  

PAYNE, TROY C.  
Assistant Professor, Justice, College of Health. Purdue University, B.S. (2004); University of Cincinnati, M.S. (2007), Ph.D. (2010).

PEABODY, ALAN B.  

PECK, GALINA A.  
<table>
<thead>
<tr>
<th>Name</th>
<th>Title/Role</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEDERSEN, ERIC</td>
<td>Associate Vice Chancellor for Enrollment Management, Student Affairs</td>
<td>Whitman College, B.A. (1989); Azusa Pacific University, M.Ed. (2003).</td>
</tr>
<tr>
<td>PENCE, SANDRA D.</td>
<td>Associate Professor, Dental Hygiene, College of Health</td>
<td>Howard Payne University, B.S. (1985); University of Alaska Anchorage, M.S. (2010).</td>
</tr>
<tr>
<td>PERIMAN, DEBORAH K.</td>
<td>Associate Professor, Justice, College of Health</td>
<td>Eastern Oregon State College, B.S. (1980); Williamette University College of Law, J.D. (1985).</td>
</tr>
<tr>
<td>PERRY, PAUL E.</td>
<td>Term Assistant Professor, Paramedical Technology</td>
<td>University of Alaska Anchorage, A.A.S. (2006).</td>
</tr>
<tr>
<td>PETERSEN, JUDITH A.</td>
<td>Professor Emerita, Nursing Science</td>
<td>Mount Marty College, B.S.N. (1966); University of Nebraska, M.S.N. (1976).</td>
</tr>
<tr>
<td>PETERSON, KIM M.</td>
<td>Professor, Biological Sciences, College of Arts and Sciences.</td>
<td>Eastern Montana College, B.S. (1972); Duke University, Ph.D. (1978).</td>
</tr>
<tr>
<td>PETRAITIS, JOHN M.</td>
<td>Associate Dean, Social Sciences, College of Arts and Sciences. Professor</td>
<td>Psychology, College of Arts and Sciences, University of Minnesota, B.A. (1983); Loyola University, M.A. (1987), Ph.D. (1990).</td>
</tr>
<tr>
<td>PEUKER, STEFFEN</td>
<td>Assistant Professor, Mechanical Engineering</td>
<td>Hochschule Mannheim University, M.S. (2002); University of Illinois, M.S. (2006), Ph.D. (2010).</td>
</tr>
<tr>
<td>PFLAUM, JACQUELINE S.</td>
<td>Associate Vice Provost, Health Programs, Professor, Nursing</td>
<td>Department of Health, St. Olaf College, B.S.N. (1969); University of Hawaii, M.S. (1979), M.P.H. (1979); University of San Diego, D.N.S. (1997).</td>
</tr>
<tr>
<td>PICCARD, LUANN</td>
<td>Interim Director, ESPM, Term Assistant Professor, ESPM, School of Engineering</td>
<td>Stanford University, B.S. (1982), M.S. (1985).</td>
</tr>
<tr>
<td>PRASAD, RASHMI</td>
<td>Dean, College of Business and Public Policy, Professor, Business Administration</td>
<td>College of Business and Public Policy, University of Michigan, B.A. (1988); University of Illinois, M.B.A. (1990); University of Kentucky, Ph.D. (2001).</td>
</tr>
<tr>
<td>PYLE, STEVEN</td>
<td>Term Assistant Professor, Medical Laboratory, College of Health.</td>
<td>Loma Linda University, B.S. (1988); University of Alaska Anchorage, B.S. (2003).</td>
</tr>
</tbody>
</table>

**QUIMBY, T. BARTLETT**

**RAINER, FREDERICK A.**
Associate Dean of Sciences, College of Arts and Sciences. Professor, Biological Sciences, College of Arts and Sciences, University of Warwick, B.Sc. (1988); The University of Waikato, Ph.D. (1991).

**RANGARAJAN, SUDARSA**

**RAVEN, THOMAS M.**
Professor, Civil Engineering, School of Engineering, Dartmouth College, B.A. (1983); University of Massachusetts, M.A. (1990); Massachusetts Institute of Technology, Ph.D. (1997).

**RAWLINS, KATHERINE**
Associate Professor, Physics/Astronomy, College of Arts and Sciences. Yale University, B.S. (1996); University of Wisconsin, Ph.D. (2001).

**REARDEN, ANNETTE K.**
Assistant Professor, Nursing, College of Health. Marquette University, B.S. (1999); University of Alaska Anchorage, M.S. (2010).

**REARDEN, DON J.**

**RECTOR, TRAVIS A.**

**REIMER, MATTHEW N.**
Assistant Professor, Economics, ISER, College of Business and Public Policy. University of Calgary, B.A. (2008); University of California, Davis, Ph.D. (2012).

**REINE, SARA L.**

**RENARDSON, GAIL L.**

**REUE, QUENTIN B.**
Professor, Biological Sciences, WWAMI School of Medical Education, College of Health, South Dakota State University, B.S. (1981); Montana State University, Ph.D. (1987).

**RILEY, JOHN P.**

**RISLEY, TODD R.**

**RIVERA, MARK**
Term Instructor, Geological Sciences, College of Arts and Sciences. University of Wisconsin Oshkosh, B.S. (1996); New Mexico State University, M.S. (2000); Southern Oregon University, M.A. (2003).

**RIVERA, MARNY S.**

**ROBERTS, RANDY R.**

**ROBINSON, MARC V.**
Assistant Professor, Elementary Education, College of Education. Saint Xavier University, B.A. (1973); University of Alaska Anchorage, M.Ed. (1996); University of Oregon, Ph.D. (2005).

**ROBINSON, MICHAEL C.**

**ROBINSON, REBECCA V.**

**ROGERS, CYNTHIA**
ROHL, EUGENE A.

ROLLINS, ALDEN M.

ROLLINS, STEPHEN J.

ROSAY, ANDRE B.

ROSE, MEI

ROSICH, ROSELLA M.
Professor, Psychology, College of Arts and Sciences. Ohio State University, B.A. (1974); University of Nebraska at Omaha, M.A. (1980); West Virginia University, Ph.D. (1988).

ROSSEL, IRA

ROSS, LARRY L.

ROUTE, ANNIE

RUBIN, JERILYN G.

RUSS, DEBRA S.

RUSSELL, TERRI
Term Assistant Professor, Nursing, College of Health. Lewis-Clark State College, B.S. (1998); Gonzaga University, M.S. (2010).

RUST, CRYSTAL A.

RYAN, HEATHER

RYAN, SUSAN M.

SAGAL, MARY

SANDBERG, KATE E.

SANDBERG, PATRICIA R.

SCHAER, NANCY E.

SCHMITT, KAREN R.

SCHLABAUGH, ADELINE

SCHMULAND, ARLENE B.

SCHREITER, MARK A.

SCHROEDER, HERBERT P.

SCHULTZ, BRUCE

SCOTT, KIRK A.

SEARS, ALICE L.

SEARS, STANLEY E.

SEKAL, BERNARD

SEITZ, HILARY J.

SEITZ, JAMES A.
Director, Office of Field Experiences and Certification. Term Assistant Professor, College of Education. University of Wisconsin Madison, B.S. (1975); University of Denver, M.A. (1981).

SELK, GARY L.

SELKEKREGG, LIDIA

SELKEKREGG, SHEILA A.
Assistant Professor, Public Administration, College of Business and Public Policy. Austin Peay State University, B.S. (1974); University of Oregon, M.S. (1976); Portland State University, Ph.D. (1994).

SENETTE, CAROL L.

SEXTON, TOM F.

SHANNON, KELLY J.
Assistant Professor, History, College of Arts and Sciences. Vassar College, B.A. (2003); University of Connecticut, M.A. (2005); Temple University, Ph.D. (2010).

SHAW, DONNA GAIL

SHEPHERD, NANCY J.

SHIELDS, JESSICA C.

SHEPP, RICK L.
Chief of Police, University Police Department. Wayland Baptist University, A.A.S (1993).

SHEPHERD, CARL E.

SHER, PATRICK
Associate Vice Chancellor, Information Technology Services.

SIEMERS, CHERYL K.

SIERRA, ELIZABETH R.
Assistant Professor, Psychology, Prince William Sound Community College. Midwestern State University, B.A. (2000); Syracuse University, M.S. (2006); State University of New York, Ph.D. (2010).
SIEWERT, SAMUEL B.

SIGNORE, LANDY
Assistant Professor, Political Science, College of Business Policy. University of Lyon, B.S. (2003), M.S. (2004); University of Montreal, Ph.D. (2010).

SIMPSON, SHEERYL A.

SIRLES, ELIZABETH A.

SKORE, TOM T.

SLAGLE, KATHRYN M.
Term Assistant Professor, Radiologic Technology, College of Health. Northeastern State University, B.S. (1996); Arkansas State University, M.S. (2000).

SMILEY, LEONARD M.

SMITH, CHERYL E.
Professor, Counseling, Community and Technical College. Gonzaga University, B.A. (1968); University of LaVerne, M.S. (1987).

SMITH, KELLY J.

SMITH, MICHAEL B.

SMITH, ORSON P.
Professor, Civil Engineering, School of Engineering. University of Kentucky, B.S. (1971); Mississippi State University, M.S. (1986); North Carolina State University, Ph.D. (1989).

SMITH, TARA M.

SMITH, TIMOTHY C.

SNOW, PETER
Assistant Professor, Elementary Education, Kenai River Campus, Kenai Peninsula College. Middlebury College, B.A. (1990); University of New Mexico, M.A. (1997); University of California, Ph.D. (2004).

SPALINGER, DONALD E.
Professor, Biological Sciences, College of Arts and Sciences. Humboldt State University, B.S. (1974); University of Nevada, M.S. (1980); Washington State University, Ph.D. (1985).

SPATZ, RONALD M.

SPECTOR, HELENA

SPIEKER, IRENE
Associate Professor, Nursing, College Health. Marymount University, B.S.N. (1977); University of Alaska Anchorage, M.S. (1985).

SPINDEL, WILLIAM

SRINIVASAN, RAM
Professor, Chemistry, WWAMI School of Medical Education, College of Health. University of Madras, B.S. (1964), M.S. (1966); University of Saskatchewan, Ph.D. (1971).

SRIVASTAVA, SURESH C.

STALVEY, JOHN R.D.

STECYK, JONATHAN
Assistant Professor, Biological Sciences, College of Arts and Sciences. Augsburg University, B. Sc. (1999); Simon Fraser University, M.Sc. (2002), Ph.D. (2007).

STEFFY, DENNIS D.

STEFFY, GINGER L.

STEIN, SONYA
Director, Office of Student Financial Assistance. SUNY University at Buffalo, B.S. (2002).

STEPHENSON, KATHLEEN S.

STEVENSON, DAVID D.
Director, Creative Writing and Language Arts. Term Assistant Professor, Creative Writing and Language Arts, College of Arts and Sciences. The Evergreen State College, B.A. (1978); University of Utah, Ph.D. (1994).

STONE, JENNIFER C.

STRALEY, STASIA C.

STRATTON, MARCIA R.

STROM, STEPHEN L.
Associate Dean, Community and Technical College. Term Assistant Professor, Operation Management and Supervision, Community and Technical College. Clemson University, B.S. (1985); Air Force Institute of Technology, M.S. (1989).

STRIED-CADWICK, KAREN S.

STROBACH, CYNTHIA

SULLIVAN, CATHERINE H.

SULLIVAN, TROY
Professor Emeritus, University of Hawaii, M.S. (1948); North Texas State College, M.S. (1950); North Texas State University, Ed.D. (1965).

SVEINBJORNSSON, BJARTMAR
Professor, Biological Sciences, College of Arts and Sciences. Reykjavik University, B.A. (1966); University of Iceland, B.S. (1972); McGill University, Ph.D. (1979).

SWARTZ, CAROL I.

SWEENEY, CHRISTOPHER R.
Associate Professor, Music, College of Arts and Sciences. Duquesne University, B.S. (1989); University of Miami, M.M. (1998); University of Miami Ph.D. (2002).

SWIFT, JOSHUA K.
Assistant Professor, Psychology, College of Arts and Sciences. Brigham Young University, B.S. (2005); Oklahoma State University, M.S. (2007).

TARRANT, DIANNE L.
Associate Professor, Nursing, College of Health. Montana State University, B.A. (1971); Alaska Methodist University, B.S.N. (1976); University of Alaska Anchorage, M.S.N. (1995).
TAYLOR, AUDREY R.
Assistant Professor, Environmental Studies, College of Arts and Sciences. Cornell University, B.S. (1997); Colorado State University, M.S. (2002); University of Alaska Fairbanks, Ph.D. (2011).

TENAGLETT, WILLIAM G.

THARP, DEBORAH K.

THIRI, KANAPATHI (SAM)

THOMPSON, JEAN
Term Assistant Professor, Medical Assisting, College of Health. University of San Francisco, B.S.N. (1972).

THORN, ELIJAH “ANDRE”

THORNGREN, KELLY
Director, Budget. Southern Oregon University, B.S. (1986).

TOBER, DIANE M.

TOMCO, PATRICK
Term Assistant Professor, Chemistry, College of Arts and Sciences. University of Nevada, B.S. (2005); University of California Davis, Ph.D. (2011).

TOMICH, GLORIA A.

TOMKA, KATHRYN A.

TORRANCE, NAOMI C.

TOSCANO, SHARYL

TRAMMEL, ERICK J.

TRAWVER, KATHI R.

TREKELL, JOSEPH M.
Term Instructor, Welding Technology, Community and Technical College.

TREMBLAY, AMMIE

TRIGIANO, GLENN L.

TROTTER, RICHARD C.
Associate Professor, Business Administration, College of Business and Public Policy. University of Texas, Austin, B.A. (1973); University of Texas School of Law, J.D. (1976).

TRUJILLO, ANGELIA C.

TRUSSELL, CINDY L.
Associate Professor, Biological Sciences, Kodiak College. University of Miami, B.S. (1996); University of North Carolina, Ph.D. (2004).

TUCK, BRADFORD H.

TURLETES, CHRIS

TURNER, A. ALLAN
Professor, Education, College of Education. Lakehead University, B.Ed. (1975), M.Sc (1977); University of Alberta, Ph.D. (1982).

TURNER, GARY J.

TURNER, MICHAEL T.

TURTON, AMINA M.
Professor, Special Education, College of Education. Kingston University, B.S. (1992); University of Birmingham, M.Ed. (2001); Arizona State University, Ph.D. (2009).

VADAPALLI, DIWAKAR
Term Research Assistant Professor, ISER, College of Business and Public Policy. Andhra University, B.Arch. (2000); Kansas State University, M.S. (2003), Case Western University, Ph.D. (2012).

VANDERBURG, ISAAC

VALEK WILSON, SHIRLEY J.

VAN DOMMELEN, DORN
Professor, Geography, College of Arts and Sciences. Pennsylvania State University, B.Sc. (1985); University of Kentucky, M.A. (1988); University of Toronto, Ph.D. (1996).

VAN RINGELENSTEIN, ELI

VAN TETS, IAN GERARD

VEH, ANDREAS F.
Associate Professor, Physics, Kenai Peninsula College. Technical University Berlin, B.S. (1990); Minnesota State University, M.S. (1994); Chadron State College, M.A. (2001).

VELTRE, DOUGLAS W.

VENEMA, RIEKEN S.
Associate Professor, Statistics, College of Arts and Sciences. University of Groningen, B.S. (1992); Mathematics Research Institute, M.S. (1993); Oregon State University, M.S. (1994); University of Groningen, Ph.D. (1999).

VENTGEN, PAMELA

VOGE, KATHLEEN L.

VOLDEN, LORA

VON HIPPEL, FRANK A.
Professor, Biological Sciences, College of Arts and Sciences. Dartmouth College, A.B. (1989); University of California, Berkeley, Ph.D. (1996).

VUGMEYSTER, LIILY
Assistant Professor, Chemistry, College of Arts and Sciences. City University of New York, B.S. (1996); State University of New York, Ph.D. (2001).

WAFTO, ROBIN J.

WALLACE, BETTIE G.
Associate Professor, Mathematics, Kenai Peninsula College. Mississippi State University, B.S. (1960), M.S. (1965).

WANG, STEVEN HSUH MING
Associate Professor, Engineering, School of Engineering. National Chung Chang Institute of Technology, B.S. (1983); Lehigh University, M.S. (1999); Northwestern University, M.S. (1989); Lehigh University, Ph.D. (1999).

WARD, JERVETTE R.

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WARD, KAREN M.  

WARREN, GARLYN R.  

WARTINBEE, DAVID C.  

WEATHERBY, EILEEN V.  

WEISS, MARY T.  

WELKER, JEFFERY M.  
Professor, Biological Sciences, College of Arts and Sciences. Montana State University, B.S. (1980), M.S. (1982); Texas A & M University, Ph.D. (1985).

WHEELER, CATHERINE  

WHITE, PAUL J.  

WHITNEY, SHAWN ALEE A.  

WICK, BRIAN D.  

WIDDICOMBE, RICHARD (TOBY)  

WIGHT, ERICA  
Term Assistant Professor, Radiologic Technology, College of Health. University of Nevada, B.S. (1992); City University of Seattle, M.Ed. (1996).

WIGHT, JOHN  

WILLIAMS, MARIA  

WILLIAMS, PAULA  

WILSON, JAMES R.  

WISNIEWSKI, HELENA S.  
Vice Provost, Research and Graduate Studies. Dean, Graduate School. Professor, Entrepreneurship, College of Business and Public Policy. William Paterson University, B.A. (1971); Stevens Institute of Technology, M.S. (1973); Graduate Center of the City University of New York, Ph.D. (1980).

WOLBERS, MARK E.  

WOLFE, WENDELL  
Professor Emeritus, Education. North Texas University, B.S. (1948); Texas College of Arts and Sciences, M.S. (1952); University of Texas, Ph.D. (1965).

WOLFRAM, VERN A.  
Assistant Professor, Culinary Arts, Community and Technical College.

WOODY, JACQUE L.  
Assistant Professor, Nursing, College of Health. Arizona State University, B.S. (1987); University of Phoenix, M.S. (2005).

WORKMAN, WILLIAM B.  

YANG, ZHAOHUI  
Professor, Civil Engineering, School of Engineering, University of Science and Technology, B.S. (1991); Sichuan Union University, M.S. (1993); University of California, Ph.D. (2002).

YAPUNCICH, MARION L.  

YEN, MINNIE YE-MIN  

YESNER, DAVID R.  

ZENG, ANNIE P.  
Director, Confucius Institute. Term Assistant Professor, Languages, College of Arts and Sciences. Xi'an Foreign Languages University, B.A. (1982); University of Reading, M.A. (1998); Brigham Young University, Ph.D. (2005).

ZUBECK, HANNELE K.  
Professor, Civil Engineering, School of Engineering. University of Technology, M.S. (1985); Oregon State University, Ph.D. (1993).
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Physical address:
3901 Old Seward Highway, Suite 106
Anchorage, Alaska

Mailing address:
P.O. Box 141629
Anchorage, Alaska 99514-1629