Dear Students,

Welcome to the 07/08 academic year at UAA! We are delighted to welcome you to this exciting learning community.

The most important part of UAA is its students. As your chancellor, I begin this academic year with an important commitment: to work cooperatively with you to make UAA a university that we are proud of and that both Anchorage and Alaska enthusiastically support. Through our collaborative efforts, UAA can serve both the needs of its students and the needs of this state.

Though one’s education is never a solo journey, each of you carry very personal academic goals and aspirations as you step foot on campus. UAA’s faculty and staff strive to meet the needs of every student by offering diverse selection of license, certificate and associate’s, bachelor’s and master’s degree programs. The UAA team is dedicated to making your educational experience at UAA a rewarding one.

I sincerely hope that your year is filled with academic challenge, discovery and success.

Sincerely,

Fran Ulmer
Chancellor
University of Alaska Anchorage
3211 Providence Drive
Anchorage, AK 99508-8046
www.uaa.alaska.edu
It is the responsibility of the individual student to become familiar with the policies and regulations of UAA 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.
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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, Vietnam era or disabled veteran status, physical or mental disability, changes in 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).
SOURCES OF INFORMATION

SCHOOLS AND COLLEGES

COLLEGE OF ARTS AND SCIENCES
(907) 786-1707  http://cas.uaa.alaska.edu
Dr. James Jakob Liszka, Dean  FAX (907) 786-4630
Social Sciences Building, Room 335

COLLEGE OF BUSINESS AND PUBLIC POLICY
(907) 786-4100  www.cbpp.uaa.alaska.edu
Thomas Case, Dean  FAX (907) 786-4131
Edward and Cathryn Rasmuson Hall, Room 301

COLLEGE OF EDUCATION
(907) 786-4401  http://coe.uaa.alaska.edu
Dr. Mary Snyder, Dean  FAX (907) 786-4445
Professional Studies Building, Room 234

COLLEGE OF HEALTH AND SOCIAL WELFARE
(907) 786-4406  http://chsw.uaa.alaska.edu
Dr. Cheryl Easley, Dean  FAX (907) 786-4440
Professional Studies Building, Room 205

COMMUNITY AND TECHNICAL COLLEGE
(907) 786-6400  www.uaa.alaska.edu/ctc
Dr. Jan Gehler, Dean  FAX (907) 786-6401
University Center, Suite 141

SCHOOL OF ENGINEERING
(907) 786-1900  www.engr.uaa.alaska.edu/soe
Dr. Robert Lang, Dean  FAX (907) 786-1079
Engineering Building, Room 201

UNIVERSITY HONORS COLLEGE
(907) 786-1086  www.uaa.alaska.edu/honors
Ronald Spatz, Dean  FAX (907) 786-1060
Edward and Cathryn Rasmuson Hall, Room 119

COMMUNITY CAMPUSES

CHUGI AK/EAGLE RIVER CAMPUS
(907) 694-3313  http://eagle.uaa.alaska.edu
Peter G. Risse, Interim Director  FAX (907) 694-1491
10928 Eagle River Road, Suite 228
Eagle River, Alaska 99977

KENAI PENINSULA COLLEGE
(907) 262-0330  www.kpc.alaska.edu
Gary J. Turner, College Director  FAX (907) 262-0322
34820 College Drive, Soldotna, AK 99669

Anchorage Extension Site
(907) 786-6421  www.kpc.alaska.edu/anchorage
Marianne Wood, Program Support  FAX (907) 786-6414
3901 Old Seward Highway, Anchorage, AK 99503

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

Kenai River Campus
(907) 262-0330  www.kpc.alaska.edu
34820 College Drive, Soldotna, Alaska 99669

MINING AND PETROLEUM TRAINING SERVICE
(907) 262-2788  www.mapts.uaa.alaska.edu
Dennis Steffy, Director  FAX (907) 262-2812
34820 College Drive, Soldotna, AK 99669

Resurrection Bay Extension Site
(907) 224-2285  www.kpc.alaska.edu/resurrection
Jackie Marshall, Coordinator  FAX (907) 224-3306
2001 Swetmann, Seward, Alaska 99664

KODIAK COLLEGE
(907) 486-4161  www.koc.alaska.edu
Barbara J. Bolson, Director  FAX (907) 486-1257
117 Benny Benson Drive, Kodiak, Alaska 99915

MATANUSKA-SUSITNA (MAT-SU) COLLEGE
(907) 745-9774  www.matsu.alaska.edu
Dennis Clark, Director  FAX (907) 745-9711
P.O. Box 2889, Palmer, Alaska 99645

MILITARY EDUCATION SERVICES

ANCHORAGE AREA MILITARY EDUCATION SERVICES
Elmendorf Air Force Base (907) 753-0204
Mel Kalkowski, Director  FAX (907) 753-8390
3 MSS/DPE 4109 Bullard Avenue, Suite 107
Elmendorf AFB, Alaska 99506

Fort Richardson Army Post (907) 428-1228
Mel Kalkowski, Director  FAX (907) 428-1002
Bldg. 7, Chilkoot Avenue
Fort Richardson, Alaska 99505

AFFILIATE COLLEGE

PRINCE WILLIAM SOUND COMMUNITY COLLEGE
(907) 834-1600  www.pwscc.edu
Douglas Desorcie, Interim President  FAX (907) 834-1627
P.O. Box 97
Valdez, Alaska 99686
with Centers at Cordova and Copper Basin
# Academic Programs

UAA offers certificate, associate, baccalaureate, and master’s degree programs in over 130 major study areas. The availability of small classes provides accessibility to faculty. In addition, the University offers tailored short courses, workshops, and seminars throughout the year, as well as institutes and conferences.

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

## Campus Key

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<th>Location</th>
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<tbody>
<tr>
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<tr>
<td>KP</td>
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<td>MA</td>
<td>Mat-Su</td>
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## Key To Colleges Offering Programs

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<td>CAS</td>
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<tr>
<td>CBPP</td>
<td>College of Business and Public Policy</td>
</tr>
<tr>
<td>CHSW</td>
<td>College of Health and Social Welfare</td>
</tr>
<tr>
<td>COE</td>
<td>College of Education</td>
</tr>
<tr>
<td>CTC</td>
<td>Community and Technical College</td>
</tr>
<tr>
<td>SOE</td>
<td>School of Engineering</td>
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<td>HC</td>
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## Occupational Endorsement Certificates

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<td>Automotive Brakes, Suspension, and Alignment</td>
<td>165</td>
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<tr>
<td>Automotive Electrical</td>
<td>165</td>
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<tr>
<td>Automotive Engine Performance</td>
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<td>Automotive Powertrains</td>
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<tr>
<td>Bookkeeping</td>
<td>177</td>
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<tr>
<td>CAD for Building Construction</td>
<td>163</td>
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<tr>
<td>Children’s Residential Services</td>
<td>145</td>
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<td>CISCO-Certified Network Assoc (CCNA)</td>
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<tr>
<td>Clinical Assistant</td>
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<tr>
<td>Coaching Leadership</td>
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<tr>
<td>Commercial HVAC Systems</td>
<td>207</td>
<td>MA</td>
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<tr>
<td>Commercial Refrigeration Systems</td>
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<tr>
<td>Community Mental-Health Services</td>
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<tr>
<td>Conflict Resolution</td>
<td>148</td>
<td>CHSW</td>
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<tr>
<td>Desktop Publishing &amp; Graphics</td>
<td>178</td>
<td>CTC</td>
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<tr>
<td>Fitness Leadership</td>
<td>195</td>
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<td>Legal Office Support</td>
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<td>Office Technology</td>
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<td>Phlebotomist</td>
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<td>Residential &amp; Light Commercial</td>
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<tr>
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<tr>
<td>Web Foundations</td>
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## Undergraduate Certificates

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<td>Architectural Drafting (AI, MA)</td>
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<td>Aviation Maintenance Technology (AI)</td>
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<tr>
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<tr>
<td>Civil Drafting (AI, MA)</td>
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<tr>
<td>Computer &amp; Networking Technology (AI, MA)</td>
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<td>CTC</td>
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<tr>
<td>Computer Information and Office Systems (AI, KO, KP, MA)</td>
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### ACADEMIC PROGRAMS

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<tr>
<td>Construction Management (AI)</td>
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<td>CTC</td>
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<td>Culinary Arts (AI)</td>
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<td>Dental Hygiene (AI)</td>
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<td>KP</td>
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<td>Early Childhood Development (AI)</td>
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<td>Fire &amp; Emergency Services Technology (AI)</td>
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<td>General Business (KO, KP)</td>
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<td>Geomatics (AI)</td>
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<td>SOE</td>
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<tr>
<td>Heavy Duty Transportation &amp; Equipment (AI)</td>
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<td>CTC</td>
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<td>Human Services (AI, MA)</td>
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<tr>
<td>Industrial Process Instrumentation (KP)</td>
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<tr>
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<td>Medical Laboratory Technology (AI)</td>
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<td>Professional Piloting (AI)</td>
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<td>Radiologic Technology (AI)</td>
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<td>Refrigeration and Heating Technology (MA)</td>
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<td>Small Business Administration (AI, KP, MA)</td>
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<td>Technology (KO)</td>
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<td>Telecommunications, Electronics and Technology (AI, MA)</td>
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<td>Welding and Nondestructive Testing (AI)</td>
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### BACCALAUREATE DEGREES

#### Bachelor of Arts

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<td>History (AI)</td>
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<td>Hospitality &amp; Restaurant Management (AI)</td>
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<td>Interdisciplinary Studies (AI)</td>
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<td>International Studies (AI)</td>
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<td>Journalism &amp; Public Communications (AI)</td>
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<td>Justice (AI)</td>
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#### Bachelor of Business Administration

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#### Bachelor of Human Services (AI)

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#### Bachelor of Liberal Studies (AI)

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#### Bachelor of Social Work (AI)

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#### Minors

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Economics (AI) 135 CBPP
Electrical Engineering (AI) 220 SOE
English (AI) 101 CAS
Environmental Studies (AI) 102 CAS
General Engineering (AI) 221 SOE
Geological Sciences (AI) 104 CAS
Gerontology (AI) 145 CHSW
Health and Fitness Leadership (AI) 194 CTC
History (AI) 105 CAS
International North Pacific Studies (AI) 107 CAS
Journalism and Public Communications (AI) 109 CAS
Justice (AI) 150 CHSW
Languages (AI) 110 CAS
Mathematics (AI) 113 CAS
Mechanical Engineering (AI) 226 SOE
Music (AI) 116 CTC
Nutrition (AI) 201 CTC
Philosophy (AI) 119 CAS
Physical Education (AI) 194 CTC
Physics (AI) 119 CAS
Political Science (AI) 120 CAS
Psychology (AI) 122 CAS
Public Administration (AI) 121 CAS
Real Estate (AI) 132 CBPP
Social Welfare Studies (AI) 159 CHSW
Sociology (AI) 123 CAS
Statistics (AI) 124 CAS
Theatre (AI) 125 CAS
Women's Studies (AI) 126 CAS

**POST BACCALAUREATE CERTIFICATES**

Early Childhood: Pre-K through Third Grade 236 COE
Elementary Education 238 COE

**GRADUATE DEGREES**

**MASTER OF APPLIED ENVIRONMENTAL SCIENCE & TECHNOLOGY (AI)** 284 SOE

**MASTER OF ARTS**

Anthropology (AI) 250 CAS
English (AI) 256 CAS
Interdisciplinary Studies (AI) 246 CAS
Master Of Arts In Teaching Education (AI) 263 COE

**MASTER OF BUSINESS ADMINISTRATION**

General Management (AI) 258 CBPP

**MASTER OF CIVIL ENGINEERING (AI)** 283 SOE

**MASTER OF EDUCATION**

Adult Education (AI) 267 COE
Counselor Education (AI) 268 COE
Early Childhood Special Education (AI) 268 COE
Educational Leadership (AI) 269 COE
Master Teacher with Specialty Options (AI) 270 COE
Special Education (AI) 270 COE

**MASTER OF FINE ARTS**

Creative Writing and Literary Arts (AI) 255 CAS
*(Suspended)*

**MASTER OF PUBLIC ADMINISTRATION (AI)** 261 CBPP

**MASTER OF PUBLIC HEALTH**

Public Health Practice (AI) 276 CHSW

**MASTER OF SCIENCE**

Applied Environmental Science and Technology (AI) 284 SOE
Arctic Engineering (AI) 281 SOE
Biological Sciences (AI) 252 CAS
Civil Engineering (AI) 282 SOE
Clinical Psychology (AI) 253 CAS
Computer Science * (AI) 255 CAS
Engineering Management (AI) 283 SOE
Global Supply Chain Management (AI) 259 CBPP
Interdisciplinary Studies (AI) 246 CAS
Nursing Science (AI) 272 CHSW
Project Management (AI) 286 SOE
Science Management (AI) 283 SOE
Vocational Education (AI) (Suspended) 281 CTC
* Joint Collaborative Program

**MASTER OF SOCIAL WORK (AI)** 277 CHSW

**GRADUATE CERTIFICATES**

Clinical Social Work Practice 279 CHSW
Dietetic Internship (AI) 280 CTC
Educational Leadership: Principal (AI) 271 COE
Educational Leadership: Superintendent (AI) 271 COE
Family Nurse Practitioner (AI) 274 CHSW
Nursing Education (AI) 275 CHSW
Port and Costal Engineering 286 SOE
Psychiatric and Mental Health Nurse Practitioner (AI) 274 CHSW
Social Work Management (AI) 279 CHSW
Special Education 271 COE
Supply Chain Management 260 CBPP

**DOCTORAL PROGRAMS**

Biological Sciences 252 CAS
*(Cooperative Program with UAF)*
Clinical-Community Psychology 253 CAS
*(Partnership with UAF)*
Medical School WWAMI 250 CAS
*(Collaborative with the University of Washington)*

**SPECIALTY PROGRAMS**

*(No Degree or Certificate awarded)*

Air Force ROTC 160
Forty-Ninth State Fellows 229
University Honors College 228
INSTITUTIONAL ACCREDITATION

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

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

PROGRAM ACCREDITATION

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

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

ART
Bachelor of Arts, Bachelor of Fine Arts
Accredited by the National Association of Schools of Art and Design (NASAD)

AUTO DIESEL TECHNOLOGY
- Associate of Applied Science in Heavy Duty Transportation and Equipment
- Associate of Applied Science in Automotive Technology with options in General Automotive, Ford ASSET, and General Motors ASEP
- Undergraduate Certificate in Automotive Technology
Accredited by the National Institute for Automotive Service Excellence

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

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

CIVIL ENGINEERING
Bachelor of Science
Accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET)

COLLEGE OF BUSINESS AND PUBLIC POLICY
Bachelor of Business Administration in Accounting, Economics, Finance, Global Logistics Management, Management, Management Information Systems, and Marketing
Bachelor of Arts in Economics
Master of Business Administration
Master of Science in Global Supply Chain Management
Accredited by the Association to Advance Collegiate Schools of Business International (AACSB)

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

DENTAL ASSISTING
Certificate
Accredited by the Commission on Dental Accreditation of the American Dental Association

DENTAL HYGIENE
Associate of Applied Science
Accredited by the Commission on Dental Accreditation of the American Dental Association

DIETARY INTERNSHIP
Graduate Certificate
Approved by the American Dietetics Association Commission on Accreditation

GEOMATICS
Bachelor of Science
Accredited by the Applied Science Accreditation Commission of the Accreditation Board for Engineering and Technology (ASAC/ABET)

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

JOURNALISM AND PUBLIC COMMUNICATIONS
Bachelor of Arts
Accredited by the Accrediting Council on Education in Journalism and Mass Communication

MEDICAL ASSISTING
- Associate of Applied Science
Accredited by the Commission on Accreditation of Allied Health Education Programs
www.caahep.org

MEDICAL LABORATORY TECHNOLOGY
- Associate of Applied Science
Accredited by the National Accrediting Agency for Clinical Laboratory Science (NAACLS)

MEDICAL TECHNOLOGY
Bachelor of Science
Accredited by the National Accrediting Agency for Clinical Laboratory Science (NAACLS)

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

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

PARALEGAL STUDIES
Certificate
Approved by the American Bar Association

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

SOCIAL WORK
- Bachelor of Social Work
- Master of Social Work
Accredited by the Council on Social Work Education (CSWE)
WELCOME TO UAA

UAA History
Mission Summary
Diversity Statement
Accreditation

UAA Campuses
Anchorage Campus
Chugiak-Eagle River Campus
Kenai Peninsula College
Soldotna Campus
Kachemak Bay Campus
Resurrection Bay Extension Site
Kodiak College
Matanuska-Susitna College

Other Academic Opportunities
Student Exchanges, Studies, and Internships at Other Locations
Student Research, Scholarship, and Creativity
Student Services

Campus Diversity and Compliance
Harassment
Safety

Free Speech and Academic Inquiry
Welcome to UAA

UAA HISTORY
UAA traces its origins back to 1954, when Anchorage Community College (ACC) was founded. That year, ACC began offering evening classes to 414 students at Elmendorf Air Force Base—the first time that college-level courses were offered in the Anchorage area. In 1962, ACC, along with other community colleges around the state, was incorporated into the University of Alaska Statewide System. Five years later, ACC began offering both day and evening classes at the current campus location. ACC provided academic study for associate 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 West Anchorage 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 (UAA). Ten years later, ACC and UAA merged to become what is now known as the University of Alaska Anchorage (UAA).

Today, some 20,000 students attend UAA, a growing and expanding university of first choice. More than 130 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.

MISSION SUMMARY
The University of Alaska Anchorage inspires learning and enriches Alaska, the nation, and the world through our teaching, research, creativity, and service. UAA is a comprehensive university that provides opportunities to all who can benefit from educational programs of high quality in an inclusive environment rich in diversity. Located in Anchorage and on community campuses serving Southcentral Alaska, UAA is committed and uniquely situated to serve the needs of its communities, the state, and its diverse peoples.

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

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

UAA CAMPUSES
ANCHORAGE CAMPUS
3211 Providence Drive
Anchorage, Alaska 99508
907-786-1480
www.uaa.alaska.edu
The largest UAA campus is in Anchorage, where students have access to the greatest number and variety of courses, programs, and services. Located at UAA Drive and Providence Drive, the campus features modern facilities and houses the administration of all of the academic schools and colleges. Enrollment services, accounting services, and many of the technical programs are housed at the University Center on the Old Seward Highway about one mile west of campus.

CHUGIAK-EAGLE RIVER CAMPUS
10928 Eagle River Road, #228
Eagle River, Alaska 99577
(907) 694-3313
www.uaa.alaska.edu/ctc/programs/chugiak-eagleriver
Located ten miles north of Anchorage, Chugiak-Eagle River Campus offers a wide variety of General Education and degree-oriented courses. Most classes are scheduled in the evenings or on weekends.

KENAI PENINSULA COLLEGE
34820 College Drive
Soldotna, Alaska 99669
(907) 262-0330
www.kpc.alaska.edu
Kenai Peninsula College (KPC) is located about 180 road miles from Anchorage. KPC has campuses in both Soldotna and Homer, and an extension site in Seward. KPC offers two-year Associates of Arts and Associates of Applied Science degrees, as well as courses leading to vocational certificates. Some programs leading to baccalaureate degrees, such as 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. 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, English-as-a-Second Language and Literacy instruction.

SOLDOTNA CAMPUS
34820 College Drive
Soldotna, Alaska 99669
(907) 262-0330
www.kpc.alaska.edu
The Soldotna campus is conveniently located between the communities of Kenai and Soldotna. The campus includes classrooms, library, laboratories, computer labs, vocational shops, media center, bookstore, art gallery, career center, learning center, food café, and commons areas. With an enrollment of almost 2000 students each semester and highly qualified faculty, KPC prides itself on small class size and personalized attention for all students.
KACHEMAK BAY CAMPUS  
533 E. Pioneer Avenue  
Homer, Alaska  99603  
(907) 235-7743  
www.homer.alaska.edu

The Kachemak Bay Campus is located in the picturesque seaside town of Homer. The branch delivers KPC’s programs and services on the southern Kenai Peninsula and serves more than 500 students each semester. The campus offers a quality education in a warm, friendly environment. The campus includes classrooms, computer lab, learning center, bookstore and library with access to CD-ROM and online databases.

RESURRECTION BAY EXTENSION SITE
2001 Swetmann  
Seward, Alaska 99664  
(907) 224-2285  
www.kpc.alaska.edu/resurrection

KPC also offers classes on the Kenai Peninsula in Seward. Various general education requirement courses and personal enrichment classes are offered utilizing high school classrooms. KPC has an on-site coordinator at Seward High School and more than 10 classes are offered each semester.

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

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

MATANUSKA-SUSITNA COLLEGE
P.O. Box 2889  
Palmer, Alaska 99645  
(907) 745-9774  
www.matsu.alaska.edu

Located on Trunk Road, forty miles north of Anchorage, and about halfway between Wasilla and Palmer, Matanuska-Susitna College serves several thousand students in one of the fastest growing areas of the state. The college offers courses leading to certificates, associate, and baccalaureate degrees. In addition, professional development, continuing education, upper-division, and graduate courses are available on a limited basis as demand warrants.

DOMESTIC EXCHANGES

IN-STATE STUDENT EXCHANGE

Students enrolled at UAA who wish to complete a portion of their studies at another campus of the University of Alaska System have opportunities for doing so.

Individual courses may be taken at any University of Alaska (UA) institution and transferred into the degree programs at UAA. Students should first check with their advisors to determine if selected courses may be used to fulfill UAA degree requirements. See the policy on Resident Credit in Chapter 7, Academic Standards and Regulations.

Several certificate and degree programs are offered collaboratively by two or three of the Major Administrative Units of University of Alaska Anchorage, University of Alaska Fairbanks and University of Alaska Southeast. These may include distance delivered classes from each campus, 2+2 programs, or similar arrangements where a planned program is delivered at more than one location.

Students are urged to verify course and program applicability before arranging for exchanges.

NATIONAL STUDENT EXCHANGE

www.uaa.alaska.edu/enrollmentservices/national.cfm

UAA is a member of the National Student Exchange (NSE) Program. This is a domestic student exchange with a consortium of over 176 colleges within the United States, Canada, Guam, Virgin Islands, and Puerto Rico. For more information, contact Enrollment Services or visit the NSE website: www.nse.org.

INTERNATIONAL EXPERIENCES

www.uaa.alaska.edu/enrollmentservices/international.cfm

STUDY ABROAD AND STUDENT EXCHANGES

Contact the Office of International Services

(907) 786-1558

International experiences allow students to master a foreign language, explore new lands, learn about other cultures, and generally broaden their perspectives while earning resident credit at UAA. Study Abroad and International Exchanges play an important role in the process of instilling citizens with global awareness, and preparing graduates for career opportunities that involve international affairs.

Students are encouraged to plan ahead for Study Abroad or International Exchange experiences during their UAA careers by contacting their departmental advisor and the Office of International Services. The Office provides information on international agreements and programs, and provides assistance with placements, visas, registration and enrollments in international locations, travel, and accommodations. The student’s academic advisor assists in establishing the transferability of credits and their applicability to certificate or degree program requirements. Many forms of financial aid are available to support international experiences. It is the responsibility of the individual student to become familiar with the policies and regulations of UAA and the international institutions that they attend.

Applications for admission to a Study Abroad or International Student Exchange program must be received by March 31 for the following fall semester and September 30 for the spring semester. There are many options available for UAA students to study in Europe, Africa, Asia, South America, Central America, and Australia. Some require foreign language skills, while others do not. Complete descriptions of programs and their requirements, along with applications for participation, are available from the Office of International Services.

OTHER ACADEMIC OPPORTUNITIES

STUDENT EXCHANGES, STUDIES, AND INTERNSHIPS AT OTHER LOCATIONS

UAA Office of International Services  
Enrollment Services, University Center  
(907) 786-1558

Students are encouraged to explore international educational experiences through a number of study abroad, internship abroad, and national or international student exchange opportunities available to UAA students.
INTERNSHIPS ABROAD
An alternative international experience for students is an internship, where students are placed in a working environment outside of the US under local supervision. These internships are facilitated and coordinated by the Office of International Services and often prove to be among the most culturally, intellectually, and personally rewarding of college experiences.

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

STUDENT SERVICES
Helping students achieve their academic goals is the mission of UAA’s support services. These services are facilitated by centers that focus on academic excellence, student health, learning resources, advising, counseling, career development, academic accommodations for students experiencing disabilities, educational opportunity, and study abroad. Other services assist students with financial aid or individualized needs or interests. (See Chapter 6, Advising and Academic Support, for further information.)

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

CAMPUS DIVERSITY AND COMPLIANCE
Through the institution’s Affirmative Action Plan, UAA recognizes its responsibility to provide education and employment opportunities for all qualified individuals. UAA also operates an Office of Campus Diversity and Compliance which monitors civil rights, federal and state laws, orders, and decisions to ensure that access, inclusion, and equity are practiced at UAA. Students and prospective students are afforded educational services, such as admission decisions, financial aid, access to academic programs, and health and counseling services, without regard to race, color, religion, national origin, age, sex, Vietnam era or disabled veteran status, physical or mental disability, changes in marital status, pregnancy, or parenthood, except as necessary and permitted by law. A student or prospective student who feels that he or she is being discriminated against has the right to contact the appropriate supervisor for assistance. The student or prospective student may also contact one of the following:

- AHAINA Student Programs Office  (907) 786-4070
- Disability Support Services  (907) 786-4530
- Human Resource Services Department  (907) 786-4608
- Native Student Services  (907) 786-4000
- Office of Student Affairs  (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

WELCOME TO UAA

STUDENT RESEARCH, SCHOLARSHIP, AND CREATIVITY
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- Office of Student Affairs  (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

HARASSMENT
The University of Alaska Anchorage is a community that cherishes free and open exchange of ideas in the pursuit of knowledge. Maintaining this freedom and openness requires the presence of safety and trust; it requires the absence of coercion, intimidation, and exploitation. Therefore, harassment of any kind has no place in the University.

Anyone who believes he or she has been a victim of harassment should contact the appropriate Dean/Director office(s), the Office of Student Affairs, the UAA Office of Campus Diversity and Compliance, or the U.S. Department of Labor (Office of Federal Contract Compliance Programs, Federal Building, Anchorage, Alaska).

SAFETY
Anchorage Campus Police  (907) 786-1120 (V/TTY)
Kenai Peninsula College
- Soldotna Campus Security  (907) 262-0300
- Kachemak Bay Branch Security  (907) 235-7743
Kodiak Campus Security  (907) 486-1219
Mat-Su Campus Security  (907) 745-9789

Safety is a priority at UAA. All members of the academic community are encouraged to take responsibility for their own safety by taking the time to locate the nearest exits and emergency telephones when they are in campus buildings. Safety concerns may be brought to the attention of UAA faculty or staff, or the University Police at (907) 786-1120. For more safety information and the most recent campus crime report, visit www.uaa.alaska.edu/safety.

FREE SPEECH AND ACADEMIC INQUIRY
In the pursuit of knowledge, any member of the university community shall be free to investigate and question any fact, context, action, purpose, or belief that is encountered in any discipline. Any member shall be free to articulate discoveries, opinions, and judgments that are found or formed in the process. UAA enables and encourages this activity and creates a culture of inquiry that is open to the expression and debate of ideas, whether or not they are popular, judicious, or refined.
CENTERS AND INSTITUTES

Alaska Center for Rural Health (ACRH)
Alaska Center for Supply Chain Integration (ACSCI)
American Russian Center (ARC)
Business Enterprise Institute (BEI)
Center for Alcohol and Addiction Studies (CAAS)
Center for Community Engagement and Learning
Center for Economic Education (CEE)
Center for Human Development (CHD)
Environment and Natural Resources Institute (ENRI)
Ecosystem Studies & Conservation Biology (ESCB)
Earth & Climate Processes (ECP)
Human Ecology & Native Studies (HENS)
Associated Programs

Institute for Circumpolar Health Studies (ICHS)
Institute of Social and Economic Research (ISER)
Justice Center
North Pacific Fisheries Observer Training Center (OTC)
Psychological Services Center (PSC)
Small Business Development Center (SBDC)
University of Alaska Center for Economic Development (CED)
Centers & Institutes

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

ALASKA CENTER FOR RURAL HEALTH (ACRH)
(907) 786-6579
http://nursing.uaa.alaska.edu/acrh

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

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

ALASKA CENTER FOR SUPPLY CHAIN INTEGRATION (ACSCI)
(907) 786-4149
www.cbpp.uaa.alaska.edu
acsci@cbpp.uaa.alaska.edu

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

AMERICAN RUSSIAN CENTER (ARC)
(907) 786-4300
www.arc.uaa.alaska.edu
ayarc@uaa.alaska.edu

The ARC serves as the administrative center for University of Alaska Anchorage (UAA) programs in Russia. For 12 years, ARC has been one of America’s principal representatives in over one-third of Russia’s sprawling, largely underdeveloped Far East. ARC’s programs bring awareness of American governmental practice and business methods to a resource-rich area that will play a key role in both Russia’s and America’s future. It manages ARC activities in Alaska and in the RFE and manages, resources, and staffs ARC projects as they are implemented. ARC also manages a network of eight affiliated Small Business Training Centers in Yuzhno-Sakhalinsk, Khabarovsk, Petropavlovsk-Kamchatsky, Komsomolsk, Blagoveshchensk, Magadan, Vladivostok, and Yakutsk. These centers provide business and project management training to Russian entrepreneurs and business professionals, and also have a limited capacity to provide support to UAA personnel and US business people on a cost reimbursement basis.

ARC also manages UAA’s relationships with five Russian universities and manages a joint degree program with the Far East State Transportation University in Khabarovsk. ARC has enormous experience in the development, planning, and management of a wide variety of educational and technical assistance partnership programs in Russia, and is seeking additional mechanisms to support the Alaska business community in Russia, as well as to contribute to UAA’s international academic mission.

BUSINESS ENTERPRISE INSTITUTE (BEI)
(907) 786-4121
www.scob.alaska.edu/bei.asp

The BEI was created to fill the needs identified by the business community for university-connected Education and Training, Organizational Consulting, Applied Business Research, and Business Incubation. This is a completely new model for higher education in that it is focused on the application of current high-level business knowledge inside of organizations rather than researching new theories.

In the education and training area, we provide: current university programs to corporations delivered when, where, and how they need them; teaching current corporate-owned courses; teaching corporate-specific training programs developed by BEI; and loading, hosting, and delivery of corporate training programs online.

In the consulting area, we provide: subject matter experts to local businesses; development of corporate-specific training programs; and consulting in BEI competency areas such as Project Management, Six Sigma, Lean, and instructional design of current corporate programs.

In the research area, we provide: organizational GAP analysis, data collection and interpretation, interpretation of legacy data, data collection planning, and grant acquisition.

In the business incubation area, we provide facilities for four constituencies: faculty researchers taking research results to product sales, students desiring to take educational results of business planning to corporations delivered when, where, and how they need them; teaching current corporate-owned courses; teaching corporate-specific training programs developed by BEI; and loading, hosting, and delivery of corporate training programs online.
CENTER FOR ALCOHOL AND ADDICTION STUDIES (CAAS)
(907) 786-6582
www.ichs.uaa.alaska.edu/caas
The CAAS mission represents the University of Alaska’s commitment to address the problem of substance use and abuse in the state. The mission of the Center for Alcohol and Addiction Studies is to help alleviate the problem of substance abuse and its adverse impacts through the development and implementation of education, training, research and public service programs.

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

CENTER FOR COMMUNITY ENGAGEMENT AND LEARNING (CCEL)
(907) 786-4062
http://engage.uaa.alaska.edu
engage@uaa.alaska.edu
Established in 2000, UAA’s Center for Community Engagement and Learning connects academic programs with community services so that students, faculty, and community partners can forge linkages between theory and practice, between knowledge and action, and between the University’s academic resources and community development. The Center enables the University to effectively carry out its community service mission, to develop applied research projects, and to support service learning, a proven pedagogy that links community service with academic study and reflection.

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

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

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

1. Providing interdisciplinary pre-service and continuing education of students.
2. Providing community service, training, and technical assistance for individuals requiring long-term support, their families, and support staff.
3. Conducting formal and applied research, evaluation, and analysis of public policy in areas affecting individuals requiring long-term support and their families.
4. Disseminating information about disabilities, long-term supports, and professional “best practices.”

ENVIRONMENT AND NATURAL RESOURCES INSTITUTE (ENRI)
(907) 257-2700
www.uaa.alaska.edu/enri
ENRI conducts applied and fundamental scientific research and collects, synthesizes, archives, and distributes natural science data, specimens, and knowledge. This is accomplished by conducting field and laboratory studies, by contributing to and forming research networks, by participating in data and sample archiving and synthesis activities, and by providing electronic outlets and Internet portals for public access. ENRI also supports two analytical facilities, the UAA Stable Isotope Laboratory (SIL) and the Applied Science and Engineering Technology Laboratory (ASET). These facilities are designed to serve the research, teaching, and service mission of the College of Arts and Sciences, and are central to advancing the integrative science theme at UAA.

ENRI is organized into three main research, data, and information themes: a) Ecosystem Studies and Conservation Biology, b) Earth and Climate Processes, and c) Human Ecology and Native Studies. Within each research theme, the research activities are comprised of multiple PI-lead programs, including: 1) Ecosystem Studies Program, 2) the Alaska Natural Heritage Program, 3) the Aquatic and Riparian Ecology Program, and 4) the Cultural Heritage Program.

ECOSYSTEM STUDIES AND CONSERVATION BIOLOGY (ESCB)
ECOSYSTEM STUDIES PROGRAM
(907) 257-2700
http://enri-sil.uaa.alaska.edu
This research group emphasizes understanding the magnitudes, patterns, governing processes, and changes in the cycles of carbon, water, nutrients, and their interactions. The program specializes in physiological plant and ecosystem ecology with studies in tundra, at tree-line, in boreal forests and in other northern systems. This program has a strong emphasis on studying how arctic and boreal ecosystems are responding to climate change, including research in Northwest Greenland and in Northern Alaska at the Toolik Lake Field Station. The UAA Stable Isotope Lab serves the analytical needs of this and other programs at ENRI and UAA.

ALASKA NATURAL HERITAGE PROGRAM (AKNHP)
(907) 257-2780
www.uaa.alaska.edu/enri
This unit is Alaska’s clearinghouse for information on plant and animal species of conservation concern, natural communities of conservation concern, and invasive noxious plant species, and includes a Botany and a Zoology emphasis. The Alaska Natural Heritage Program collects, validates, and distributes information, and assists natural resource managers and others in applying it effectively. The Alaska Natural Heritage Program is part of the international network NatureServe, and its data are linked to...
similar programs in all 50 states, most Canadian provinces, and many Latin American countries.

**AQUATIC AND RIPARIAN ECOLOGY PROGRAM**  
*(907) 257-2744*  
[http://aquatic.uaa.alaska.edu](http://aquatic.uaa.alaska.edu)  
This program investigates the influences of natural and human processes on the structure and function of freshwater ecosystems. The major focus has been quantifying the baseline biological conditions of streams and rivers and the development of tools to monitor the biological health of Alaska’s streams and associated terrestrial ecosystems. This program has recently embraced studies that quantify marine-terrestrial linkages via marine-derived N inputs into freshwater streams and adjoining riparian ecosystems. Training and outreach to local K-12 programs and municipalities are central to this program.

**EARTH AND CLIMATE PROCESSES (ECP)**  
**ALASKA STATE CLIMATE CENTER (ASCC)**  
*(907) 257-2737*  
[http://climate.uaa.alaska.edu](http://climate.uaa.alaska.edu)  
The ASCC Unit provides climatological information and official weather data to the public, while studying how long-term changes in weather patterns are being manifested in south central Alaska. The Climate Center collaborates closely with UAA’s Alaska Experimental Forecast Facility and is developing links to the Alaska Ocean Observing System. ASCC is also leading coordination of our Boreal Forest Observatory located on the UAA campus that is measuring and monitoring air and soil temperatures, CO₂ fluxes, and canopy properties.

**GEOCHEMISTRY UNIT**  
*(907) 786-6895*  
The Geochemistry Unit at ENRI focuses on the quantification of inorganic and organic minerals and nutrient cycles, contaminant biogeochemistry, as well as catchment processes. The contaminant research addresses perchlorate biogeochemistry and arsenic dynamics. The isotope geochemistry research emphasizes nitrate dynamics in urban and rural watersheds as well as local, state, and continental patterns and processes governing the isotopes of water in precipitation, USNIP (US Network of Isotopes in Precipitation (www.uaa.alaska.edu/enri/usnip/index.cfm)). The Geochemistry Unit is supported in part by The Applied Science and Engineering Technology Laboratory (ASET) ([www.uaa.alaska.edu/enri/aset](http://www.uaa.alaska.edu/enri/aset)), a modern analytical facility specializing in the analysis of fatty acids in fish, birds, and mammals; inorganic nutrients (NO₃ and NH₄) in waters; as well as organic and inorganic pollutants such as perchlorate and dissolved carbon and nitrogen in waters.

**HUMAN ECOLOGY AND NATIVE STUDIES (HENS)**  
**CULTURAL HERITAGE PROGRAM**  
[http://culturalheritage.uaa.alaska.edu](http://culturalheritage.uaa.alaska.edu)  
*(907) 257-2704*  
This research group focuses on basic and applied archaeological and anthropological studies, thematic history investigations, subsistence studies, and cultural resources consultations. Culture contact and change, human ecology in changing environments, and ethnogenesis of historic indigenous Alaska cultures are major themes that are currently being addressed. This group has a long history of studies addressing cultural practices, past and present in Northwest Alaska where whaling has been a critical way of life for hundreds of years. The rich cultural history of Alaska and the wealth of Native communities and issues provide a rich environment to address the human dimensions of arctic and boreal systems. This group is supported by the Cultural Heritage Studies Program.

**ASSOCIATED PROGRAMS**

**ARCTIC ENVIRONMENTAL INFORMATION AND DATA CENTER (AEIDC)**  
*(907) 257-2700*  
[www.uaa.alaska.edu/enri](http://www.uaa.alaska.edu/enri)  
The AEIDC is becoming an electronic information and data center that serves as a foci for ENRI data compilation, data archiving, data synthesis activities, data collection, sample storage, data sharing and the provision of data and information to scientists and society. AEIDC focuses on organizing data sets from large- and small-scale monitoring and measurement networks that include Alaska, the north, and across the US. The scale of data compilation ranges from archiving data sets from individual projects lead by ENRI faculty and staff to compiling data that represents entire programs at the national level. AEIDC is upgrading its computing and personnel capacity to serve these needs.

**INSTITUTE FOR CIRCUMPOLAR HEALTH STUDIES (ICHS)**  
*(907) 786-6575*  
[http://ichs.uaa.alaska.edu](http://ichs.uaa.alaska.edu)  
[ayichs@uaa.alaska.edu](mailto:ayichs@uaa.alaska.edu)  
The ICHS was created by the Alaska State Legislature in 1988 (AS 14.40.088) to develop new solutions to health problems in Alaska and the circumpolar north. Within the University of Alaska, the Institute provides support and coordination for health research, information, and training.

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

At ICHS, research addresses a wide variety of health problems and issues facing Alaskans, many of which are common to populations in the circumpolar north. Alaska’s rural and multicultural environment calls for a multidisciplinary approach to defining health problems and identifying appropriate solutions. ICHS research activities include epidemiologic studies of population health problems, studies of health services need, access and utilization, and evaluation of health policy and the effectiveness of new programs.

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

**INSTITUTE OF SOCIAL AND ECONOMIC RESEARCH (ISER)**  
*(907) 786-7710*  
[www.iser.uaa.alaska.edu](http://www.iser.uaa.alaska.edu)  
[ayisher@uaa.alaska.edu](mailto:ayisher@uaa.alaska.edu)  
ISER is a public policy and social science research institute, applying multidisciplinary skills to the analysis of social and economic change in Alaska and northern regions. Since 1961, the institute has investigated virtually every major public policy issue in Alaska, including the effects of natural resource development, the fiscal policies of state and local
In addition, Center-sponsored conferences and a quarterly publication, staff provide legislators and other public officials with assistance in the agencies, and video educational programs. Justice Center faculty and The Justice Center products include books, papers, reports to public of Alaska. Observers collect information critical to the management and work onboard commercial fishing vessels in the Bering Sea and the Gulf mammal identification, and safety at sea. Fishery observers live and Service, and the Alaska Department of Fish and Game, the OTC trains the University of Fairbanks (UAF), the National Marine Fisheries groundfish, crab, and scallop observers. Working in conjunction with TRAINING CENTER (OTC)

NORTH PACIFIC FISHERIES OBSERVER TRAINING CENTER (OTC)

www.ualaska.edu/ctc/otc

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

PSYCHOLOGICAL SERVICES CENTER (PSC)

(907) 786-1795

http://psych.ualaska.edu/services

The PSC is the training clinic for graduate students in the MS Clinical Psychology Program and the Joint Doctoral Program in Clinical Community Psychology with a Rural Indigenous Emphasis. Therapy is provided for families and individuals in an atmosphere sensitive to culture and ethnicity. People are seen for reasons from a curiosity about one’s own potential to concerns such as anxiety, depression, stress, loss, and relationship difficulties. Confidentiality is observed. Services are affordable and determined on a sliding scale basis. Students are welcomed in the PSC but clients do not need to be affiliated with UAA to receive services. The PSC clinicians are graduate students who are supervised by licensed practitioners. Because this is a training clinic that is closed on weekends, holidays, and school breaks, the PSC is generally not a good match for people who have severe crises. For an appointment or information, please call the PSC at 786-1795.

SMALL BUSINESS DEVELOPMENT CENTER (SBDC)

(907) 274-7232 • Toll Free: 1-800-478-7232

www.aksbdc.org

The SBDC is a cooperative program of the U.S. Small Business Administration and UAA. The objectives of the SBDC programs are to combine federal dollars and resources with those of the state, academic community, and private sector to strengthen small businesses; to contribute to the economic growth of the state; and to create a broader-based delivery system to the small business community. The primary emphasis of the SBDC program is on in-depth, quality business counseling and training. Small businesses are assisted in the areas of management, marketing, sales, finance, accounting, and other disciplines required for small business growth, expansion, and innovation. The SBDC has five regional centers located in Anchorage, Fairbanks, Juneau, Wasilla (serving the Matanuska-Susitna Borough area), and Soldotna (serving the Kenai Peninsula area), in addition to a rural outreach program. Other business assistance programs administered include the Procurement Technical Assistance Center which provides assistance with government contracting; the BUY ALASKA program which provides free in-state sourcing for buyers and sales referrals to suppliers; and the Technology Research Development Center which provides Small Business Innovation Research (SBIR) proposal assistance and technical database searches to businesses. All of SBDC’s business assistance programs encourage the involvement of University faculty and provide internship opportunities for University of Alaska students.

UNIVERSITY OF ALASKA CENTER FOR ECONOMIC DEVELOPMENT (CED)

(907) 786-5444

www.ced.ualaska.edu

The CED’s mission is to provide technical assistance to private nonprofit and government-related agencies engaged in economic development. The Center focuses on regional problems and opportunities. It utilizes the University’s unique research capabilities and expertise to help address the technical assistance and information needs of various economic development entities. The Center coordinates its efforts with the U.S. Commerce Economic Development Administration.
STUDENT LIFE

Student Involvement
Student Development
Student Leadership Development
Union of Students (USUAA)
  Club Council
  Concert Board
Greek Council
KRUA 88.1 FM
Media Board
The Northern Light
Student Lecture Series and Conferences
  Student Showcase
  Bartlett Lecture Series
  Pacific Rim Literary Conference
Honor Societies
The Seawolf Speech and Debate Team
Alaska Native Oratory Society
Arts
  Fine and Performing Arts Facilities
  Wendy Williamson Memorial Auditorium and Lecture Hall
  Campus Art Galleries
Campus Life and Student Union
  Student Activities
Athletics
  Intramural Sports and the Wells Fargo Sports Complex
WOLFcard
Food Service
Bookstore
Information and Technology Services
  Telephone Services
  Customer Support
  Campus Open-Access Computer Labs
  Email Services
  Web Hosting Service
  Distance Education
  Training Services
Campus Housing and Residence Life
  Academic Theme Housing
Health and Wellness
  Student Health and Counseling Center
  Counseling Services
  Psychological Services Center
  Insurance
Alcohol Policies
  Campus Alcohol Policy
  Residence Life Alcohol Policy
  UAA Residential Community Wellness Initiative
  Drug and Alcohol Counseling Resources
Smoke-Free Environment
Outdoor Life
Safety
  Automobile Insurance
  Emergencies and First Aid
  Safety Escorts
  University Police
Wildlife on Campus
Pets on Campus
Parking Services
Lost and Found
STUDENT INVOLVEMENT

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

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

STUDENT DEVELOPMENT

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

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

STUDENT LEADERSHIP DEVELOPMENT

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

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

UNION OF STUDENTS (USUAA)

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

USUAA is UAA's student government, charged with representing approximately 14,000 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 the state legislators, and pursuing the academic concerns of students. Each student who pays the student government fee is a member of USUAA and is entitled to the services it provides. USUAA comprises a legislative assembly and five organizations: Board of Global Information and Activities, Club Council, Concert Board, Election Board, and Media Board.

CLUB COUNCIL

(907) 786-1966
www.uaa.alaska.edu/clubs

The Club Council recognizes, governs, appropriates funding to, and provides a mechanism of support for over 80 student clubs and organizations.

CONCERT BOARD

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

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

GREEK COUNCIL

(907) 786-1371

The governing body for three national sororities and two national fraternities, the Greek Council consists of a seven member executive board: one delegate from each chapter and an advisor. The Council coordinates group activities such as dances, barbecues, and study groups and places a high value on community service work and philanthropy.

KRUA 88.1 FM

(907) 786-6000
http://krua.uaa.alaska.edu

Managed by student employees with the help of approximately 30 volunteers, KRUA broadcasts daily from 7:00 a.m. to 1:00 a.m. with an alternative format including reggae, rap, jazz, ska, blues, and local music, along with news and public affairs shows. Training is provided to volunteers and no broadcast experience is required.

MEDIA BOARD

(907) 786-1215

The Media Board’s purpose is to assist student media in the effective and professional conduct of their operations and to advocate for their interests and well-being. The Media Board hires student media managers and approves media policies and budgets.

THE NORTHERN LIGHT

(907) 786-1318
www.thenorthernlight.org
aylight@uaa.alaska.edu

The student newspaper employs up to 25 students each semester. Students gain experience in writing, editing, layout and graphics, photography, advertising, and management. The staff publishes 26 weekly issues during the fall and spring semesters and three issues in the summer, plus an up-to-date online edition.
**STUDENT LECTURE SERIES AND CONFERENCES**

**STUDENT SHOWCASE**
(907) 786-1215  
[www.uaa.alaska.edu/campuslife/showcase](http://www.uaa.alaska.edu/campuslife/showcase)

This annual academic conference recognizes student excellence in all disciplines. Showcase is a forum for students to present papers or other works 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 Student Showcase Journal.

**BARTLETT LECTURE SERIES**
(907) 786-1215

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

**PACIFIC RIM LITERARY CONFERENCE**
(907) 786-4355  
[http://english.uaa.alaska.edu/programs.htm](http://english.uaa.alaska.edu/programs.htm)

This conference is organized by the Department of English and members of Sigma Tau Delta, the English honor society. What began as a small, student-run project has grown to be a major event sponsored by grants and many UAA departments, including Canadian Studies, Women's Studies, and the UAA Bookstore. Students plan the event, including writing grant proposals, inviting speakers, and selecting papers.

**HONOR SOCIETIES**

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

**THE SEAWOLF SPEECH AND DEBATE TEAM**
(907) 786-4390  
[http://forensic.uaa.alaska.edu](http://forensic.uaa.alaska.edu)

The Seawolf Speech and Debate team, founded in 1982, is the only intercollegiate forensics program in Alaska. Housed in the Department of Communication, this faculty-run, co-curricular program helps students achieve educational goals while developing communication skills through competitive experiences in individual speaking events and debate. The program has earned an average of 100 awards each year while representing UAA, the UA system, and the State of Alaska in intercollegiate competition against students from across the U.S. and around the world.

**ALASKA NATIVE ORATORY SOCIETY**
(907) 786-4390  
[www.uaa.alaska.edu/native/aknos](http://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 contest for competition in dramatic declamation and oratory, which offers cash prizes.

**ARTS**

**FINE AND PERFORMING ARTS FACILITIES**

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

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

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

**WENDY WILLIAMSON MEMORIAL AUDITORIUM AND LECTURE HALL**
(907) 786-6815

Built in 1972, the Williamson Auditorium provides UAA and the Anchorage community with a venue for lectures, performances, arts events, and community gatherings. The auditorium seats 912 patrons and features plays, music festivals, and speakers from around the world.

**CAMPUS ART GALLERIES**

**Kimura Gallery**
(907) 786-1783

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 community and Anchorage community to experience a wide range of challenging art. As an educational space, it exposes our students to innovative art work 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

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.
CAMPUS LIFE AND THE STUDENT UNION
(907) 786-1204
www.uaa.alaska.edu/campuslife

The Student Union building is the hub of co-curricular activities and programs. Housed in the Student Union is Campus Life, which provides students with social, cultural, academic, leadership, and recreational opportunities. Campus Life programs include Student Activities, Concert Program, Student Union management, Bartlett Lecture Series, Student Showcase, The Northern Light student newspaper, and KRUA 88.1 FM student radio station. Also housed in the Student Union are the offices of USUAA, Club Council and Greek Council, Parking Services, Student Leadership, New Student Orientation, and the Dean of Students. Services in the Student Union include group and quiet study lounges, open computer lab, game room, art gallery, Subway Sandwiches, Corner Café, ATM machine, an information desk that provides general information, Carrs/Safeway entertainment tickets, outdoor rental equipment, lost and found, and snack items for sale.

STUDENT ACTIVITIES
(907) 786-1219
(907) 786-1000 (Events Hotline)
www.uaa.alaska.edu/campuslife/activities

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

ATHLETICS
(907) 786-1230
www.goseawolves.com
athletics@uaa.alaska.edu

UAAs highly visible athletic teams compete in 11 NCAA sports - men's ice hockey, men's and women's basketball, men's and women's skiing, men's and women's cross country, women's gymnastics, women's indoor and outdoor track & field, and women's volleyball. The Seawolves compete at the Division II level (with the exception of Division I hockey and gymnastics) and are members of the Western Collegiate Hockey Association, the Great Northwest Athletic Conference (basketball, volleyball, cross country, and track), the Mountain Pacific Sports Federation (gymnastics) and the Rocky Mountain Intercollegiate Ski Association. Over the years, the Seawolves have produced multiple national champions in skiing and gymnastics as well as several NCAA Tournament bids in other sports. In 1988 the men's basketball team was the Division II national runner-up, and in 1991 the hockey team reached the NCAA quarterfinals. UAA sports receive national television exposure thanks to the annual Carrs/Safeway Great Alaska Shootout basketball tournament, held at the 8,700-seat Sullivan Arena. The ESPN cable network, which has broadcasted Shootout games since 1985, has an agreement that runs through 2006. The four-team Nye Frontier Classic is one of the top pre-season 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 (cap. 1,250) 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

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

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

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

FOOD SERVICE
(907) 751-7246

A variety of food services and menu options are provided throughout the campus. ARAMARK (food service provider) has eight different campus dining areas:

- Bear Necessities, a convenience store located in the housing Commons building
- Cuddy Marketplace, a food court located in Lucy Cuddy Hall
- Daily Grind, a coffee cart located in the dining room of Lucy Cuddy Hall
- Creekside Eatery, a cafeteria located in the housing Commons building
- Northern Temptations, a snack bar in the Administration/ Humanities Building
- Starbucks in the UAA/APU Consortium Library, a comfortable café
- UAA Perk, a coffee stand located in the University Center
- Union Station, a coffee stand located in the Student Union

In addition to the above, the University partners with Subway to offer a full menu selection in the Student Union.

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

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

Student Union and University Center locations

The mission of the bookstore is to contribute to the academic excellence of the university by providing for the sale of books and other educational materials to students and members of the university community. The bookstore stocks required and recommended textbooks, course materials, study aids, technical manuals, reference books, fiction, nonfiction, faculty authors, children's, and Alaskan books. In addition, the bookstore hosts many special events throughout the year to provide additional learning opportunities to the university community and the general public. These opportunities allow students to interact with faculty and world-renowned authors in informal settings.
INFORMATION AND TECHNOLOGY SERVICES
(907) 786-4646
http://technology.uaa.alaska.edu
The IT Services Department provides local campus network, computing, telephone, audiovisual, and online curriculum services to the UAA community. IT Services is committed to providing students, staff, and faculty with a variety of important and useful technology-related services. A brief summary of services is provided below.

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

CUSTOMER SUPPORT
http://technology.uaa.alaska.edu/computer/OnSite callcenter@uaa.alaska.edu
The IT Call Center serves as the single 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.

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

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

UAA uses e-mail and the MyUA web portal to communicate with students on many important matters. Please refer to Chapter 5, Student Freedoms, Rights, and Responsibilities for more details.

WEB HOSTING SERVICE
http://technology.uaa.alaska.edu/computer/WebHosting
Students have access to a web-hosting environment at UAA for creation and support of personal web pages and content. Student content placed into these web pages 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.

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

TRAINING SERVICES
IT offers a variety of general interest computer and network related short courses open to both students and employees. Courses are held in the University Center (UC) Computer Lab.

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

Four different 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. All residence hall rooms have access to the university’s computer network.

ACADEMIC THEME HOUSING
Alyeska Community and Alyeska First Year Experience Community, located in West Hall, provide a supportive environment for science and engineering majors, particularly Alaska Native and rural students. These programs help students develop close ties with others of similar backgrounds and interests as they adjust to campus life together.

First-Year Experience Hall is a comprehensive program in North Hall designed exclusively for first-year college students under the age of 20 who have completed 20 or fewer college credits. Individuals participating in this program will also enroll in GUID A150, a 3-credit academic course focusing on college survival skills, taught in North Hall. The Hall creates a supportive living and learning environment through social events, leadership opportunities, study groups, tutoring, community service opportunities, academic and living skills workshops, discussion groups, and peer support and mentoring.

First-Year Focus Community in West Hall is for first-year college students under the age of 20 who have completed 20 or fewer college credits. Residents will experience a close-knit community enhanced through programming, peer support, and mentoring.

Honors Community is located on the fourth floor of East Residence Hall and promotes interaction between the academic and residential communities on campus. These students also take part in the Honors Program.

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

Aviation House and Aviation Community are 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.
The Psychology Community offers a sense of place and belonging for students interested in Psychology, through AnPsych (Alaska Natives in Psychology) in conjunction with Residence Life. This community focuses on academic support, while enhancing cultural awareness, emotional development, and the well-being of all students in the community. Students are connected to UAA faculty and community resources through activities, programs, and special events.

The UAA Service House is ideal for returning students committed to service and social justice. Situated in the Templewood Apartments, rooms are available to students wanting to live in a community, plan service projects and discuss social justice over community meals. Residence Life offers this program in conjunction with the Bonner Leader program sponsored by the Center for Community Engagement and Learning.

HEALTH AND WELLNESS

STUDENT HEALTH AND COUNSELING CENTER
(907) 786-4040
www.uaa.alaska.edu/studenthealth
The center provides educational, preventive, diagnostic, and treatment services for health problems. It is staffed by Advanced Nurse Practitioners who specialize in adult health and/or mental health. The primary health care benefits received by paying the student health fee include routine office care or outpatient services, including family planning and immunizations. Laboratory services, x-rays, limited medications, and health care supplies are available to participating students at a reduced cost.

Advanced nurse practitioners provide mental health psychotherapy and medication management to students in need. Therapists act as patient advocates and assist individuals in dealing with stressful life events, depression, anxiety, sexual and physical abuse, alcohol and drug dependency, situational crises, and other life issues. A nominal fee is charged for psychotherapy with a nurse practitioner.

COUNSELING SERVICES
(907) 786-6158
Student Affairs counselors provide assistance with concerns affecting academic success, such as stress, situational crises, alcohol and other drug issues, and life changes. Other services include sexual assault counseling support, referrals to community agencies, including sexual orientation resource referrals, and educational workshops on responding to personal life issues. These counseling services are provided at no charge to UAA students.

PSYCHOLOGICAL SERVICES CENTER
(907) 786-1795
The Center offers low-cost therapy and counseling to families, couples, and individuals of all ages for a variety of problems. Clinical psychology students in the last phase of study for the master’s degree see patients under the supervision of licensed psychologists from the psychology faculty. Services are available to the campus community. A fee schedule is based on each individual’s ability to pay.

INSURANCE

STUDENT HEALTH INSURANCE
(907) 786-4049
www.uaa.alaska.edu/studenthealth/insurance.cfm
Health insurance is mandatory for international students on student visas. Contact Enrollment Services for specific requirements.

A group student health insurance plan is available for purchase to currently enrolled UAA students. For an additional premium, dependents and major medical expenses may be covered. Students can obtain more information through the Student Health Center.

ACCIDENT AND TRAVEL INSURANCE
(907) 474-5278
www.alaska.edu/swrisk
Supplemental accident insurance for field trips, fieldwork, laboratory, practica, internships, and special UAA events is available for purchase. Depending on departmental policy, either the student or the department assumes the cost of this insurance. This insurance is in excess of other insurance covering the student and is made available to students through the Statewide Risk Management office. It is the student’s responsibility to contact departments for further information.

ALCOHOL POLICIES

The University is concerned about ways in which alcohol use and abuse affect the primary academic mission of the institution, its overall atmosphere, and the personal well-being of the University community. The University has the duty to exercise the degree of care that a reasonable person would to ensure that private and public events are conducted in accordance with state law. Whether or not a person drinks alcoholic beverages is a personal decision, but individuals are held personally accountable for their actions.

CAMPUS ALCOHOL POLICY

The primary objectives of UAA’s policies and procedures on alcoholic beverages are to ensure responsible behavior and attitudes among all members of the University community, to educate the University community concerning the use and effects of alcoholic beverages in order to promote responsible decision-making and to help individuals experiencing difficulties associated with the use of alcohol. The Chancellor or the Vice Chancellor for Student Affairs has the authority to approve events where alcoholic beverages may be served to individuals of legal age with positive identification. Approval to serve alcoholic beverages may be granted on designated premises for private University-sanctioned events. The sale of alcoholic beverages at University-sanctioned events on campus is not permissible and is not approved by the Chancellor. Personal consumption, possession, or display of beer, wine or other alcoholic beverages is prohibited in University public places. The possession of kegs and other large quantities of alcoholic beverages will only be allowed by special permission of the Chancellor. Any person who exhibits offensive behavior, misconduct, excessive noise or creates a public disturbance on property owned or supervised by the University will be subject to disciplinary and/or legal action. (See Chapter 5, Student Rights and Responsibilities, for further information.)

RESIDENCE LIFE ALCOHOL POLICY

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

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 indoors and smoking of tobacco products must be done 50 feet away from buildings.

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

Smoke-Free Environment
Smoking is not permitted in University facilities. All UAA facilities are covered by this policy (Anchorage, Kenai Peninsula College, Kodiak College, and Mat-Su College). 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.

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

Safety
www.uaa.alaska.edu/students/campussafety.cfm

Automobile Insurance
Under Alaska state 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 Anchorage Police Department by dialing 9-911.

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

University Police
(907) 786-1120
www.uaa.alaska.edu/upd
The University Police Department is on duty 24 hours a day, seven (7) days a week, to provide safe access to the campus, to prevent disruptive behavior, and to offer a variety of services to the community. The department employs dispatchers and uniformed police officers to accomplish these goals.

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

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

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

Wildlife on Campus
The main campus of UAA is situated next to a greenbelt and several small lakes. Sightings of moose, coyotes, and black bear 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.

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.
PARKING SERVICES
(907) 786-1119
www.uaa.alaska.edu/parking

Campus parking provides permits for on-campus parking and has space for more than 3,000 vehicles. Permits are now available online: www.thepermitstore.com. Parking Services also offers jumpstarts and vehicle unlocks. UAA Seawolf Shuttle service runs continuous loops weekdays among all main parking lots and the University Center for students and staff convenience. All campus lots are paved, lighted, and patrolled. Vehicles parked in restricted areas without proper decal or permits will be ticketed and may be impounded at a cost to the owner. Failure to pay parking tickets may result in withholding of transcripts or grades, or impounding of a vehicle at owner expense.

PARKING FOR INDIVIDUALS EXPERIENCING DISABILITIES

Individuals experiencing disabilities will find designated parking spaces available in each lot on the UAA campus. These parking spaces display distinctive blue-and-white logos. The appropriate handicap permit issued by the State of Alaska Department of Motor Vehicles must be displayed to legally park in these designated spaces. All other motorists will be ticketed. Illegally parked vehicles may be impounded at owner expense.

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, downtown Anchorage.

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, 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.
TUITION, FEES & FINANCIAL AID

Residency for Tuition Purposes
Resident and Non-Resident Tuition
Western Undergraduate Exchange (WUE)

Tuition Summary
Fees
Financial Obligations
Payment Procedure
Refund Policy

Petition for Exception to University Policy on Refund of Tuition and Fees

Senior Citizen Tuition Waiver

Student Financial Aid
Financial Aid Application Procedures
Satisfactory Academic Progress
Financial Aid Appeal Policy
Return of Federal Financial Aid Policy

Types of Financial Aid
Grants
Loans

Scholarships

Federal Workstudy Program
Student Employment
Veterans Assistance
Residency for Tuition Purposes

Resident and Non-Resident Tuition

Students eligible for Alaska resident tuition include:

- Alaska residents as defined below.
- Members of the United States military on active duty (stationed in Alaska) and members of the Alaska National Guard, their spouses and dependent children.
- Dependent children of alumni who have received an associate, baccalaureate, or graduate degree from the University of Alaska.
- Students enrolled in four (4) or fewer credit hours during a semester.
- Residents of British Columbia, the Yukon, Northwest or Nunavut Territories.
- Students from other states or provinces whose public universities waive non-resident charges for Alaska residents and students from foreign cities and provinces that have partnerships with Alaska or specific Alaska communities (lists of approved programs are published online in the University of Alaska Board of Regents’ regulations: [www.alaska.edu/bor](http://www.alaska.edu/bor)).
- Students participating in the UA Scholars Program.
- Students participating in the University of Alaska College Savings Program who meet eligibility criteria as established by the Education Trust of Alaska.

For purposes of tuition assessment, a “resident” is any person who, prior to the published first day of instruction at his or her home campus:

- Has been physically present in Alaska for two years (apart from documented absences due to illness, vacations, attending another educational institution while maintaining Alaska residency, or other absences not exceeding a total of 120 days in the two-year period)
- And declares the intention to remain in Alaska indefinitely.

A dependent child (one who is unmarried, younger than age 24, and financially dependent on his or her parent or guardian) will be considered a resident if he or she has a parent or guardian that qualifies as an Alaska resident as defined above.

A student will be considered “non-resident” if within two years prior to applying for residency he or she:

- Carried out any act inconsistent with Alaska residency
- Was claimed as a dependent child of a non-resident of Alaska for federal income tax purposes during the most recent tax year
- Paid resident tuition at an educational institution in another state during the past two years.

Students having non-immigrant visa status are not eligible for Alaska residency. An international student in F-1 status or any other non-immigrant visa status cannot be considered a resident for tuition purposes. Non-immigrant visa status is inconsistent with Alaska residency. An international student who is a legal permanent resident or who is refugee status or another status which permits an indefinite stay in the United States may qualify as a resident for tuition purposes provided they meet the other conditions of residency.

A student who has initially registered as a non-resident may apply for resident status after residing in the state for one year under the University’s “bona fide resident” provision. Bona fide resident status can be based on either:

- Eligibility to receive the Alaska Permanent Fund Dividend
- Or satisfying five (5) of the following conditions:
  - Voter registration in Alaska
  - Vehicle registration in Alaska for at least nine months
  - Motor vehicle operator’s license in Alaska for at least nine months
  - Evidence of one or more years of physical presence in Alaska within the past three years; you may not have enrolled in more than six credit hours at a college or university during the three-year time frame
  - Ownership of real property in Alaska
  - Active checking or saving accounts in Alaska
  - Other evidence of residence deemed satisfactory by the University’s chief enrollment officer or designee

Students who want to apply for resident status should file an application for residency with required documentation at the appropriate university office prior to the published first day of instruction at their home campus.

For additional information and applications, new students should contact the Office of Admissions; returning students should contact the Office of the Registrar.

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 non-resident 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 Services. Alaska residents may obtain information about WUE programs in the states from either of the following two addresses:

Certifying Officer for Alaska Commission on Postsecondary Education
3030 Vintage Blvd.
Juneau, AK 99800
Phone: (800) 441-2962

WICHE Student Exchange Program
P.O. Drawer P
Boulder, CO 80301-9752
Phone: (303) 497-0210
[http://wue.wiche.edu](http://wue.wiche.edu)
Tuition Summary

Tuition Cost
Preparatory and Lower Division: Undergraduate (Course Numbers 050 - 299)

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Upper Division: Undergraduate (Course Numbers 300 - 499)

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Graduate (Course Numbers 600 - 699)

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

2% Network Charge  .................. 2%
Administrative Fee  ............... Varies
Admission Fee (non-refundable)
- Undergraduate Certificate  .... $40
- Associate Degree  .............. $40
- Baccalaureate Degree  .......... $40
- Graduate Certificate  .......... $45
- Graduate Degree  .............. $45
Audit Fee  ......................... Varies
Catalog  ......................... $6.50
Continuing Education Unit (CEU)  .... Varies
Continuous Registration Fee
(Graduate Students)  ........... $287
Credit-by-Exam Fee  ............. $40 per credit
Distance Fee  ........................ Varies
Graduation Application Fee  ....... $25
Laboratory, Material, Special, and Other Fees  .... Varies
Language Credit-by-Placement Fee  .... $20 per course
Late Payment Fees  .............. $75 - 100
Late Registration Fee  ........... $50
Non-Credit Course Fee  .......... Varies
Parking Fee  ............ Range $65 - 300
Placement Test Fee  ............. $10
Self Support Fee  ........................ Varies
Student Life Fee (for 6+ credits)  .... $16 per credit hour
(max $192 per semester)

Student Organization Fees (for 3+ credits) Varies
- Student Government Fee  ....... $1 per credit
  (max $12 per semester)
- Student Media Fee  .............. $11 per semester
- Concert Board Fee  ............. $5 per semester
Technology Fee  ................... $5 per credit
  (max $60 per semester)
Transcript Fee (per copy)  .... Varies

2% Network Charge
The network charge covers rapidly rising costs, especially in the maintenance and enhancement of the university-wide infrastructure. The two (2) percent network charge will be applied on a course-by-course basis to tuition, non-resident surcharges if applicable, and fees in lieu of tuition, for credit and non-credit 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 $2.

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

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

Continuing Education Unit (CEU) Fee
This fee varies. It is charged per Continuing Education Unit instead of tuition.

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

Credit-by-Exam Fee
A non-refundable $40-per-credit fee is charged to challenge a course.

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

Laboratory, Material, Special, and Other Fees
A fee is sometimes charged in addition to tuition. The semester Class Schedule identifies courses for which fees are charged and their purpose: lab fee, special fee, or materials fee. Fee amounts vary.

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

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.
Tuition, Fees, and Financial Aid

Late Payment Fees
A $75 fee will be assessed on all accounts which are not paid by the payment deadline. A $100 fee will be assessed on all accounts which are not paid by the withdrawal deadline. Students who pay for or drop their courses prior to the published deadline will not be required to pay the fees.

Late Registration Fees
Fee charged to new registrations during Late Registration (beginning the first day of instruction for the semester).

Non-Credit Course Fee
Non-credit courses are numbered A001-A049. These courses do not meet degree requirements and may have fees other than regular tuition. Such fees are listed in the semester Class Schedule as special fees.

Parking Fee
All areas on campus except “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 at the Student Union, Suite 113. Permit fees are non-refundable. For further details, contact Parking at (907) 786-1119, or visit www.uaa.alaska.edu/parking.

Placement Test Fee
Testing fee for course placement.

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

Student Life Fee
All students enrolled in six or more credits and having at least one course (three credits or more) on the Anchorage campus are assessed a per credit mandatory Student Life fee per semester for access to student-related programs and facilities: Athletics, Sports Complex, Student Activities, and Student Health Center.

Students enrolled in at least one academic credit but not meeting the enrollment requirements above, whether enrolled on or off campus, may elect to pay certain student fees for access to these services. Student Life Fees for students registered in fewer than six credits are set at a fixed rate. Contact the Issue Cage in the Wells Fargo Sports Complex for information about an Athletics/Sports Complex Fee, and contact Student Activities in the Student Union building regarding a Student Activity Fee. Note: Summer Student Life fees are listed in the class schedule.

Student Organization Fees
All students, with the exception of senior citizens, enrolled in three or more credits on the Anchorage campus are assessed mandatory student organization fees per semester: A USUAA Fee for the student government, a Concert Program Fee, and a Student Media Fee for the Northern Light student newspaper and 88.1 FM KRUA student radio station. The use of these fees is governed by the Union of Students at UAA (USUAA) Constitution.

Students enrolled in at least one academic credit but not meeting the enrollment requirements above, whether enrolled on or off campus, may elect to pay these fees per semester in order to have access to student organization programs and services.

Summer session students are not assessed the Concert Program Fee.

Note: The Aviation Technology Center, King Career Center, University Center, and Wendler Junior High are considered Anchorage on-campus facilities for purposes of Student Life Fee and Student Organization Fee assessments.

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

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

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 or add/drop will be denied, or a student's current registration may be cancelled. Students are held financially responsible for all courses for which they register. Interest, late fees, or collection costs will be added to a student's account. Past due accounts will be sent to a collection agency and reported to the credit bureau.

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

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

Tuition and fee charges may be audited, corrected, and adjusted before the end of the current semester. Students are notified of adjustments by mail. No refunds are issued for $5 or less. The University reserves the right to change its tuition or fees at any time.

Refund Policy
Refund processing is automatic for students who officially drop courses or withdraw from the University by the refund deadlines published in the current Class Schedule. Students are responsible for thoroughly reading the Class Schedule and being aware of the published refund deadlines for their particular classes. The date of official drop or withdrawal activity determines eligibility for a refund.

Students who drop or withdraw, or who are administratively dropped or withdrawn from courses as a result of University disciplinary action, forfeit all rights to any refund.

If there is a refund due to the student and the tuition was paid by credit card, the credit card account will be credited. If tuition was paid by cash or check, a refund check will be mailed to the student's address of record. Refunds will not be issued for amounts of less than $5. A $15 fee is charged for all checks reissued due to a stop payment request by the student.

Cancelled Classes
If UAA cancels a class, students may add another class of equal cost at no additional tuition charge. If a replacement class is not added, a 100% refund of tuition and course fees is automatically processed. Refund processing dates are listed in the current Class Schedule.
Withdrawal from Classes
No tuition fee refund or exchange will be allowed for withdrawal after the drop deadline.

Non-Credit, CEU, and Self-Support Classes
100% of all tuition charged is refunded if the student officially drops at least two (2) business days before the first class begins. There is no refund after this time.

Regular Tuition, Credit Courses (full semester)
- 100% of both the tuition and course fees are automatically refunded when official drop/withdrawal activity is completed prior to the end of the seventh calendar day of the semester.
- 50% of tuition only is automatically refunded when official drop/withdrawal activity is completed in the eighth through the twelfth calendar days of the semester. Course fees are not refunded on or after the eighth calendar day of the semester.
- No refund is issued for a drop/withdrawal made on or after the thirteenth calendar day of the semester.
- Refund deadlines for less-than-semester-length classes are prorated.

Please refer to the current semester’s Class Schedule for additional information.

Petition for Exception to University Policy on Refund of Tuition & Fees
A student, or person with legal authority to act on behalf of a student, may petition for an exception to University policy on refunds of tuition and fees. Petitions are not automatically granted but will be considered in light of the criteria set out below and individual circumstances, as demonstrated in the documentation provided:

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

2. A petition for exception must be received no later than the last day of the semester following the semester or session in which the course was offered. Petitions that are not received within this time frame may not be considered.
   - Fall course: No later than the end of the following Spring semester
   - Spring course: No later than the end of the following Fall semester
   - Summer course: No later than the end of the following Fall semester

3. At the time the petition is filed, the student must already have dropped or withdrawn from the course(s) involved. Refunds will not be considered for courses in which a student is still registered, or for which a grade exists, i.e., E, I, DF, AU.

4. Written documentation from instructors, physicians, or other appropriate persons verifying and supporting the request must accompany the petition. It is the responsibility of the student or a person authorized to act on behalf of the student to submit supporting documentation along with the petition. Petitions submitted without documentation may be returned and not considered.

5. A petition will only be approved if the petitioner can demonstrate unanticipated and unavoidable circumstances beyond the student’s control that arose after the withdrawal deadlines in UAA’s published schedule and that caused the student to drop the course(s).

6. Work-related issues, financial hardship, and failure to read UAA’s published documents generally do not present justifiable reasons to support a refund request.

7. Petitions for refunds for self-support courses are generally not allowed and must have approval of the academic unit/department chair or director.

8. Mandatory Student Fees are not refundable, unless a student drops all courses during the 100% refund period.

9. If the petition for refund is approved, refunds will be issued to the original funding source, e.g., credit card, financial aid, granting agency, lending agency, etc.

10. Petitions will be reviewed periodically and the number of petitions being reviewed will determine the time for response. A minimum of six to eight (6-8) weeks should be allowed for review.

11. Appeals of an adverse decision of the Committee must be in writing, must state the basis for the appeal, and must be received by the Chief Enrollment Officer within ten working days of the day the decision is mailed or otherwise distributed to the student. Appeals will be reviewed by UAA’s Chief Enrollment Officer, whose decision is final within the University. Appeals may be faxed, delivered in person or mailed to Chief Enrollment Officer, Offices of Enrollment Services and Student Financial Aid, University Center, University of Alaska Anchorage, P.O. Box 141629, Anchorage, Alaska 99514-1629. FAX (907) 786-1807.

12. If a petitioner wishes to seek judicial review of the Chief Enrollment Officer’s final decision, the appeal must be filed with the superior court of the State of Alaska within 30 days of the date the final decision is mailed or otherwise distributed to the petitioner, in accordance with Alaska Appellate Rule 602(a)(2).

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 at www.uaa.alaska.edu/studentaffairs/Fact-Finder.cfm.

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

- Senior citizens must pay all additional course fees. To waive tuition, senior citizens must register and present a completed tuition waiver with proof of age during the late registration period.
- Registration using a senior citizen tuition waiver for payment is permitted only during late registration and must be completed by the add deadline.
- Senior citizens may elect to register before the late registration period; however, they must pay full tuition and fees (use of senior citizen tuition waiver will not be accepted). Senior citizens electing to register and pay tuition are subject to all payment deadlines. Refunds will NOT be available to senior citizens who drop courses and then re-register in the same courses using a tuition waiver during late registration.
- The Student Government Fee and Student Media Fee are waived for senior citizens. The Student Life Fees are mandatory for all students taking three (3) or more credits on the Anchorage campus.
FINANCIAL AID APPLICATION PROCEDURES
Interested students should contact the Office of Student Financial Aid for information and applications. Students should submit applications at least six (6) months before the beginning of the semester for which they are applying. For the upcoming fall semester, the Office of Student Financial Aid should have received completed applications and required additional forms by June 1 at the latest. Applications received after this date will be considered if funds are available. Specific procedures are as follows:

1. New students must first apply for formal admission to UAA through Enrollment Services by the appropriate deadline.
2. All interested students must complete a Free Application for Federal Student Aid (FAFSA) and submit the application to the Department of Education. List UAA's Title IV code on FAFSA (011462). We recommend you apply online at www.fafsa.ed.gov. It is faster and more accurate.
3. Students who wish to apply for a specific scholarship may complete special applications available at the Office of Student Financial Aid or online at www.uaa.alaska.edu/scholarships.
4. Students who wish to apply for Bureau of Indian Affairs grants or scholarships should contact the BIA or their Native Regional Corporation for applications.

FINANCIAL AID ELIGIBILITY
To be considered for financial aid, a student must:

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

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

1. Income tax returns
2. Verification of household size
3. Child support payments
4. Statements of untaxed income
5. Verification of number of family members in college
6. If military, copies of Leave/Earning Statements for previous tax year (all 12 months)

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

SATISFACTORY ACADEMIC PROGRESS
To remain in good standing for federal assistance, students must complete the number of credits upon which the semester’s aid was based. In addition, they must maintain a minimum grade point average (GPA) of 2.0 for undergraduates and 3.0 for graduate students.

SATISFACTORY ACADEMIC PROGRESS POLICY
In order to receive financial aid from any of the federal aid programs, the State of Alaska loan programs or from institutional funds, a student must be fully admitted to an eligible degree or certificate program. In addition, the student must maintain satisfactory academic progress toward his/her educational goal. A complete copy of the Satisfactory Academic Progress Policy may be obtained online or from the Enrollment and Financial Aid Kiosk at the University Center.

FINANCIAL AID APPEAL POLICY
Students who wish to appeal for reinstatement of their financial aid must provide sufficient evidence to support their assertion that unusual circumstances prevented them from maintaining satisfactory academic progress. Please see the guidelines for financial aid appeal policy on the web.

RETURN OF FEDERAL FINANCIAL AID POLICY
Students who totally withdraw from all classes prior to completing more than 60% of an enrollment term will have their eligibility for aid recalculated based on the percent of the term completed. For example, a student who totally withdraws after completing only 30% of the term will have “earned” only 30% of any Title IV aid received. The school and/or the student must return the remaining 70%. The Office of Student Financial Aid encourages you to read this policy carefully. If you are thinking about withdrawing from all classes PRIOR to completing 60% of the semester, you should contact the Office of Student Financial Aid to see how your withdrawal will affect your financial aid.

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

BUREAU OF INDIAN AFFAIRS (BIA)
The Bureau of Indian Affairs makes grants available to eligible full-time students. Applicants must be at least one-quarter Alaska Native or American Indian. For further information, contact the local BIA area office or your Native Regional Corporation.

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

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

STUDENT FINANCIAL AID
www.uaa.alaska.edu/financialaid
The Office of Student Financial Aid assists students and prospective students in applying for state and federal aid programs. State and Federal governments, the University, and many private organizations offer grants, scholarships, loans, and employment opportunities to students who demonstrate need for such assistance. Each student's financial situation is carefully assessed, taking into consideration family size, assets, income, and estimated costs of attending college. Types and amount of financial aid vary according to State and Federal guidelines, student needs, and availability of funds.

FINANCIAL AID ELIGIBILITY
To be considered for financial aid, a student must:

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

FINANCIAL AID APPEAL POLICY
Students who wish to appeal for reinstatement of their financial aid must provide sufficient evidence to support their assertion that unusual circumstances prevented them from maintaining satisfactory academic progress. Please see the guidelines for financial aid appeal policy on the web.

RETURN OF FEDERAL FINANCIAL AID POLICY
The Higher Education Amendments of 1998 changed the formula for calculating the amount of aid a student and school can retain when the student totally withdraws from all classes. Students who withdraw from all classes prior to completing more than 60% of an enrollment term will have their eligibility for aid recalculated based on the percent of the term completed. For example, a student who totally withdraws after completing only 30% of the term will have “earned” only 30% of any Title IV aid received. The school and/or the student must return the remaining 70%. The Office of Student Financial Aid encourages you to read this policy carefully. If you are thinking about withdrawing from all classes PRIOR to completing 60% of the semester, you should contact the Office of Student Financial Aid to see how your withdrawal will affect your financial aid.

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

**EMERGENCY LOAN FUND (ELF)**

Thirty day loans are available when school is in session to assist students with books. An admitted full-time student making satisfactory progress may borrow a maximum of $600 for up to 30 days. A $10 administrative fee is charged. Students may receive one ELF per semester, subject to Financial Aid Disbursement approval.

**FEDERAL FAMILY EDUCATION LOAN PROGRAM (FFELP)**

A. **FEDERAL STAFFORD LOAN PROGRAM**

The Stafford Loan Program enables students to borrow directly from lending institutions 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 is a separate application process. The Office of Student Financial Aid has application forms and information for students’ consideration.

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 $2,625 as a first year undergraduate student, $3,500 as a second year undergraduate student and for students in a baccalaureate degree, $4,500 as a third, fourth and fifth year undergraduate student. The aggregate loan amount for undergraduate study is $23,000; the aggregate loan amount for graduate study is $65,500 minus any amount previously borrowed for undergraduate study.

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

2. **Federal Unsubsidized Stafford Student Loan**

   This loan is considered a non-need based loan. Students are responsible for paying the interest on this loan immediately from the time the unsubsidized loan is disbursed. Independent freshmen and sophomore undergraduate students can borrow up to $4,000 annually in addition to the amount borrowed on the subsidized Stafford. Independent juniors and seniors can borrow up to the limits of the subsidized loan and up to $5,000 annually in addition to the amount borrowed on the subsidized loan. Graduate students can borrow up to $10,000 annually in addition to the amount they are eligible for on the subsidized loan. Undergraduate students can borrow up to a maximum loan limit of $23,000 on unsubsidized loan borrowing. Graduate students can borrow up to a maximum of $73,000 on the unsubsidized loan program, including the amount borrowed as an undergraduate student.

B. **FEDERAL PARENTS’ LOANS FOR UNDERGRADUATE STUDENT (PLUS)**

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

**SCHOLARSHIPS**

**www.uaa.alaska.edu/scholarships**

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

**FEDERAL WORK-STUDY PROGRAM**

**www.uaa.alaska.edu/financialaid/workstudy.cfm**

The Financial Aid Office awards Work-study to the eligible student. It is based on financial need, which is calculated from the information provided on the Free Application for Federal Financial Aid (FAFSA). The student accepts work-study by securing a job on campus. The Financial Aid Department posts the available positions on our web site from the job descriptions supplied by each department seeking student employees. The student will choose the job that interests him/her and contacts the department that has posted the vacancy.

**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 University of Alaska Board of Regents Policies and Regulations online at **www.alaska.edu/bor/contents/pt9.xml**.

**CAREER SERVICES CENTER (CSC)**

(907) 786-4513

**HotLine (907) 786-4545**

**www.uaa.alaska.edu/careerservices**

Students seeking employment off-campus can find opportunities through the Career Services Center (CSC). Government, corporate, and private sector employers contact the CSC daily to post job opportunities. Student Internships may also be obtained through CSC. Through its Student Internship Services, the CSC provides qualified students the opportunity to earn credit in their major while gaining work experience in a paid position. This service provides guidance to students through developed learning objectives and faculty participation.

**HUMAN RESOURCE SERVICES (HRS)**

(907) 786-4608

**www.uakjobs.com**

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

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

**GRADUATE ASSISTANTSHIPS**

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

Graduate assistants are assigned responsibilities requiring approximately 20 hours per week. They receive stipends of varying amounts. Semester tuition waivers may also be available based on full-time (nine credits) attendance. Graduate assistantships are awarded in spring for the upcoming academic year. For additional information and applications, contact the appropriate dean’s office.
VETERANS ASSISTANCE
(907) 786-1586
www.uaa.alaska.edu/financialaid/vets.cfm

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

Students using DVA educational benefits must apply for admission to a degree or certificate program at UAA. In accordance with federal regulations, UAA must report this information to the VA, along with information regarding students' enrollment, grades, and academic progress.

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

ADMISSION TO UAA
All veteran students receiving DVA benefits must be officially admitted to a degree program. Contact Enrollment Services for information on requirements.

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

TRANSCRIPTS FROM PREVIOUS COLLEGES OR UNIVERSITIES
Veteran students with previous college or university experience must have official transcripts on file with the University. Each student must request these transcripts from each previous institution when applying for admission to UAA. The Department of Veterans Affairs may withhold benefits until this requirement is satisfied.
STUDENT FREEDOMS, RIGHTS & RESPONSIBILITIES

Student Freedoms, Rights & Responsibilities

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

**STUDENT FREEDOMS, RIGHTS, AND RESPONSIBILITIES**

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 society. University policies, procedures, and regulations are formulated to guarantee each student’s freedom to learn, and to protect the rights of all.

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 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 University catalog, the student handbook, and in the Dean of Students Office, located in the Student Union, Room 204. Students may also obtain a copy of University of Alaska Board of Regents’ Policies and University Regulations online at [www.alaska.edu/bor](http://www.alaska.edu/bor).

**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. UAA does not discriminate on the basis of race, color, religion, national origin, sex, age, Vietnam era or disabled veteran status, physical or mental disability, changes in 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/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 interviewed and/or 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 (FERPA) POLICY**

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

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

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

2. The right to request the amendment of a record if the student believes that the record is inaccurate or misleading. Students may ask the University to amend the student's education records if the student believes they are inaccurate or misleading. If the University decides not to amend the record as requested by the student, the University will inform the student of its decision and advise the student of his or her right to a hearing regarding the request for amendment. If the University denies the amendment request after the hearing, the student is given the right to insert a statement in the education record.
3. The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent. UAA may release, without consent, certain directory information. No one outside the University shall have access to, nor will the University disclose any other information from a student's educational record, without the written consent of the student, except to University officials with legitimate educational interests, to officials of other institutions in which a student seeks to enroll, to persons in compliance with a judicial order, and to persons in an emergency in order to protect the health or safety of the student or other persons, or as otherwise permitted under FERPA.

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

The following information is designated as directory information and may be released to the public by UAA:

a. Names of students
b. Dates of attendance at UAA
c. Program/Major field(s) of study
d. Degrees and certificates received including dates
e. Participation in officially recognized University activities
f. Academic and co-curricular awards, honors, and scholarships received and dates received
g. Weight and height of students on athletic teams
h. Electronic mail addresses
i. Hometown; city, and state

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

Students may inform the Enrollment Services Registrar that he/she does not give permission for the University to release his/her directory information. A written and signed request made by the student to not release his/her directory information must be given to the Registrar within two weeks of the start of the academic term. The requests for non-disclosure are valid until a subsequent written request to release directory information is received.

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

Family Policy Compliance Office
U.S. Department of Education
400 Maryland Avenue, SW
Washington, DC 20202-5920

A complete copy of the UAA procedures on the application of FERPA, including procedures for challenging the content of one's records, is available in Enrollment Services. Links to the University of Alaska Board of Regents’ Policy and University Regulation (09.04.00) regarding education records are on the web site: www.alaska.edu/bor/contents/pt9.xml.

STUDENT FREEDOMS, RIGHTS, AND RESPONSIBILITIES

ACADEMIC RIGHTS OF STUDENTS

The University has the responsibility of providing a program of high quality education in keeping with its financial resources. Students have protection through campus-specific procedures against arbitrary or capricious academic evaluation. Student performance shall be evaluated solely on an academic basis, not on opinions or conduct in matters unrelated to academic standards. Students are responsible for the proper completion of their academic program, for familiarity with all requirements of the University Catalog, and for maintaining an acceptable grade average for degree requirements.

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

ACADEMIC INTEGRITY

Academic integrity is a basic principle which requires that students only take credit 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. Disputes regarding academic actions are reviewed under the Academic Dispute Resolution Procedure contained 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. Students and student organizations will be responsible for ensuring that they and their guests comply with the Code while on property owned or controlled by the University or at activities authorized by the University.

Violations of the Code which occur on property owned or controlled by the University, or at activities authorized by the University, are subject to University judicial review and disciplinary action by the University. Student behavior which, were it to occur on property owned or controlled by the University or at activities authorized by the University, would constitute a Code violation is subject to disciplinary sanction 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 who fails to complete disciplinary sanctions as assigned by the University, may be prohibited from re-enrolling in the University until the charges or disciplinary 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.

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

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

3. Damage or Destruction of Property:
   a. damage or destruction to property owned or controlled by the University; or
   b. damage or destruction of property not owned or controlled by the University if the action constitutes a violation of the Code, e.g., the action occurred during an event authorized by the University; or
   c. conduct which causes personal injury.

4. Theft of Property or Services:
   a. theft or unauthorized use of University services or unauthorized presence at University activities without appropriate payment for admission.
   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; intimidation; or
   c. other conduct, including hazing, which unreasonably interferes with or creates a hostile or offensive learning, living, or working environment.

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

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

8. Misuse of Firearms, Explosives, Weapons, Dangerous Devices, or Dangerous Chemicals:
   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/studentaffairs/Fact-Finder.cfm](www.uaa.alaska.edu/studentaffairs/Fact-Finder.cfm)

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.
STUDENT FREEDOMS, RIGHTS, AND RESPONSIBILITIES

COPYRIGHT POLICY
http://technology.uaa.alaska.edu

All faculty, staff, and students who use any computer at the University are responsible for using computer resources in an ethical and legal manner. For detailed information see the Acceptable Use Policy on the ITS website:
http://technology.uaa.alaska.edu/admin/PoliciesAndProcedures.

SEX OFFENSE 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 Offense 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 which 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 UAA Board of Regents Policy 09.03.02 and its University Regulation on Resolution of Disputes Regarding Academic Decisions or Actions. Appropriate issues for the procedure include such things as considerations of alleged grading error or arbitrary and capricious grading for a final grade assignment. Grades assigned prior to the final grade received in a course are not subject to review under this procedure. Only the course instructor or an academic decision review committee may authorize a change in the assignment of a final grade. A complete copy of the Academic Dispute Resolution Procedure can be found in the UAA Fact Finder/Student Handbook.

COMMUNICATIONS VIA E-MAIL

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

COPYRIGHT AND INTELLECTUAL PROPERTY
http://info.alaska.edu/active/level2/copyright.html

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

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

The University of Alaska aggressively investigates specific claims of such abuse including abuses using personally owned computers connected to the University’s network. Verified abuses may lead to immediate suspension of access to University networks and/or computing resources, subject violators to possible University disciplinary action, and expose them to fines, other civil penalties, and criminal prosecution by copyright owners.
ADVISING & ACADEMIC SUPPORT

Academic Support
Academic Advising
College/School Advising

Advising and Testing Center

AHAINA Student Programs

Career Services Center (CSC)
College Preparatory and Development Studies
Disability Support Services (DSS)

Labs and Tutoring

Learning Communities
Alaska Native Science and Engineering Program (ANSEP)
Alaska Natives into Psychology (ANPsych)
Recruitment and Retention of Alaska Natives into Nursing (RRANN)
Smart Start Program
University Honors College

Learning Resources Center (LRC)

Library Support

Native Student Services (NSS)

Office of Undergraduate Research and Scholarship (OURS)

Pre-Professional Health Careers Advising

Student Support Services (SSS)

Testing and Assessment Services

TRIO Programs
Educational Opportunity Center (EOC)
Education Talent Search Program (ETS)
Upward Bound (UB)
ACADEMIC SUPPORT

ACADEMIC ADVISING

Academic advising assists students in developing academic plans consistent with educational, career and life goals. An academic advisor can guide the student on University policies and procedures, general and degree requirements, and career options associated with the field.

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. The Certificate of Admission issued upon acceptance to UAA provides the referral to the proper source of advising.

Academic advising is handled differently by each school/college. The following list provides a contact number for the advising coordinator of each unit.

COLLEGE/SCHOOL ADVISING

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

Advising is also available at the Community Campuses:
- Kachemak Bay (907) 235-7743
- Kenai Peninsula College, Student Services (907) 262-0330
- Kodiak College, Administration (907) 486-1219
- Mat-Su College, Student Services (907) 745-9762

ADVISING AND TESTING CENTER

(907) 786-4500

www.uaa.alaska.edu/advising-testing

ayfront@uaa.alaska.edu

The Advising and Testing Center is staffed with student development professionals and faculty counselors to assist students with a wide range of academic planning activities. In addition, the Center provides placement testing for students new to UAA. Advising services focus on new students uncertain about their academic focus, degree-seeking students with undeclared majors, Associate of Arts degree-seeking students, and all students enrolled in non-degree status. Staff assess students’ academic readiness for college level courses, guide students in the selection of required courses, and help students explore UAA degree programs, majors and related careers. Staff also connect students with other campus resources to maximize student access to programs and activities designed to promote student success and engagement with UAA. Maintaining regular contact with academic advisors during all phases of the college career is likely to enhance the student’s college experience and will help students attain their educational goals in a timely manner.

AHAINA STUDENT PROGRAMS

(907) 786-4070

www.uaa.alaska.edu/multicultural

AHAINA is an acronym for African American, Hispanic, Asian, International and Native American students. Its primary goal is to assist these students in achieving academic success and enhancing their University experience through the sharing of cultures. AHAINA provides academic support for students as they pursue their personal and educational goals.

CAREER SERVICES CENTER (CSC)

(907) 786-4513

www.uaa.alaska.edu/careerservices

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

COLLEGE PREPARATORY AND DEVELOPMENTAL STUDIES

(907) 786-6856

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

DISABILITY SUPPORT SERVICES (DSS)

(907) 786-4530 (voice), (907) 786-4536 (TTY)

www.uaa.alaska.edu/dss

aydss@uaa.alaska.edu

DSS coordinates academic support services for students who experience disabilities. To access support services, students must 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 computer technology.
# LABS AND TUTORING

<table>
<thead>
<tr>
<th>Title</th>
<th>Services</th>
<th>Eligible Students</th>
<th>Location</th>
<th>Cost</th>
<th>Resources Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Assisted Writing Lab (CAWL)</td>
<td>Tutoring for written assignments</td>
<td>All, PRPE &amp; ESL given priority</td>
<td>SMH 120</td>
<td>None</td>
<td>Computers, style guides, dictionaries</td>
</tr>
<tr>
<td>786-6856 CPDS &amp; LRC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EOC 274-5522</td>
<td>Tutorial assistance</td>
<td>Low-income, first generation college students</td>
<td>500 L Street Suite 501</td>
<td>None</td>
<td>Computer lab</td>
</tr>
<tr>
<td>LRC 786-6828</td>
<td>CAWL, Math Guided Studies Lab, and Language Lab. Coordinates athletic and individual tutoring. Preparatory ESL tutoring.</td>
<td>All students, depending on type of tutoring</td>
<td>SMH</td>
<td>Free for some services. Private tutoring costs vary</td>
<td>See listing above</td>
</tr>
<tr>
<td>Mathematics Guided Studies Lab</td>
<td>Tutoring for MATH A054, A055, or A105. Testing for Guided Studies Mathematics students.</td>
<td></td>
<td>SMH 120</td>
<td>None</td>
<td>Computers, mathematics tutorial materials</td>
</tr>
<tr>
<td>786-6856 CPDS &amp; LRC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematical Sciences Math Lab 786-1744</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>SSB 156</td>
<td>Lab fee</td>
<td>Computers, mathematical and statistical software</td>
</tr>
<tr>
<td>Mathematical Sciences Department</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Writing Center 786-6918</td>
<td>Tutoring on written assignments</td>
<td>All students</td>
<td>SMH 109</td>
<td>none</td>
<td>Books, dictionaries, style guides, workshops</td>
</tr>
</tbody>
</table>
ADVISING AND ACADEMIC SUPPORT

LEARNING COMMUNITIES

ALASKA NATIVE SCIENCE AND ENGINEERING PROGRAM (ANSEP)
(907) 786-1079
www.ansep.uaa.alaska.edu
ANSEP is a comprehensive suite of outreach, recruitment, retention, and placement strategies designed to help students fulfill their potential in college, sustain their interest in science, technology, engineering, and mathematics (STEM), and develop an interest in graduate study.

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

ALASKA NATIVES INTO PSYCHOLOGY (ANPsych)
(907) 786-6131
ANPsych’s mission is to increase the number of Alaska Natives and American Indian psychologists, and other mental health professionals, working in the field and to support Native communities in achieving their goals, building on wellness in their villages. The program provides financial, academic, and social support to students who wish to continue their education at the bachelors and graduate level. 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. ANPsych sponsors a residential learning community in West Hall called the Rita Pitka-Blumenstein Psychology Community.

RECRUITMENT AND RETENTION OF ALASKA NATIVES INTO NURSING (RRANN Program)
(907) 786-6978 or toll-free 1-877-891-4321
http://nursing.uaa.alaska.edu/rrann
The UAA School of Nursing was awarded a grant from the Department of Health and Human Services, Division of Nursing, to recruit and assist Alaska Native and American Indian students in their nursing education endeavors. RRANN and UAA are committed to increasing the number of Alaska Natives and American Indians graduating with an Associate of Applied Science or Baccalaureate 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 Nightinglæe Nursing Community in West Hall.

SMART START PROGRAM
(907) 786-6856
Smart Start offers a 13-credit, semester-length program to strengthen basic mathematics, reading, writing, and study skills. Participants meet Monday through Friday in the same classroom from 8:30 am to 12:30 pm where they meet with their teachers and tutors. Students receive individualized attention and tutoring services both inside and outside the classroom. Interested students must take a UAA-approved placement test and speak to a College Preparatory & Developmental Studies placement advisor (786-6856) to see if Smart Start is right for them. For information on available placement testing times and locations, call Advising and Testing Center (786-4500).

LEARNING RESOURCES CENTER (LRC)
(907) 786-6828
www.uaa.alaska.edu/ctclrc
The LRC offers a friendly place for students to read, study, work on supplemental materials, or get extra help for a class. The LRC houses a large quiet study area, an open area that is available for individuals and small work groups, a language laboratory, a mathematics laboratory, a computer-assisted writing laboratory, an open-access computer laboratory, and audio-visual study areas. The Instructor Reserve area maintains a collection of supplemental course materials for student use. The LRC provides laser printers, copy machines, laminating equipment, and document binding equipment to assist students.

LIBRARY SUPPORT

THE CONSORTIUM LIBRARY
(907) 786-1848
http://consortiumlibrary.org
The Consortium Library serves the students, faculty, and staff of the University of Alaska Anchorage and Alaska Pacific University with a newly expanded and remodeled facility. It is also the major research library for Southcentral Alaska. The collection includes more than 770,000 volumes, 500,000 microform units, subscriptions to 3,400 journals, and an extensive sheet music collection. The Library is a selective depository for federal and state documents. It houses special collections about Alaska and the Arctic, including a collection of archives and manuscripts. The Consortium Library also houses an extensive health sciences collection. The Consortium Library’s web site provides access to the Joint Library Catalog that contains the holdings for the Consortium Library as well as the Anchorage Municipal Libraries, UAA Career Services, Alaska Resources Library and Information Services (ARLIS), the UAA community campus libraries in Kodiak, Mat-Su, Kenai, Homer, and Valdez, and the Anchorage Museum. The website also provides access to a growing list of databases, indexes, full text articles, and electronic journals. Online request services for interlibrary loan and reference are available.

NATIVE STUDENT SERVICES (NSS)
(907) 786-4000
http://nss.uaa.alaska.edu
The NSS mission is to improve the retention and success of Alaska Native and Native American students in achieving their educational goals.

NSS provides educational/vocational planning, advising, career counseling, financial aid resources and guidance, scholarship and internship information, study group space, peer mentoring, leadership opportunities, community and cultural programming, educational outreach, community partnerships, campus orientation, student tours, school visits, and summer internships among other services.
NSS has a Peer Mentoring Program that is designed to increase new student retention, academic success, and personal adjustment to UAA through a volunteer Full-Circle mentoring approach.

OFFICE OF UNDERGRADUATE RESEARCH AND SCHOLARSHIP (OURS)
(907) 786-1086
www.uaa.alaska.edu/ours

The OURS fosters undergraduate research opportunities and presentation, encourages the integration of teaching and research across the campus, and links students both to local faculty and the global community of scholars.

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

PRE-PROFESSIONAL HEALTH CAREERS ADVISING
(907) 786-1747
http://biomed.uaa.alaska.edu

UAA students interested in the health professions can complete prerequisite courses required for admission into medical, dental, veterinary, pharmacy, physician assistant, physical therapy, and other professional programs. Many academic departments support pre-health career majors, including Biological Sciences, Chemistry, and Psychology. Alaska residents interested in medicine can apply to the WWAMI Program, which is affiliated with the University of Washington School of Medicine. MEDEX Northwest is a source of physician assistant training for qualified Alaskans.

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

Pre-Health Professions Advisor
Biomedical Program/WWAMI
University of Alaska Anchorage
3211 Providence Drive
Anchorage, AK 99508
(907) 786-1747

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

STUDENT SUPPORT SERVICES (SSS)
(907) 786-1380
www.uaa.alaska.edu/sss

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

TESTING AND ASSESSMENT
(907) 786-4500
www.uaa.alaska.edu/advising-testing/assessment

The assessment program supports many of the testing needs of the University and also serves the community as a testing site for national tests, which are used for admission, earning college credit, and professional certification.

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

TRIO PROGRAMS
www.uaa.alaska.edu/trio

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

EDUCATIONAL OPPORTUNITY CENTER (EOC)
(907) 274-5522

The EOC program provides information and assistance to adults who wish to pursue a postsecondary education. Services provided by the EOC include career planning, educational advising, college and technical school selection, school admission assistance, financial aid advising and application assistance, basic computer skills instruction, and federal student loan default rehabilitation.

EDUCATIONAL TALENT SEARCH PROGRAM (ETS)
(907) 274-1513

The ETS program serves 6th through 12th grade students in thirteen schools in the Anchorage School District. ETS prepares students to successfully complete high school and enroll in college. Services include academic advising, career exploration, study skills tutoring, college planning, college tours, and more.

UPWARD BOUND (UB)
(907) 274-1513

The Upward Bound program serves 9th through 12th graders in three high schools in the Anchorage School District. UB, like ETS, prepares students to complete high school, but the program emphasizes academic preparation in science, math, language and literature, as well as the services listed above for ETS. UB students attend a six-week highly challenging academic summer program on the UAA campus. Students who have graduated from secondary school and intend to enroll in college in the fall may participate in a Summer Bridging component, where they enroll and earn credit in college courses designed to aid their transition to college.
ACADEMIC STANDARDS & REGULATIONS

Admissions
General Admission Information
Transcripts and Test Scores
Ability to Benefit
Advising Requirements

University Admission Requirements
Undergraduate Programs
Application and Admission Status for Undergraduate Degree-Seeking Status
Master’s Degree Programs and Graduate Certificates
General Interest and Non-Degree-Seeking Options

Academic Planning
Program Selection
Course Selection
Special Courses
Full-Time/Part-Time Status and Course Load
Special Students
Residency
Resident Credit
Catalog Year
Age Limit of Credits
Transfer Credits
Class Standing
Academic Petition

Registration
Registration by Proxy
Facsimile (FAX) Transmission
Biographic/Demographic Information
Registration Changes
Faculty Signature
Auditing Classes
Continuous Registration
Cancellation of Classes

Transcripts
Course Performance
Class Attendance
Student-Initiated Drop or Withdrawal
Faculty-Initiated Drop or Withdrawal
Participation and Preparation
Course Materials
Assignments and Testing
Syllabus and Course Procedures

Course Completion
Grading
Grade Changes
Grade Point Average Computation (UAA GPA)
Academic Standing
Academic Eligibility for Student Activities

Program Completion
Graduation Application
Graduation with Honors
Commencement

Exception to University Policy for Records and Registration
ADMISSIONS
(907) 786-1480
www.uaa.alaska.edu/admissions
All students intending to register for one or more courses must apply for admission. Applications for admission are available online at www.uaa.alaska.edu/admissions or from Enrollment Services.

UAA offers four admission options for students:

- **Certificate and associate degree programs** emphasize technical or job-related skills in demand in the workplace and/or can be used as preparation for a bachelor program.
- **Baccalaureate ( Bachelor) degree programs** provide a comprehensive general education along with scholarship in a major specialty.
- **Graduate programs** prepare students for deep inquiry within a chosen field of mastery or for career advancement.
- **General interest and non-degree-seeking options** offer students the opportunity to take classes for either personal or professional interests.

GENERAL ADMISSION INFORMATION

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

HOME SCHOOL APPLICANTS

High school transcripts will be accepted from applicants attending home schools registered with the State of Alaska or affiliated with a diploma-granting educational organization whose accreditation is recognized by the U.S. Department of Education. Applications for admission for other home school graduates will be reviewed if the home school graduate:

- Takes the “ability to benefit” test offered at a UAA campus testing center; or
- Takes and submits a score for the General Educational Development (GED) Test; or
- Achieves and submits an official SAT 1 combined score (reading/verbal and math) of 1210 or an ACT composite score of 27; or
- Submits to the Director of Enrollment Services (or campus designee) an official SAT 1 or ACT test score, high school transcripts, a three-page essay on postsecondary educational goals, and a letter requesting admission to a specific certificate or degree program.

TRANSCRIPTS AND TEST SCORES

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

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

Transcripts from private high schools are recognized in the same manner as transcripts from state supported high schools. Transcripts are acceptable only if the school is accredited through a regional accrediting agency, affiliated with an accredited high school or registered with the state. Otherwise, the student must go through the Ability to Benefit process for admission.

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

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

ABILITY TO BENEFIT

Testing and Assessment Center
(907) 786-4500
www.uaa.alaska.edu/advising-testing/assessment
Degree-seeking students who are at least 18 years old but have not earned a high school diploma, GED, or at least 60 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 Testing and Assessment Center.

After taking the exam, 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 Enrollment Services before admission can be completed. Interested individuals should contact the advising center at their local campus for schedules and appointments.

ADVISING REQUIREMENTS

All students should meet with a faculty or academic advisor prior to each semester’s registration. Advising helps students clarify their goals, make suitable course selections, and understand academic expectations. New degree-seeking students are directed to an appropriate advisor as part of the admission process. Some students may be required to meet with an advisor prior to registration. (See Chapter 6, Advising and Academic Support, for further information.)
INTERNATIONAL UNDERGRADUATE STUDENTS
International Services
(907) 786-1558

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. In addition to being admitted to an undergraduate program, international students must submit the following:

1. An official TOEFL (Test of English as a Foreign Language) score of at least 450 for the paper-based test or 133 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. English translations of all required documents.

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 Enrollment Services for details.

ADMISSION TO BACCALAUREATE PROGRAMS

To qualify for admission to baccalaureate programs, a student must satisfy at least one of the following:

1. Graduation from high school with a GPA of at least 2.50, and completion of either the SAT, ACT, or an approved test; or
2. Successful completion of the GED, and completion of either the SAT, ACT, or an approved test; or
3. Completion of at least 30 college-level semester credits with a GPA of at least 2.00 and a high school diploma, GED, or completion of UAA's Ability to Benefit process as described in this chapter; or
4. Completion of at least 60 college-level semester credits with a GPA of at least 2.00.

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

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

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

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

FRESHMEN (STUDENTS WITH FEWER THAN 30 COLLEGE-LEVEL SEMESTER CREDITS)

Undergraduate certificate or associate degree-seeking freshmen must submit:

1. Final official high school transcripts showing graduation date or official GED scores. Students still attending high school must submit both a partial transcript at the time of application and a final transcript after graduation that confirms the graduation date.
2. Official transcripts from all regionally accredited colleges and universities and all institutions attended outside the United States. (Exception: Students do not need to request transcripts from any University of Alaska campus.)

TRANSFER STUDENTS (UNDERGRADUATES WITH AT LEAST 30 COLLEGE-LEVEL SEMESTER CREDITS)

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

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

INTERNATIONAL STUDENTS

INTERNATIONAL STUDENT ADVISOR

INTERNATIONAL STUDENT SERVICES

(907) 786-1558

INTERNATIONAL UNDERGRADUATE 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. In addition to being admitted to an undergraduate program, international students must submit the following:

1. An official TOEFL (Test of English as a Foreign Language) score of at least 450 for the paper-based test or 133 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. English translations of all required documents.

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 Enrollment Services for details.

ADMISSION TO BACCALAUREATE PROGRAMS

To qualify for admission to baccalaureate programs, a student must satisfy at least one of the following:

1. Graduation from high school with a GPA of at least 2.50, and completion of either the SAT, ACT, or an approved test; or
2. Successful completion of the GED, and completion of either the SAT, ACT, or an approved test; or
3. Completion of at least 30 college-level semester credits with a GPA of at least 2.00 and a high school diploma, GED, or completion of UAA's Ability to Benefit process as described in this chapter; or
4. Completion of at least 60 college-level semester credits with a GPA of at least 2.00.

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

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

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

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

FRESHMEN (STUDENTS WITH FEWER THAN 30 COLLEGE-LEVEL SEMESTER CREDITS)

Undergraduate certificate or associate degree-seeking freshmen must submit:

1. Final official high school transcripts showing graduation date or official GED scores. Students still attending high school must submit both a partial transcript at the time of application and a final transcript after graduation that confirms the graduation date.
2. Official copies of ACT, SAT, or approved test scores.

TRANSFER STUDENTS (UNDERGRADUATES WITH AT LEAST 30 COLLEGE-LEVEL SEMESTER CREDITS)

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

Students who wish to transfer college-level course work from institutions outside the United States or Canada must submit official transcripts and English translations as well as an official statement of educational equivalency from a recommended international credentials evaluation service. A list of evaluation services may be obtained from Enrollment Services. Fees depend upon the agency performing the evaluation. The evaluation service will require a separate transcript and copy of the English translation.
**Transfer Students (Undergraduates with at least 30 college-level semester credits)**

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

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

**International Undergraduate Students**

International Services

(907) 786-1558

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. In addition to being admitted to an undergraduate program, international students must submit the following:

1. An official TOEFL (Test of English as a Foreign Language) score of at least 520 for the paper-based test or 133 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. English translations of all required documents.

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 Enrollment Services for details.

**Related Undergraduate Admission Policies**

**Catalog Year**

Students who wish to earn an undergraduate certificate or degree must meet the requirements specified in the catalog in effect at the time of admission to the certificate or degree program, or the catalog in effect at the time of graduation. Certificate and associate students have five (5) years to complete their certificate or degree requirements under the terms of the catalog in effect at the time of admission. Baccalaureate students have seven (7) years. Students who take longer to complete their programs must reapply for admission and meet the catalog admission and graduation requirements in effect at the time of readmission or graduation.

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

**Change of Admission Level**

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

**Change of Major or Degree**

Once formally admitted and in attendance, students may request a change of major or degree program to another program at the same level (i.e. associate to associate, or baccalaureate to baccalaureate) through the Change of Major/Degree process. Students admitted initially in undeclared or pre-major status may also declare a major or degree program through this process. Students must meet the specific admission requirements of the desired program and must be formally accepted by signature of the Dean or Department Chair. No fee is required with a change of major or degree at the same level.

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.

**Concurrent Degrees**

Students may pursue concurrent degrees as long as they have formally applied and been accepted to each program through Enrollment Services. (See Chapter 10, Undergraduate Programs, for further information.)

**Pre-majors or Undeclared**

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

Students admitted to pre-major status must satisfy all requirements for formal admission to the major and then complete the Change of Major process. Such changes will not affect a student's degree requirements or catalog year.

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

**Transfer Evaluations**

Transfer evaluations will be completed for all undergraduate degree-seeking students who have attended other regionally accredited colleges and universities. Once the student has been admitted to a degree program, transcripts will be evaluated. Only transcripts from regionally accredited institutions declared at the time of admission are considered for transfer evaluation. Students may view most courses that have been previously evaluated by UAA by visiting the transfer credit web site at www.uaonline.alaska.edu. For more information see Transfer Credits in this chapter.
APPLICATION AND ADMISSION STATUS FOR UNDERGRADUATE DEGREE-SEEKING STUDENTS: TERMS AND DEFINITIONS

APPLICATION STATUS

Incomplete Application
An incomplete application is one that is not accompanied by all required documents; generally, an application is considered incomplete until all required official transcripts and test scores have been received.

Pending Application
A pending application has met University requirements and is awaiting departmental recommendation for admission.

Postponed Application
Students may postpone their applications for up to one year by notifying Enrollment Services 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 that are still incomplete and 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
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.

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

Postponed Admission
Students may postpone their admission for up to one (1) year by notifying Enrollment Services 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 reapply for admission if they later choose to attend UAA.

Returning Students – No Attendance Outside the UA System
Undergraduate degree-seeking students who have had a break in their UAA attendance but have not attended another institution outside the UA system and who wish to retain their original admission catalog may update their admission status. Individual departments reserve the right to refuse students readmission to their programs.

Returning Students – With Attendance Outside the UA System
Undergraduate degree-seeking students who attend another institution outside the University of Alaska system following their UAA admission must reapply for admission unless one or more of the following criteria have been met:

- Prior department approval via petition to take classes at another institution(s).
- Enrollment at outside institution was concurrent with UAA enrollment.
- Enrollment at outside institution occurred during summer semester.
- Enrollment was in correspondence courses.
- Student participated in a National or International Student Exchange.
- Student is participating in the Servicemembers Opportunity Colleges (SOC)-approved military programs.
- Outside institution was unaccredited at time of attendance.
- Outside institution was Community College of the Air Force or Excelsior (formerly Regents) College.

MASTER’S DEGREE PROGRAMS AND GRADUATE CERTIFICATES
See Admission Requirements in Chapter 12, “Graduate Programs,” for information.

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

Non-degree-seeking students may take noncredit, professional development, and regular credit courses for which they have the prerequisite skills and experience. They are not required to submit transcripts or test scores for admission, but still must meet placement requirements and prerequisites for individual courses. Students with little or no previous college experience are strongly encouraged to complete a UAA-approved placement test and meet with an academic advisor to determine appropriate entry levels of instruction. Students who wish to register for graduate courses must have the Department Chair’s or faculty member’s signature, and are strongly advised to contact the department at the earliest opportunity.

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

1. Have completed UAA’s Secondary School Student Enrollment process as described in this chapter.
2. Have completed UAA’s Secondary School Student Enrollment process as described in this chapter.
3. Have completed UAA’s Secondary School Student Enrollment process as described in this chapter.

Admission as a non-degree-seeking student does not guarantee future admission to a degree program. Credits earned as a non-degree-seeking student may be applied to degree programs only as specified in admission to the individual degree-seeking programs.

Non-degree-seeking students do not qualify for federal or state financial aid benefits, nor do they qualify to receive a Form I-20 Certificate of Eligibility for Nonimmigrant (F-1) Student Status.

INTERNATIONAL STUDENTS, NON-DEGREE-SEEKING

International Services
(907) 786-1558
Non-degree-seeking students do not qualify to receive a Form I-20 Certificate of Eligibility for Nonimmigrant (F-1) Student Status. Those with certain other types of visas including B-1 or B-2 visitor visas, F-2 visas and those on the visa waiver program may only take English as a Second Language (ESL) or recreational/vocational courses. Contact the International Student Advisor in Enrollment...
Services for further details. Individuals with permanent resident status may be admitted to any program according to the procedures and requirements.

Secondary School Students
Secondary school students are those who are in the 9th, 10th, 11th, or 12th grade and have not already earned their high school diplomas or completed a GED. For more information see the Secondary School Student Enrollment Policy as described in this chapter.

Related Non-Degree-Seeking Admission Policies

Transfer Credits
Non-degree-seeking students are not eligible to have transfer credits evaluated. Transferring credit is an option for degree-seeking students only. Students who wish to get an unofficial estimation of how their credits might transfer can visit www.uaonline.alaska.edu.

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

Academic Planning
Proper academic planning allows students to complete their chosen course, program, or degree successfully and efficiently. Students are advised to consider their personal circumstances (e.g., job schedules, financial aid, family situations, childcare) as well as short (1-2 semesters), medium (1-2 years), and long-term educational goals when planning their academic programs. The UAA Advising and Testing Center offers general academic advising, career counseling, personal development, and testing and assessment services as well as orientations and special workshops for all UAA students.

Each academic program has clearly defined student outcomes that describe the knowledge, skills, and capabilities that students acquire in the program.

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

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

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

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

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

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

Registration
Students may attend classes in a course offered at UAA only after they have properly completed the registration process for that course.

Students have three opportunities to register for the classes they select: Early registration (during the prior semester), Registration (immediately before the semester begins), and Add-drop (after the semester has begun). The specific dates of each are specified in the UAA Catalog and class schedule. Students consult the online or printed class schedule to select their courses for the coming semester and register either in person, via proxy, or via UAOnline. (See Registration later in this chapter for details).

Students select courses that meet their educational needs and that fit into their semester schedule. Registration in multiple sections of the same course is not allowed since that reduces the availability of those classes for other students. UAA policy states: For any given semester, a student may not be concurrently registered in two or more sections of the same course that have the same or overlapping starting and ending dates. UAA reserves the right to drop/withdraw a student from any or all sections for which they have multiple registrations. This administrative drop may be done at any time without prior or subsequent notice to the student.

Course Placement
Appropriate course placement is an essential component of academic success. Students are encouraged to meet with academic advisors within their academic department prior to registration to discuss educational goals, placement scores, and course prerequisites for appropriate course selection.
If registering for the first time in English or Mathematics courses, students must show evidence of appropriate placement. For English and Mathematics course placement purposes, ACT and SAT 1 scores are valid for two years from the date taken. UAA-approved placement test scores are valid for two years for English and 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 schedule for specific course prerequisites and placement score requirements.

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

**ENGLISH COURSE PLACEMENT**

English (ENGL), English as a Second Language (ESL), and Preparatory English (PRPE) courses require appropriate placement scores for course registration. Test scores reflect national norms and are subject to change. Students who have not earned appropriate scores on the ACT English or SAT 1 Writing 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 1 Writing score is eligible to enroll in the following English courses:

<table>
<thead>
<tr>
<th>English Course</th>
<th>ACT English Score</th>
<th>SAT 1 Verbal Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL A111</td>
<td>22-29</td>
<td>530-619</td>
</tr>
<tr>
<td>ENGL A211*</td>
<td>30+</td>
<td>620+</td>
</tr>
<tr>
<td>ENGL A212*</td>
<td>30+</td>
<td>620+</td>
</tr>
<tr>
<td>ENGL A213*</td>
<td>30+</td>
<td>620+</td>
</tr>
<tr>
<td>ENGL A214*</td>
<td>30+</td>
<td>620+</td>
</tr>
</tbody>
</table>

* If a student has earned 30+ on the ACT English test or 620+ on the SAT 1 Writing 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 three credits from the General Education Requirements (GER) Written Communications Skills list, for a total of six credits. Contact the English Department (786-4355) for questions on test scoring.

**MATHEMATICS COURSE PLACEMENT**

Mathematics placement testing is available through Advising and Testing (786-4500). A student who has completed the course prerequisites is eligible to enroll in Mathematics courses. A student who has not completed the course prerequisites but has completed courses with similar content and has earned an appropriate ACT, SAT 1 or UAA-approved placement test score is eligible to enroll in the following Mathematics courses:

<table>
<thead>
<tr>
<th>Mathematics Course</th>
<th>ACT Math Score</th>
<th>SAT 1 Math Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH A055</td>
<td>400-479</td>
<td></td>
</tr>
<tr>
<td>MATH A105</td>
<td>480-519</td>
<td></td>
</tr>
<tr>
<td>MATH A107</td>
<td>520-589</td>
<td></td>
</tr>
</tbody>
</table>
| MATH A200          | 590+           | **

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

**CONTACT HOURS**

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

One (1) contact hour is defined as 50 minutes of contact time.

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

One (1) 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 fifteen 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:

**Non-Credit Courses**

A001-A049: Non-credit 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 fees 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.
ACADEMIC STANDARDS AND REGULATIONS

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

ACADEMIC CREDIT COURSES
Courses with these 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 exam periods. Equivalencies to this standard may be approved by the chief academic officer of the university or community college. Academic credit courses are numbered as follows.

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 with the course descriptions.

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, 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, 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/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 course work 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 with these numbers require the ability to analyze, synthesize, compare and contrast, research, create, innovate, develop, elaborate, transform, and/or apply course material to solving complex problems, and generally require a substantial background of study in lower-level courses.

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

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

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

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

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

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

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

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

PREREQUISITES
Students are expected to meet prerequisites for all courses prior to registering. Prerequisites are listed with the course description and indicate the preparation and/or background necessary to undertake academic study. If a student has not met the necessary prerequisites, the student may request permission from the instructor of the course to enroll in the class. A faculty member may withdraw students who enroll without either prerequisites or faculty permission.
**Co-requisites**
Co-requisites are courses that must be taken concurrently. Students are responsible for enrolling and attending all co-requisite courses in the same semester. Co-requisites are listed in the individual course descriptions. A faculty member may withdraw students who do not enroll for the appropriate co-requisites.

**Repeatable Courses**
Some courses (such as Special Topics) may be taken more than once for additional credit. Only those courses for which repeatability for additional credit is explicitly noted in the course description qualify for this option.

**Retaking Courses**
Any course for which a student has received a transcripted grade may be retaken at the student's option, if the course is available and if permitted by the Program offering the course. The student's transcript will reflect all grades earned by the student in each semester in which the course is taken. Only the credits and chronologically last grade earned are applied toward graduation requirements, prerequisite fulfillment, and cumulative UAA GPA calculation.

The Credit/No Credit grading option cannot be selected when courses are to be retaken for GPA improvement. Students may not retake a course through credit-by-exam, correspondence, or through work at another college or university for the purpose of raising their grade point average at UAA.

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

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

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

**Special Courses**

**Directed Study**
A Directed Study course is a permanent catalog course delivered on an individual basis when the course is not offered that semester.

The policies are as follows:
1. Retroactive registration is not permitted.
2. Forms incorrectly completed will not be processed.
3. Courses scheduled for less than a full semester may not be offered for more than one (1) credit each week.
4. For fall and spring semesters, the deadline for directed study registration is the end of the ninth week.
5. For the summer semester, the deadline for directed study registration is prorated according to the length of the session.
6. 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.
7. Only regular (tenure track or term) faculty are allowed to supervise or to be the Instructor of Record for Directed Study courses. The Dean or Director may function as Instructor of Record when no regular faculty is available to fulfill that function.

The responsibilities of the Instructor of Record are to:
- a. approve the course of study;
- b. approve the credentials of other faculty involved;
- c. see that the material is presented in a full and timely manner;
- d. evaluate student's progress in achieving student outcomes;
- e. generate course grade and see that the grades are turned in to Enrollment Services; and
- f. assume responsibility for academic issues that arise in the course.
8. The faculty member teaching the course must have taught the permanent course or a related course prior to teaching a directed study.
9. The initiation of directed studies must come from the faculty in the discipline and must be approved by the Dean or Director.

**Independent Study**
An Independent Study course is a course consisting of topics or problems chosen by the student with the approval of the department concerned, with the supervision of an instructor, and final approval by the Dean/Director. These courses are not duplications of and must differ significantly from any catalog course. The independent study provides the opportunity for students who have completed most of the required courses in their program to study topics which are not offered.

The policies are as follows:
1. Retroactive registration is not permitted.
2. Independent study courses cannot be used to fulfill GER. This policy is not petitionable.
3. Forms incorrectly completed will not be processed.
4. Courses scheduled for less than a full semester may not be offered for more than one (1) credit each week.
5. For fall and spring semesters, the deadline for independent study registration is the end of the ninth week.
6. For the summer semester, the deadline for independent study registration is prorated according to the length of the session.
7. Only regular or term faculty are allowed to be the Instructor of Record for the Independent Study courses. The Dean or Director may function as Instructor of Record when no regular or term faculty are available to fulfill that function.

The responsibilities of the Instructor of Record are to:
- a. approve the course of study;
- b. approve the credentials of other faculty involved;
- c. see that the material is presented in a full and timely manner;
- d. evaluate student's progress in achieving student outcomes;
- e. generate course grade and see that the grades are turned in to Enrollment Services; and
- f. assume responsibility for academic issues that arise in the course.
8. The initiation of independent study courses must come from faculty in the discipline and must be approved by the Dean or Director.

**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 semester class schedule indicates if a class is being offered in stacked format.

University of Alaska Anchorage 2007-2008 Course Catalog
www.uaa.alaska.edu
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 semester class schedule will indicate if a class is being offered in cross-listed format.

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

Internships may be arranged either through the student's academic department or through the UAA Career Service Center. (See Chapter 6, Advising and Academic Support, for further information.)

PRACTICUM
A practicum is a student work experience, for which the academic department establishes the objectives and outcomes. The instructor facilitates, monitors, evaluates student accomplishments, and assigns the final grade.

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:

a. group study
b. tutorial study
c. scheduled lectures
d. 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 (3) credits and usually in a shorter time frame than a full semester.

FULL-TIME/PART-TIME STATUS AND COURSE LOAD
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 (6) credits to be considered half-time.

A student who has been admitted to a UAA graduate program and is enrolled at UAA for nine (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 five (5) graduate credits (400-level credits included if in the graduate degree program). Graduate students; see Chapter 12, Graduate Programs, for information.

Audited courses, credit-by-exam 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 at registration.

The faculty advisor and appropriate Dean or Director must approve overload requests for certificate or degree-seeking students. An advisor in the Advising & Counseling Center must approve overload requests for non-degree-seeking students.

Students should consider their graduation timeline when planning their study load. The minimum number of required credits is 60 for an associate 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 University 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 grade 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.
2. The courses taken will establish an official transcript that
1. University work is much more rigorous and much less
of, and agreement with/to all of the following:
Understanding.
Secondary School Student and Parent/Guardian Statement of
The registration process at UAA requires all secondary school
STUDENT AND PARENT/GUARDIAN AGREEMENT
11. Meet other program requirements established for
10. Attain a grade of at least "C" (2.00 on a 4.00 scale) from
9. Adhere to UAA policies and procedures found in the
catalog and student handbook;
8. Pay all tuition, course, and student fees;
7. Register on a space available basis, as priority is given to
6. Submit forms named in numbers 2 through 5 to the UAA
Office of the Registrar or community campus director for
review and final approval. The campus designee will
review the student packet for completeness and assess
the student's social and academic maturity and readiness
for success and safety in the courses requested;
7. A secondary school student who registers in University
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;
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.
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
intelectual 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 deter-
mination 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 proce-
dures may be made for special academic programs at the
department, school, college or campus level. Contact
Enrollment Services, specific academic programs or
community campuses for information regarding the avail-
ability of these special programs.
CERTIFICATE AND DEGREE PROGRAMS
Secondary school students are not eligible for admission to
certificate or degree programs until they earn a high school
diploma or GED or otherwise meet university admission
requirements for degree-seeking students. (See the Admission
section of this chapter for more information.)

APPLICATION PROCESS
www.uaonline.alaska.edu
Secondary school applicants may be admitted on a semester-
by-semester basis to non-degree-seeking status only.
Applications for admission to UAA are available online, at
Enrollment Services, or at the community campuses.
REGISTRATION PROCESS
To complete the registration process, secondary students must:
1. Pick up secondary student registration forms online, at
Enrollment Services, 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 or 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 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 to the UAA
Office of the Registrar or community campus director for
Enrollment Services, or at the community campuses;
APPLICATION PROCESS
www.uaonline.alaska.edu
Secondary school applicants may be admitted on a semester-
by-semester basis to non-degree-seeking status only.
Applications for admission to UAA are available online, at
Enrollment Services, or at the community campuses.

ACADEMIC STANDARDS AND REGULATIONS

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 course work;
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;
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;
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.
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 deter-
mination 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 proce-
dures may be made for special academic programs at the
department, school, college or campus level. Contact
Enrollment Services, specific academic programs or
community campuses for information regarding the avail-
ability of these special programs.
CERTIFICATE AND DEGREE PROGRAMS
Secondary school students are not eligible for admission to
certificate or degree programs until they earn a high school
diploma or GED or otherwise meet university admission
requirements for degree-seeking students. (See the Admission
section of this chapter for more information.)
INTERNATIONAL STUDENTS
International students with Permanent Residency or Immigrant visas may be admitted to either degree-seeking programs or non-degree-seeking options. Those with visa types including B-1 or B-2 visitor visas, F-2 visas and those on the visa waiver program may only take English as a Second Language (ESL) or recreational/vocational courses. Individuals seeking the Form I-20 Certificate of Eligibility for Nonimmigrant (F-1) Student Status must be formally admitted to degree-seeking status. Individuals with other visa types are advised to contact the International Student Advisor in Enrollment Services for information. See the Admission section of this catalog for more information.

SENIOR CITIZENS
Alaska residents 60 years of age or older may qualify for tuition and special fee consideration. (See Chapter 4, Tuition, Fees, and Financial Aid, for further information.)

VETERANS, SERVICE MEMBERS, AND ELIGIBLE DEPENDENTS OF VETERANS
Individuals in this category may qualify for tuition and special fee consideration. (See Chapter 4, Tuition, Fees, and Financial Aid, for further information.)

NON-HIGH SCHOOL GRADUATES
Individuals 18 and over who do not have a high school diploma or GED may still enroll in classes. See the Admission section of this catalog for information.

NON-DEGREE-SEEKING STUDENTS
Individuals in this category are not currently seeking a UAA certificate or degree. See the Admission section of this catalog for information.

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

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

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

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

15 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
CERTIFICATES AND ASSOCIATE DEGREES
Each student’s catalog year is established when the student is first admitted into a certificate or degree program as a major or pre-major. A student’s catalog year is adjusted if the student formally postpones admission (see Postponed Admission) or executes a change of major (See Change of Major or Degree).

Students may elect to graduate under the requirements of the catalog in effect at the time of formal acceptance to a certificate program or associate degree 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 (5) 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.

If the requirements for a baccalaureate degree as specified in the entry-level catalog are not met within seven (7) 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 course work that clearly and demonstrably satisfies the intent of a UAA General Education, College or major requirement can be accepted as a substitute. When this is not possible, evaluators may grant discipline-specific elective credit at the appropriate level. UAA reserves the right to reject transfer credit or to require an examination before credit is allowed. An evaluation of transfer credit is completed after a student has been admitted as a certificate- or degree-seeking student.

CRITERIA FOR ACCEPTANCE OF TRANSFER CREDIT
1. Transfer credits from United States institutions are accepted only if those institutions are accredited by one of the following regional accrediting associations:
   - Southern Association of Colleges and Schools
   - 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
   - Western Association of Schools and Colleges

2. Only undergraduate college-level (100 to 499) courses completed with grades equal to “C” (2.00) or higher are considered for transfer. Grades conferring point value less than 2.00 on a 4.0 scale will not be accepted.

3. Credits transferred for application to graduate certificates or degrees are subject to additional requirements noted in the chapter on Graduate Programs.

4. Students who plan to transfer credits from outside the United States must provide an official statement of educational equivalence from a recommended credentials evaluation service. Addresses are available from Enrollment Services. The student is responsible to pay evaluation fees which depend upon the type and complexity of the evaluation.

5. Transfer credits are not included in the student’s UAA grade point average (GPA) computation, except to determine eligibility for graduation with honors.
6. Challenge exams and credit by exams posted on another university’s transcript will not be considered for transfer credit (see National Credit by Examination).

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

8. Credits from institutions that are not accredited by one of the regional associations listed above are only accepted under special arrangements that may be initiated upon student request. Students wishing to pursue such transfers must clearly establish equivalency to UAA courses using evidence obtained from course descriptions, syllabi, texts, assignments, exams and direct communication between the faculties at UAA and at the originating institution.

TRANSFER OF GENERAL EDUCATION REQUIREMENT CREDITS WITHIN THE UNIVERSITY OF ALASKA SYSTEM

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

<table>
<thead>
<tr>
<th>Category</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written Communication</td>
<td>6 credits minimum</td>
</tr>
<tr>
<td>Oral Communication</td>
<td>3 credits minimum</td>
</tr>
<tr>
<td>Humanities/Social Sciences/Fine Arts</td>
<td>15 credits minimum</td>
</tr>
<tr>
<td>At least 3 credits in the arts</td>
<td></td>
</tr>
<tr>
<td>At least 3 credits in the humanities</td>
<td></td>
</tr>
<tr>
<td>At least 6 credits in the social sciences from two (2) different disciplines</td>
<td></td>
</tr>
<tr>
<td>Quantitative Skills/Natural Sciences</td>
<td>10 credits minimum</td>
</tr>
<tr>
<td>At least 3 credits in mathematics</td>
<td></td>
</tr>
<tr>
<td>At least 4 credits in the natural sciences including a laboratory</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>34 credits minimum</td>
</tr>
</tbody>
</table>

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

In its catalog, each University of Alaska institution specifies the courses which meet the general education categories at that institution and which can thus be guaranteed to transfer as described above. Students who have received a baccalaureate degree from UAS or UAF will be considered as having met UAA’s General Education Requirements.

CLASS STANDING

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

<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 from the school or college or from Enrollment Services.

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/UAS, must meet Transfer Credit Criteria for Acceptance prior to final approval.

Final authority to deny or approve petitions pertaining to school or college requirements rest with the Dean or Director of the school or college. Petitions pertaining to general education requirements and/or general university requirements 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 General Education Requirements (GER) list cannot be petitioned to meet a GER.

REGISTRATION

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

Students may register in person or use the UAOnline web registration system during the dates published in that semester’s class schedule. Noncredit, Continuing Education Unit (CEU), and Professional Development (500-level) courses have special registrations; interested students are advised to contact the appropriate school or college for more information.

For fall and spring semesters, a two-week late registration and add/drop period begins on the first day of the semester. Registration for semester-length courses is not permitted after the tenth class day of the semester. Even if students have been attending class from the beginning of the course, their registration will not be accepted after the late 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% refund period to avoid tuition assessment. Refer to the Academic Calendar published each semester in the class schedule for specific deadlines.
Deadlines will be prorated for courses with dates other than the full semester length. Calculate course prorate dates at www.curric.uaa.alaska.edu/registration/prorate.

Students may adjust their schedules and add or drop courses throughout the late registration and 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 Financial Aid Office before dropping or auditing a course. (See Chapter 4, Tuition, Fees and Financial Aid, for further information.)

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

**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 in the class schedule or from Enrollment Services. The proxy must follow the policies and calendar governing registration. Proxy registrations are not accepted without written permission from the student.

**FACSIMILE (Fax) Transmission**

Because the original source of a document received by FAX cannot always be accurately determined, official documents received by facsimile transmissions are considered only as working documents, pending the receipt of the original, authenticated documents. Documents sent via fax are held to the same dates and deadlines and are processed after original documents. Documents received after 5 p.m. are considered as being received by the following business day. Faxes are not guaranteed nor will they be confirmed. Students and departments are encouraged to retain the record of transmission.

**BIOGRAPHIC/DEMOGRAPHIC INFORMATION**

UAA must comply with State and Federal reporting requirements and therefore requires that students provide specific biographic or demographic information on registration or admissions forms. The University uses the information for statistical purposes and as an identifier for University records. This information is relevant to the University’s admissions and enrollment policies. The University does not discriminate on the basis of this information.

**Change of Name**

A student’s name on official records at UAA must be the student’s full legal name. A Change of Name form may be processed through Enrollment Services and must be supported by legal documentation, i.e., social security card, driver’s license, or a court order. Employees of UAA must present their social security number.

**Change of Address**

Currently enrolled students who have changed their address should notify Enrollment Services through UAOnline or by completing the appropriate form. Official notification of change of address is necessary for accurate mailing of correspondence, transcripts, registration instructions, registration billing, and information about graduation requirements.

**Social Security Number**

The University of Alaska has established student identification numbers and moved away from the practice of using social security numbers as default ID numbers. The University is still required to collect a valid social security number from each student for IRS, employment, and federal financial aid purposes. The social security number will be included on official transcripts for identification matching purposes.

**REGISTRATION CHANGES**

It is the responsibility of the student to become familiar with UAA policies, procedures and deadlines. Refer to the Academic Calendar published each semester in the class schedule for specific deadlines. Add, drop, withdrawal, credit/no credit, and audit deadlines for courses other than semester-length will be prorated according to the length of the class. Students are expected to register only for course sections which they plan to attend and to complete all courses for which they register. (See the Table for Add/Drop, Withdrawal, Credit/No Credit and Audit for more information.)

**Faculty Signature**

Some course descriptions include “Instructor Permission” as a prerequisite. Students must obtain the signature of the faculty member instructing the course section or their designee, or appropriate approval before registering.

**Auditing Classes**

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

Students who audit courses are required to meet prerequisites, register, and pay the same tuition as those who take the courses for credit. During weeks one (1) and two (2) of the semester, audit-to-credit requires faculty signature. Audit-to-credit changes are not allowed after week two (2) of the semester. During weeks three (3) 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-exam for an audited course until the following academic year.

**Continuous Registration**

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

**Cancellation of Classes**

UAA reserves the right to cancel or combine classes; to change the time, dates, or place of meeting; or to make other necessary revisions in class offerings. The University may discontinue a class at any time if enrollment falls below expected levels. Students may not be notified, so it is advisable to check their schedules regularly.

**Transcripts**

Transfer credit equivalents vary among semester, unit and quarter universities. Courses that differ from equivalent UAA courses by less than one credit are equated to UAA courses and meet UAA course requirements without requiring a petition. To complete credit requirements where transfer course credits differ from UAA credits by more than 1.00 credit, students can either take another UAA class or request an Academic Petition from the academic advisor. Refer to the Certificate of Admission for academic advisor contact information. It is ultimately the responsibility of students to ensure that they complete the total number of credits required for their degrees.
COURSE PERFORMANCE
Successful performance in individual courses contributes to overall satisfaction with the educational experience at UAA and ultimately will provide for successful completion of a course of study or degree.

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

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

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

Unexcused absences may result in a student being withdrawn from the class or receiving a failing grade. Unreasonable refusal to accommodate an emergency absence or an official university absence as described below may be appealed under the Academic Appeals Process.

OFFICIAL UNIVERSITY ABSENCES
Students participating in official intercollegiate activities on behalf of UAA, including but not limited to competition in athletics, forensics and performing arts, are responsible for making advance arrangements with faculty members to enable them to meet course requirements. Faculty are encouraged to make reasonable accommodations for such students. In some cases accommodation may not be possible.

STUDENT-INITIATED DROP OR WITHDRAWAL
Students may drop a class according to the information found in the published class schedule each semester. Deadlines are determined by the start date of the class and usually occur within the first two weeks of class (for Fall and Spring semesters), prorated for courses other than the full semester. No grade will be issued for classes dropped by the deadlines.

After the last deadline for dropping a class, students may withdraw from the class through the twelfth week of class (for Fall and Spring semesters), prorated for 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 (7) calendar days of the semester is also eligible for this action. The deadlines for faculty-initiated drop or withdrawal are the same as for student-initiated drop or withdrawal.

The requirements which a student must meet include all catalog pre- or co-requisites for the course, as well as other registration restrictions, and attendance requirements established for the class. Faculty may initiate a withdrawal for a student in audit status for a class according to criteria for audit status distributed in the course syllabus.

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

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

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

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

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

Students should be aware of testing policies as written in the course syllabus. Students are responsible for arranging alternate testing times and arrangements 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 exam for illness or family issues. Students should clarify how to address alternate testing with the individual faculty prior to the first exam.

SYLLABUS AND COURSE PROCEDURES
The course syllabus is the student guide to the course. Students should receive a syllabus at the beginning of each course that describes the course, policies within the course, and procedures that govern the delivery of the course.

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

COURSE COMPLETION
The grades that appear on a student's transcript are as follows:

ACADEMIC LETTER GRADES
With the exception of letter grades assigned to 500 level professional development courses, these letter grades carry grade points and are used to calculate GPAs.

A Honor grade; indicates comprehensive mastery of required work
B Indicates high level of performance in meeting course requirements
C Indicates satisfactory level of performance
D Indicates lowest passing grade; may not be acceptable to satisfy requirements in certain majors and in graduate programs
F Indicates failure
The following registration activity deadlines pertain to semester-length courses (15 weeks). Deadlines for courses more or less than semester-length are pro-rated according to the length of the course. Students are not permitted to drop or withdraw from a course after it has ended.

**ADD/DROP, WITHDRAWAL, CREDIT/NO CREDIT, AND AUDIT (Semester Length Courses):**

<table>
<thead>
<tr>
<th>Desired Change</th>
<th>Week 1 of Semester</th>
<th>Week 2 of Semester</th>
<th>After Week 2 of Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ADD OR LATE REGISTRATION</strong></td>
<td>Faculty signature required if course closed.</td>
<td>Faculty signature required.</td>
<td>Not permitted.</td>
</tr>
<tr>
<td></td>
<td>$50 fee charged for late registration.</td>
<td>$50 fee charged for late registration.</td>
<td></td>
</tr>
<tr>
<td>Desired Change</td>
<td>Begin 7th calendar day of Semester through Week 2 of Semester DROP</td>
<td>Weeks 3 through 12 of Semester WITHDRAWAL</td>
<td>After Week 12 of Semester</td>
</tr>
<tr>
<td><strong>FACULTY INITIATED DROP OR WITHDRAWAL (OPTIONAL)</strong></td>
<td>Form filed by faculty member with Enrollment Services. Course will not appear on student transcript.</td>
<td>Form filed by faculty member with Enrollment Services. Course will appear on student transcript with a grade of “W.”</td>
<td>Not permitted.</td>
</tr>
<tr>
<td>Desired Change</td>
<td>Weeks 1 through 2 of Semester DROP</td>
<td>Weeks 3 through 12 of Semester WITHDRAWAL</td>
<td>After Week 12 of Semester</td>
</tr>
<tr>
<td><strong>DROP OR WITHDRAWAL</strong></td>
<td>No faculty signature required.</td>
<td>No faculty signature required.</td>
<td>Not permitted.</td>
</tr>
<tr>
<td></td>
<td>Course will not appear on student’s transcript.</td>
<td>Form filed with Enrollment Services.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Students are not permitted to drop or withdraw from a course after it has ended.</td>
<td>No faculty signature required. Course will appear on student's transcript with a grade of “W.”</td>
<td></td>
</tr>
<tr>
<td>Desired Change</td>
<td>Weeks 1 through 2 of Semester DROP</td>
<td>Beginning Week 3 of Semester WITHDRAWAL</td>
<td>Beginning of Final Exam Week</td>
</tr>
<tr>
<td><strong>TOTAL WITHDRAWAL FROM UNIVERSITY</strong></td>
<td>No faculty signature required.</td>
<td>No faculty signature required.</td>
<td>Not permitted.</td>
</tr>
<tr>
<td></td>
<td>Form filed with Enrollment Services.</td>
<td>Form filed with Enrollment Services.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Courses will not appear on student’s transcript.</td>
<td>Courses will appear on student’s transcript with a grade of “W.”</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Students are not permitted to drop or withdraw from a course after it has ended.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**CHANGE IN GRADING OPTION**

The grading option for a course may be changed as follows:

<table>
<thead>
<tr>
<th>Desired Change</th>
<th>Weeks 1 through 2 of Semester</th>
<th>Weeks 3 through 12 of Semester</th>
<th>After Week 12 of Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CREDIT/NO CREDIT</strong></td>
<td>Form filed with Enrollment Services.</td>
<td>Not permitted.</td>
<td>Not permitted.</td>
</tr>
<tr>
<td><strong>CREDIT TO AUDIT</strong></td>
<td>Faculty signature required. Form filed with Enrollment Services.</td>
<td>Not permitted.</td>
<td></td>
</tr>
<tr>
<td><strong>AUDIT TO CREDIT</strong></td>
<td>Faculty signature required. Form filed with Enrollment Services.</td>
<td>Not permitted.</td>
<td></td>
</tr>
</tbody>
</table>
NON-ACADEMIC GRADES
These grades do not carry grade points and are not used to calculate GPAs. However, CR, NC, P, and NP grades may be used to determine satisfactory academic progress.

CR Indicates credit received for course
NC Indicates no credit received for course
DF Deferred; temporary grade which indicates course requirements cannot be completed by end of semester. It is to be used for courses which cannot normally be completed in a semester (such as thesis, project, research, internships, etc.).
I Incomplete; indicates additional work must be completed to receive a final grade. If the course work is not completed within one (1) year and the faculty member does not submit a change of grade at that time, the I will become a permanent grade.
P Indicates passing work
NP Indicates work that is not passing (no credit received)

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

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

CREDIT/NO CREDIT
Credit/No Credit is a grading option that encourages students to explore areas of interest. Undesignated electives may be evaluated 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 (GER), 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/NP). 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. If performance falls below that level (D, F, NP) the student will be automatically withdrawn from the course.

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 Enrollment Services. Once selected, this grading option may not be changed to regular grading after the end of week two of the semester.

DEFERRED GRADE
A deferred grade (DF) is used when the student is making satisfactory progress, but completion of the course project (such as thesis, project, research courses, internships, etc.) typically requires more than a semester. Credit is withheld, without academic penalty, until the course requirements are met. If course work is not completed prior to fulfilling graduation requirements or if the student fails to maintain enrollment for one (1) 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. The Incomplete Grade Contract, a contract form between the student and the faculty member that stipulates the assignment(s) required to finish the course, is required and must be completed and filed with the department or dean's office before an I grade is assigned. Course work must be completed by a date specified in the contract, not to exceed one (1) year. Upon completion of the required course work, the faculty member must submit a change of grade form to Enrollment Services. If course work is not completed within one (1) year or if the terms specified on the Incomplete Contract are not met, the student may be assigned a failing grade (F or NP, depending on the grading basis of the course). If course work is not completed within one (1) year and the faculty member does not submit a change of grade at that time, the I will become a permanent grade and it will be necessary for the student to re-register to obtain credit for the course.

PASS/NO PASS
In some courses, students are graded Pass/No Pass. 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 15th 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 Enrollment Services by the appropriate faculty member. Change of Grade forms will not be accepted if submitted to Enrollment Services by the student.

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>Letter</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 (1) 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 (3) courses and earned an A for a three-credit course, a C for a one-credit course, and a P (Pass) for a two-credit course would have a total of four (4) quality hours. The total grade points for the first course would be 12 points and for the second...
would be two (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 grade point average of 3.50.

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

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

DEPARTMENTAL PROBATION OR REMOVAL FROM A MAJOR PROGRAM
Individual departments may establish additional criteria for departmental academic action. Failure to meet or maintain these criteria may result in departmental probation or removal from a major program. Those students’ major program will be changed to Undeclared. Students will remain in a certificate or undergraduate degree-seeking status as long as the University’s minimum academic standards are met. Undeclared students must use the Change of Major/Degree form and process to request re-admission or admission to a new program. Forms are available from Enrollment Services.

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 are released to the media; also, names and addresses of honor students are provided to the National Dean’s List Publication unless a written request not to do so has been received by Enrollment Services.

THE DEAN’S LIST
To be eligible for Dean’s List, a student must be an admitted undergraduate degree/certificate-seeking student enrolled in at least 12 UAA credits graded with academic letter grades and must have earned a GPA of at least 3.50 for the semester. Regardless of the number of credits a student is enrolled in, temporary grades of I (incomplete) or DF (deferred) will prevent a student from being eligible for the Dean’s List until course work has been completed and the I or DF is replaced by a final grade.

THE CHANCELLOR’S LIST
To be eligible for Chancellor’s List, a student must be an admitted undergraduate degree/certificate-seeking student enrolled in at least 12 UAA credits graded with academic letter grades and must have earned a GPA of 4.00 for the semester. Regardless of the number of credits a student is enrolled in, temporary grades of I (incomplete) or DF (deferred) will prevent a student from being eligible for the Chancellor’s List until course work has been completed and the I or DF is replaced by a final grade.
PROGRAM COMPLETION

GRADUATION APPLICATION

UAA issues diplomas three times a year: in January following the fall semester, in May following the spring semester, and in September following the summer session. To be eligible for graduation at the end of a given semester, a student must:
- Be formally admitted to the degree or certificate program during the previous semester. Submit an Application for Graduation signed by the academic advisor and accompanied by the required fee to Enrollment Services. Application for Graduation deadlines are March 1 for summer graduation, May 1 for fall graduation and September 15 for spring graduation.

Upon receipt of the student's Application for Graduation, a review is completed by Enrollment Services. 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.

Exception to University Policy for Records and Registration

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

1. The petitioner must submit to the Exception to University Policy Committee a signed petition and consent to release of information form, which is provided for this purpose. The form and petition must be submitted to the University of Alaska Anchorage Office of The Registrar, University Center, P.O. Box 141629, Anchorage, AK 99514-1629.
2. Only petitions submitted by the student or by a person with legal authority to act on behalf of the student will be considered.
3. A petition for exception must be received no later than the last day of the semester following the semester or session in which the course was offered. Petitions that are not received within this time frame may not be considered.
   - Fall course: No later than the end of the following spring semester.
   - Spring course: No later than the end of the following fall semester.
   - Summer course: No later than the end of the following fall semester.
4. Written documentation from instructors, physicians, or other appropriate persons verifying and supporting the request must accompany the petition. It is the responsibility of the student or a person authorized to act on behalf of the student to submit supporting documentation along with the petition. Petitions submitted without documentation may be returned and not considered.
5. A petition will only be approved if the petitioner can demonstrate unanticipated and unavoidable circumstances beyond the student's control that arose or came to light after published deadlines in UAA's printed schedule. Work-related issues, financial hardship, and failure to read UAA's published 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; a student may need to file a separate Petition for Refund.
7. Petitions will be reviewed periodically and the number of petitions being reviewed will determine the time for response. A minimum of six to eight (6-8) weeks should be allowed for review.
8. Appeals of an adverse decision by the Committee must be in writing, must state the basis for the appeal, and must be received by the Registrar within ten working days of the day the decision is mailed or otherwise distributed to the student. Appeals may be faxed, delivered in person, or mailed to: Office of the Registrar, University Center, University of Alaska Anchorage, P.O. Box 141629, Anchorage, AK 99514-1629.

RECORDS AND REGISTRATION

EXCEPTION TO UNIVERSITY POLICY FOR


ACADEMIC STANDARDS AND REGULATIONS

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 represents your entire academic history. All grades and credits earned will be included in determining eligibility to graduate with honors (Ds, Fs, retaken courses, courses lost in academic bankruptcy, etc).

Honors are awarded to associate and baccalaureate degree students with cumulative GPAs as follows:
- Cum Laude 3.50 to 3.79
- Magna Cum Laude 3.80 to 3.99
- Summa Cum Laude 4.00

COMMENCEMENT

Students who complete certificate or degree requirements and meet the application for graduation deadline during an academic year (fall and spring semesters) are invited to participate in the annual commencement ceremonies in May. Students who complete certificate or degree requirements and meet the application for graduation deadline during the summer session are invited to participate in the commencement ceremonies the following May.

University of Alaska Anchorage 2007-2008 Course Catalog
www.uaa.alaska.edu
EDUCATIONAL DELIVERY METHODS & NON-TRADITIONAL CREDIT

Educational Media Services (eMedia)
Distance Education Services
Proctoring Services

Center for Distance Education and Independent Learning

Military Programs

Non-Traditional Credit
Language Credit by Placement
Certified Experience Credit
Local Credit by Examination
Military Credit
National Credit by Examination
Advanced Placement Program
College-Level Examination Program (CLEP)
Dantes/USAFI Examination
Excelsior College Exam
International Baccalaureate
National Occupational Competency Testing Institute (NOCTI) Examination
8

Educational Delivery Methods & Non-Traditional Credit

**Educational Media Services (eMedia)**
Phone (907) 786-6177  
Toll Free (888) 553-2760  
Fax (907) 786-4485  
[www.uaa.alaska.edu/distanceeducation](http://www.uaa.alaska.edu/distanceeducation)  
distance@uaa.alaska.edu

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

eMedia supports the specific needs of instructors and students involved in UAA distance education. UAA has particular interest in expanding the use of distance-delivered courses to better meet the changing needs of today's students. Distance education courses are offered throughout the year during fall, spring, and summer semesters.

**Distance Education Services**
[www.uaa.alaska.edu/distanceeducation](http://www.uaa.alaska.edu/distanceeducation)

A goal of UAA is to become a student-centered university. Distance Education Services supports this by offering courses that are convenient for college students with busy schedules. Distance education courses often provide flexibility and access for students who live in geographically remote areas and are unable to attend classes on campus.

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

Students must possess high motivation and self-discipline in order to successfully complete distance courses. Every UAA distance education course requires that you have a computer and a reliable Internet connection. Some courses have a television, audio conferencing, or DVD component to them, so it is important to check the technological requirements of a distance course before registering. All courses have a computer component to them. Students must have a computer with a reliable Internet connection to enroll in any UAA distance course.

Many different technologies are used to deliver distance education. Most courses use a combination of the following:
- Audio Conferencing  
- CD/DVD Instruction  
- Instructional TV  
- Streaming Media  
- Video/Audio Tapes  
- Web-Based Instruction

**Proctoring Services**
Student quizzes, tests, and exams are administered at remote testing sites such as public schools, libraries, or community centers. Students are required to contact an assigned location with an approved proctor before taking an exam.

**Center for Distance Education and Independent Learning**
P. O. Box 756700  
Fairbanks, Alaska 99775-6700  
Phone: (907) 474-5353  
Fax: (907) 474-5402  
[www.distance.uaf.edu](http://www.distance.uaf.edu)  
Distance@uaf.edu

The Center for Distance Education and Independent Learning is part of the College of Rural Alaska. The Independent Learning Program (IL) is the oldest distance delivery program at the University of Alaska and has offered correspondence courses for more than forty years. There are more than 100 courses available, though the variety of courses is not designed to meet the requirements of any specific degree program. Some required courses for various degree programs, however, are included in the IL offerings. The UAA Advising and Testing Center has brochures for this program and can proctor exams.

**Military Programs**
Postsecondary education programs for active duty military personnel, dependents of active duty personnel, Department of Defense employees, and civilians at military bases are offered throughout the state. Major military bases and corresponding military education centers at UAA include:
- Elmendorf Air Force Base  
- Fort Richardson Army Post

Program offerings range from classes in support of an Associate of Arts to a Master of Public Administration. Enlisted personnel benefit from UAA's membership in the Servicemembers Opportunity College Network where training and experience are evaluated for applicable credit and degree completion is possible despite a duty change. Classes are delivered via traditional classroom instruction, videotape course delivery, and live interactive satellite delivery.

**UAA Military Programs**
**Elmendorf AFB**  
3 MSS/DPE 4109 Bullard Avenue, Suite 107  
Elmendorf AFB, Alaska 99506  
(907) 753-0204

The education center on Elmendorf Air Force Base, located five miles north of Anchorage, offers degree programs including the Associate of Arts, the Bachelor of Business Administration, the Bachelor of Arts in Interdisciplinary Studies, the Bachelor of Science in Technology, the Master of Arts in Interdisciplinary Studies, and the Master of Public Administration. Day, evening and weekend classes are taught during regular 15-week semesters, as well as 8-week sessions.
The specific processes are listed below. Taking local or national examinations, seeking UAA students. Documenting military or occupational training, Non-traditional credit evaluations are available for accepted degree-seeking UAA students. Documenting military or occupational training, taking local or national examinations, are some of the methods used. The specific processes are listed below.

NON-TRADITIONAL CREDIT

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

LANGUAGE CREDIT BY PLACEMENT

An accepted, degree-seeking UAA student who has completed in residence a Department of Languages UAA catalog course (A102-A302) with a grade of B or better is eligible to receive credit for the two immediately preceding courses, if any, up to a total of 8 credits. This policy does not apply to credit earned through the College Board Advanced Placement Examination Program, nor to Special Topics (_93), Independent Study (_97), Language Self Study (LANG prefix), or Department of Languages literature or culture courses. In order to receive credit, the student must complete the appropriate form from Enrollment Services and pay an administrative fee.

CERTIFIED EXPERIENCE CREDIT

This program allows crediting of certified, but not accredited, institution-sponsored learning. With documentation, the University may award elective credit or specific course credit.

National/State/Local Certificates: Persons who have met certain standards and/or passed certain tests may be awarded academic credit. Credit agreements are currently in effect for the following:

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

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.

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 local UAA Advising and Testing Center. There is a fee charged for local credit by exam.

General criteria for local credit by examination include:

1. Courses with numbers below 100 may not be taken through credit by exam.
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 exam.
3. When an appropriate exam exists, CLEP, DANTES, ACT-PEP, or other national examinations may be administered instead of a local examination.
4. Determination of which courses may be taken through local credit by exam and construction of the examinations is at the discretion of the appropriate department.
5. Local credit by exam 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 exam. If the exam 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 non-resident credit.
8. There is no limit to the number of credits which may be acquired through the local credit by examination process.
9. Students have one (1) year from the date of application to take the local examination.
10. Students may not request local credit-by-exam for an audited course until the following academic year.

MILITARY CREDIT

Up to eight (8) elective credits may be awarded to students who have completed one (1) calendar year of active duty military service.

In addition, credits may be granted for formal service schools and the primary MOS/Rating as recommended in the Guide to the Evaluation of Education Experiences in the Armed Services prepared by the American Council on Education.

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

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

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

To graduate from these programs, the residency requirement is three (3) semester credits for the two-year programs and 24 semester credits for the four-year program and an overall GPA of 2.0.

Please contact Enrollment Services at 786-1480 for further information regarding required documentation and forms.
**EDUCATIONAL DELIVERY METHODS AND NON-TRADITIONAL CREDIT**

**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 exams are based on the most current American Council on Education recommendations or departmental approved scores.

A student desiring credit for a national exam must request that an official report of exam scores be sent to Enrollment Services at UAA. Credit may be received for more than one national exam.

**ADVANCED PLACEMENT PROGRAM**

UAA awards credit for satisfactory performance (a score of 3 or higher) on the College Board Advanced Placement Examinations. These exams are normally completed by students during their senior year in high school. A student may receive credit for more than one Advanced Placement Exam.

**Advanced Placement Exam**

<table>
<thead>
<tr>
<th>UAA Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ART</strong></td>
</tr>
<tr>
<td>Studio Art .............................................. 4 credits lower-division art elective</td>
</tr>
<tr>
<td>History of Art ............................................. ART A261/A262</td>
</tr>
<tr>
<td><strong>BIOLOGY</strong></td>
</tr>
<tr>
<td>Biology ................................................. BIOL A102/A103 + 4 credits lower-division biology elective</td>
</tr>
<tr>
<td><strong>CHEMISTRY</strong></td>
</tr>
<tr>
<td>Chemistry .................................................. CHEM A105/A105L</td>
</tr>
<tr>
<td>Computer Science ........................................ CS A201/3 credits lower-division elective</td>
</tr>
<tr>
<td>Environmental Science .................................. ENVI A202 + 1 credit GER-Natural Science Lab</td>
</tr>
<tr>
<td><strong>ECONOMICS</strong></td>
</tr>
<tr>
<td>Macroeconomics ........................................... ECON A201</td>
</tr>
<tr>
<td>Microeconomics ........................................... ECON A202</td>
</tr>
<tr>
<td><strong>ENGLISH</strong></td>
</tr>
<tr>
<td>Language and Composition ................................ ENGL A111</td>
</tr>
<tr>
<td>Literature and Composition ............................. ENGL A121</td>
</tr>
<tr>
<td><strong>GOVERNMENT AND POLITICS</strong></td>
</tr>
<tr>
<td>American Government and Politics .................... PS A101</td>
</tr>
<tr>
<td>Comparative Government and Politics ................ PS A102</td>
</tr>
<tr>
<td><strong>HISTORY</strong></td>
</tr>
<tr>
<td>American History .......................................... HIST A131/A132</td>
</tr>
<tr>
<td>European History .......................................... HIST A102</td>
</tr>
<tr>
<td>World History ............................................. HIST A101/A102</td>
</tr>
<tr>
<td><strong>LANGUAGES</strong></td>
</tr>
<tr>
<td>Level 3: French Language ............................... FREN A101/A102</td>
</tr>
<tr>
<td>Level 3: French Literature .............................. FREN A201/A202</td>
</tr>
<tr>
<td>Level 3: German Language ............................... 8 credits lower-division German elective</td>
</tr>
<tr>
<td>Virgil ....................................................... 4 credits lower-division Latin elective</td>
</tr>
<tr>
<td>Catullus-Horace .......................................... 4 credits lower-division Latin elective</td>
</tr>
<tr>
<td>Level 3: Spanish Language .............................. SPAN A102/A202</td>
</tr>
<tr>
<td>Level 3: Spanish Literature ............................. SPAN A101/A102</td>
</tr>
<tr>
<td><strong>MATHEMATICS</strong></td>
</tr>
<tr>
<td>Calculus AB ................................................ MATH A107/A108/A200</td>
</tr>
<tr>
<td>Calculus BC ................................................ MATH A107/A108/A200/A201</td>
</tr>
<tr>
<td><strong>MUSIC</strong></td>
</tr>
<tr>
<td>Music Theory ................................................ MUS A111</td>
</tr>
<tr>
<td>Music Listening and Literature ........................ MUS A121</td>
</tr>
<tr>
<td><strong>PHYSICS</strong></td>
</tr>
<tr>
<td>Physics B ................................................... PHYS A123/A123L</td>
</tr>
<tr>
<td>Physics C ................................................... PHYS A211/A211L</td>
</tr>
<tr>
<td><strong>PSYCHOLOGY</strong></td>
</tr>
<tr>
<td>Psychology .................................................. PSY A111</td>
</tr>
<tr>
<td><strong>STATISTICS</strong></td>
</tr>
<tr>
<td>Statistics ................................................... STAT A252</td>
</tr>
</tbody>
</table>

**COLLEGE-LEVEL EXAMINATION PROGRAM (CLEP)**

An Official CLEP Transcript must be submitted to Enrollment Services.

**General Exams**

UAA awards up to 24 credits for CLEP general exams to students who earn a score of 500 or higher for paper based test and 58 or higher for a computer based test. Credit for CLEP general exams are awarded according to the following standards:

- English Composition with No Essay ......... .0 Credits
- No Credit awarded
- English Composition with Essay .......... .3 Credits
- ENGL A111 - GER
- Mathematics ........................................ .3 Credits
- Lower Division Elective, Non-GER
- Natural Sciences ................................. .6 Credits
- BIOL A102 - GER and
- Lower Division Elective, Non-GER
- Humanities ......................................... .6 Credits
- Humanities and/or Fine Arts - GER
- Social Sciences ................................. .6 Credits
- Humanities - GER or Social Sciences - GER

Students must request that an official report of exam scores be sent to Enrollment Services. Examinations may not be repeated for a minimum of six (6) months.

**Subject Exams**

Credit awarded for subject exams is elective credit or, through agreements with departments, is equated to UAA courses.

Students must request that an official report of exam scores be sent to Enrollment Services. Examinations may not be repeated for a minimum of six (6) months.

**DANTES/USAFI EXAMINATIONS**

Credit may be awarded for successful completion of the Defense Activity for Non-Traditional Education Support (DANTES) examinations. Credit for exams will be elective credit or, through agreements with departments, will be equated to UAA courses. An official copy of the DANTES/ USAFI transcript must be submitted to Enrollment Services.

**EXCELSIOR COLLEGE EXAM**

Credit may be awarded for successful completion of the Excelsior College Exam. Credit for exams is elective credit or, through agreements with departments, is equated to UAA courses. An official copy of the student’s exam scores must be sent to Enrollment Services.

**INTERNATIONAL BACCALAUREATE**

UAA awards credit for satisfactory performance (a score of 5 or higher), on the International Baccalaureate Examinations. An official copy of the student’s higher level exam scores must be sent to Enrollment Services.

**NATIONAL OCCUPATIONAL COMPETENCY TESTING INSTITUTE (NOCTI) EXAMINATION**

(907) 786-6446

NOCTI tests may be used to document competency in various occupational fields (e.g. Electronic Communication, Welding, Diesel Mechanic) as an option for students who want to enter certain Community and Technical College (CTC) degree programs.

Successful completion of the NOCTI test may result in awarding students up to 30 semester credits toward the technical competency requirement of the applicable AAS degree. Completion of the technical competency requirements is accomplished as prescribed by the applicable CTC department. A fee is charged. Applicants may call for further information.
ACADEMIC PREPARATION, PROFESSIONAL DEVELOPMENT & TRAINING

Academic Preparation
College Preparatory and Developmental Studies

Professional Development and Continuing Education
College of Education Professional and Continuing Education (PACE)
Community and Technical College Workforce and Professional Education (WPE)
Centers and Institutes Offerings

Tech Prep Program
Tech Prep Program Credit (Non-Concurrent)
General Information
ACADEMIC PREPARATION

COLLEGE PREPARATORY & DEVELOPMENTAL STUDIES (CPDS)
(907) 786-6856
www.uaa.alaska.edu/ctc/cpds

The mission of the department is to help under-prepared, linguistically diverse, and non-traditional students develop the academic and language skills necessary to pursue successfully their life-long learning goals. The department offers composition, English-as-a-Second Language (ESL), mathematics, reading, and study skills courses that prepare students 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 Undergraduate Programs in the Community and Technical College section of Chapter 10.

PROFESSIONAL DEVELOPMENT AND CONTINUING EDUCATION

COLLEGE OF EDUCATION

PROFESSIONAL AND CONTINUING EDUCATION (PACE)
(907) 786-1932
http://coe.uaa.alaska.edu/pace
pace@uaa.alaska.edu

The PACE Office facilitates professional development opportunities for educators and other service professionals. PACE works collaboratively with UAA academic units and partner organizations to provide responsive service and support for 500-level courses, workshops, conferences, institutes, and academies. Committed to addressing the community's immediate and changing professional development needs, PACE works closely with school districts, professional societies, and private and government agencies.

COMMUNITY & TECHNICAL COLLEGE

WORKFORCE AND PROFESSIONAL EDUCATION (WPE)
(907) 694-3313
www.uaa.alaska.edu/ctc/programs/wpe

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

CENTERS & INSTITUTES OFFERINGS

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

TECH PREP PROGRAM

The Tech Prep Program is a partnership between UAA, secondary school districts, Alaska Vocational Technical Center, Job Corps, and other partnership institutions. It is a program that recognizes technical and related academic preparation and, where possible, work-based learning in a specific career field. It partners secondary education, post-secondary education, labor, and business in a sequential course of study without duplication of course work that will lead a student to a certificate, credential, apprenticeship, associate degree, or baccalaureate degree.

The purpose of the Tech Prep Program is to offer secondary school students and other individuals in a technical field of study an opportunity to receive lower-division college credit toward a UAA certificate or undergraduate degree. Students may receive UAA credit by successfully completing specific courses that have been approved for articulation by UAA. Tech Prep Program articulation agreements use the University's curriculum standards and measures for articulating course work from secondary school districts and other partnerships into UAA credit. Motivated, able learners will greatly benefit from this outcomes-based program.

TECH PREP PROGRAM CREDIT (NON-CONCURRENT)

Most students receiving Tech Prep credit are concurrently enrolled in UAA and in the partnership institution. Students who did not concurrently enroll and are requesting Tech Prep credit (up to two years after completion of the partnership course), through the non-traditional transfer credit process, must first apply and be accepted as a certificate or degree-seeking student at UAA, must complete the Tech Prep Request for Non-Traditional Transfer Credit, provide UAA with an official partnership transcript reflecting course completion and final grades received in the articulated course, and pay an administrative fee.

UAA reserves the right to reject credit or to require an examination before awarding non-traditional transfer credit.

Only Tech Prep courses completed with a grade of C (2.00) or higher will be considered for non-traditional transfer credit.

Credit awarded through the non-traditional transfer credit process will not be reflected as a concurrent registration in a UAA course and will not be included in the student's UAA grade point average (GPA).

Credit will not be awarded for a course that duplicates one for which UAA credit was already received.
There is no limit on the total number of UAA credits a student may receive through the non-traditional transfer credit process. However, there may be limits to the number of those credits that may apply toward a specific degree. Where possible, partnership courses in the Tech Prep Program will be articulated and equated to specific UAA lower division courses (100 or 200 level). However, some courses may be articulated to UAA lower division elective credit.

**GENERAL INFORMATION**

**CREDITS**

There is no limit on the total number of UAA credits a student may receive through the Tech Prep Program.

UAA credit received through the Tech Prep Program will be considered resident credit. Credit will not be awarded for a course that duplicates one for which UAA credit was already received.

Credit through the UAA Tech Prep Program is generally not included in the computation of study load for UAA full-time or part-time status.

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

Credit for partnership courses articulated as UAA elective credit will be awarded through the non-traditional transfer credit process.

Students may take advantage of the Tech Prep Program while attending the partnership institution or they may request non-concurrent credit from UAA, through the non-traditional transfer credit process, up to two years after completing the partnership course, providing the courses were articulated and approved at the time of completion.
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Baccalaureate Degrees
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Undergraduate Program Descriptions
THE CURRICULUM

The University of Alaska Anchorage provides curricula that offer its students the opportunity to acquire the intellectual skills, habits of mind, and ethical sensibilities necessary to develop into individuals who make informed judgments and interpretations about their community and the broader world, who take full responsibility for their beliefs and actions, who recognize the connection between knowing and acting, and who commit themselves to lifelong learning. The UAA curricula emphasize that while the acquisition of knowledge is an end in itself, each UAA graduate must enter the world beyond the University fully equipped to live resiliently in a changing world and be willing to apply theories and methodologies to examine and resolve the problems of their own communities, and those of an increasingly diverse and interdependent world.

The University does not prescribe specific courses for all students. It is the responsibility of each student to determine an appropriate program of courses within the framework of their academic program in consultation with an academic advisor. (See Chapter 6, Advising and Academic Support, for further information.) The requirements for each degree include completion of a minimum number of courses, resident credits, fulfillment of the General University Requirements and the General Education Requirements, and completion of program requirements.

ACADEMIC PROGRAMS

CERTIFICATES AND OCCUPATIONAL ENDORSEMENTS

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

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

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

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

ASSOCIATE DEGREES

The University of Alaska Anchorage offers two types of associate degrees, both of which require the completion of 60 credits or more:

- Associate of Arts (AA) degrees combine broad studies in the general education areas of 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 degrees provide applied or specialized studies that are used to satisfy a student’s specific educational needs. Many AAS programs prepare students for work in a particular field of employment. Some AAS degrees are designed to provide a foundation for a specific related baccalaureate degree.

Students in these degree programs build knowledge and skills needed to carry out specific tasks while they develop abilities in the essential elements of communications, computation, and human relations.

BACCALAUREATE DEGREES

Baccalaureate, or Bachelor’s degrees, are organized programs of study that consist of a minimum of 120 credits. In addition to providing extensive preparation in a specific knowledge area, the content and activities found in the baccalaureate degree promote in students the abilities to reason, research, and analyze, and to form, support, and communicate ideas and opinions.

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

MINORS

A minor is a component of a baccalaureate degree. A minor may only be issued simultaneously with a baccalaureate degree. A minor from UAA consists of a minimum of 18 credits, at least 6 of which must be upper division. Students must earn at least 3 credits in residence in each minor field. They must also earn a UAA cumulative GPA of at least 2.00 (C) in the minor. Students must follow minor requirements from the same catalog used for the baccalaureate program. Refer to each discipline for specific requirements. Students must declare minors no later than the deadline to submit an Application for Graduation.

REGIONAL STUDIES

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

POST-BACCALAUREATE AND GRADUATE PROGRAMS

Post-Baccalaureate and graduate certificates and degrees are described in later chapters of this catalog.
GENERAL UNIVERSITY REQUIREMENTS FOR UNDERGRADUATE CERTIFICATES AND ASSOCIATE DEGREE PROGRAMS

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

GENERAL UNIVERSITY REQUIREMENTS FOR UNDERGRADUATE CERTIFICATES

1. Students must be admitted to the program and must complete the certificate program requirements listed in the program section of this chapter.
2. When completing the last half of a certificate program, students must earn at least 50 percent of the credits in residence. For example, in a 30-credit certificate program, at least 8 of the last 15 must be resident credits. Additional residency credit requirements, to meet discipline or accreditation standards, may be established.
3. Students must earn a cumulative GPA of at least 2.00 (C) at UAA. Some certificate programs require higher GPAs.
4. Students must earn a minimum of 30 credits for an Undergraduate Certificate.
5. Students may elect to complete under the requirements of the catalog in effect at the time of formal acceptance to a certificate program or the catalog in effect at the time of graduation.
6. If the requirements for a certificate are not met within five (5) 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 (1) certificate by completing all requirements for each additional program.
8. Undergraduate Certificates that share a common core must differ by at least 6 credits.

GENERAL UNIVERSITY REQUIREMENTS FOR OCCUPATIONAL ENDORSEMENT CERTIFICATES

1. Students must be admitted to the program and must complete the certificate program requirements listed in the program section of this chapter.
2. Students must complete at least 30% of the program in residence at UAA. Additional residency credit requirements, to meet discipline or accreditation standards, may be established.
3. Students must earn a cumulative GPA of at least 2.00 (C) at UAA. Some certificate programs require higher GPAs.
4. Students must earn a minimum of 9 credits for an Occupational Endorsement Certificate.
5. Students may elect to complete under the requirements of the catalog in effect at the time of formal acceptance to a certificate program or the catalog in effect at the time of graduation.
6. If the requirements for a certificate are not met within five (5) 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 (5) years.
7. Students may earn more than one (1) 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 ASSOCIATE OF ARTS DEGREES

The following requirements must be met for associate degrees to which students have been admitted:

1. Students must be admitted to the program and must complete the General Education and Degree requirements listed in the program section of this chapter, listed under the College of Arts and Sciences.
2. Students must earn a minimum of 60 credits for an Associate of Arts degree.
3. Students must complete at least 15 credits in residence. Additional residency credit requirements, to meet program accreditation standards, may be established.
4. Students must earn a cumulative GPA of at least 2.00 (C) at UAA.
5. Students may elect to graduate under the requirements of the catalog in effect at the time of formal acceptance to an associate degree program or the catalog in effect at the time of graduation.
6. If the requirements for an associate degree are not met within five years of formal acceptance into the program, admission expires and the student must reapply for admission and meet the admission and graduation requirements in effect at the time of formal acceptance.
7. Students must complete a minimum of 60 credits at the 100-level or above, including at least 20 credits at the 200-level or above.
8. No more than 15 military credits can be applied to an Associate of Arts degree.

GENERAL UNIVERSITY REQUIREMENTS FOR ASSOCIATE OF APPLIED SCIENCE DEGREES

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

1. Students must be admitted to the degree program and complete the General Course Requirements that follow this section.
2. Students must complete the major degree requirements listed in the program section of this chapter. Each program is listed under its offering college.
3. Students must earn a minimum of 60 credits for an AAS degree.
4. Students must complete at least 15 credits in residence. Additional residency credit requirements, to meet program accreditation standards, may be established.
5. Students must earn a cumulative GPA of at least 2.00 (C) at UAA. They must also earn a cumulative GPA of at least 2.00 (C) in all courses required for each major. Some associate 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 (5) years of formal acceptance into the program, admission expires and the student must reapply for admission and meet the admission and graduation requirements in effect at the time of formal acceptance.
8. All courses for an AAS degree must be at the 100-level or above.
9. No more than 15 military credits can be applied to an Associate of Applied Science degree.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS

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

1. General University Requirements for Associate of Applied Science Degrees;
2. General Course Requirements for Associate of Applied Science degrees in Oral and Written Communications (9 credits total, see below).
Advising note for AAS students who plan to pursue a four-year degree: AAS students who intend to pursue a baccalaureate degree should consult a faculty or academic advisor for appropriate course selections.

A. Oral Communication Skills 3
COMM A111 Fundamentals of Oral Communication
COMM A235 Small Group Communication
COMM A237 Interpersonal Communication
COMM A241 Public Speaking

B. Written Communication Skills 6
ENGL A111 Methods of Written Communication
and one of the following:
CIOS A260A Business Communications
ENGL A211 Academic Writing About Literature
ENGL A212 Technical Writing
ENGL A213 Writing in the Social and Natural Sciences
ENGL A214 Persuasive Writing

3. General Course Requirements in designated 6 disciplines. Choose Humanities*, Math, Natural Sciences, or Social Sciences courses from the General Course Requirement Classification List for Associate of Applied Science Degrees (see below.) Courses chosen must be at or above the 100-level.

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

4. Degree-Specific Requirements Varies
(See Degree Programs under each college in this chapter.)

5. Electives Varies

Total Minimum Credits 60

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, Natural Science, Mathematics 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, A332, and A333 only)
Russian
Spanish
Theatre

Mathematics and Natural Sciences
Anthropology (ANTH A205 only)
Astronomy
Biological Sciences
Chemistry
Computer Science
Environmental Studies (ENVI A202 only)
Geography (GEOG A205 and A205L 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 A201 only)
Geography (except GEOG A205 and A205L)
Guidance
Health Sciences (HS A220 only)
Human Services (HUMS A106 only)
International Studies
Journalism and Public Communications (JPC A101 only)
Justice (JUST A110 and A330 only)
Liberal Studies Social Sciences
Paralegal Studies (PARL A101 only)
Political Science
Psychology
Social Work (SWK A106 and A243)
Sociology
Women's Studies

MULTIPLE ASSOCIATE DEGREES OR CONCURRENT MAJORS

The Associate of Arts degree (AA) is intended to provide general 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 Enrollment Services.

Students seeking a second Associate degree must be admitted to the program and must complete the General University Requirements, the General Course Requirements for their primary program, the General Education Requirements (for the AA degree), the major or degree requirements for both programs, and at least 12 resident-credits beyond the total number of credits required for the primary degree.

Students must satisfy the catalog requirements in effect at the time of acceptance into the degree program(s) or the catalog requirements in effect at the time of graduation.
DOUBLE MAJORS FOR AAS PROGRAMS
The Associate of Applied Science (AAS) degree is intended to provide specialized education. Therefore, it does include a major specialty and students may earn more than one AAS degree.

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

Students must apply and be accepted into each major program. Students may request a double major at the time of initial admission to UAA or add a major at a later date through the Change of Major degree process. Forms are available from Enrollment Services. Students must satisfy the General University Requirements, the General Course Requirements, and both sets of major requirements.

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

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

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

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

BACCALAUREATE DEGREES

THE ACADEMIC MAJOR
Baccalaureate degree-seeking students select a major discipline which reflects their interests; academic talents; and professional goals, and in consultation with academic advisors declare themselves to be majors in the selected discipline. Students select courses within the declared discipline, which in combination with other successfully completed University requirements, lead to a UAA baccalaureate degree. Students may declare a major, a double major, and/or an interdisciplinary major.

The requirements for completing specific majors are presented in detail in the section describing the programs offered by each department.

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

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

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

- General University Requirements;
- General Education Requirements;
- School/College Requirements, if applicable; and
- Major Program Requirements.

For General Education Requirements, refer to the General Education Requirements (GER) for Baccalaureate Degrees section of this chapter. For School/College and Major Program Requirements, refer to the appropriate school or college section of this catalog.

* Students may not be admitted to and graduate from a program in the same semester.

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. 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:

2. Upper Division Credits: Students must earn at least 42 upper division credits, including 24 upper division credits in residence. Some degree programs require completion of additional upper division credits.

3. Resident Credit: Students must earn at least 30 credits in residence. In addition, transfer students must earn in residence at least 12 credits in each major field and, where applicable, at least 3 credits in each minor field. Additional residency credit requirements, to meet program accreditation standards, may be established.

4. Minimum GPA: Students must earn a cumulative GPA of at least 2.00 (C) at UAA. They must also earn a cumulative GPA of at least 2.00 (C) in all courses required for each major and each minor. Some degree programs may require higher GPAs.

5. Controlling Catalog:
   a. Students may elect to graduate under the requirements of the catalog in effect at the time of formal acceptance to a baccalaureate degree program or the catalog in effect at the time of graduation.
   b. If the requirements for a baccalaureate degree, as specified in the entry-level catalog, are not met within seven (7) years of formal acceptance into the program, admission expires and the student must reapply for admission and meet the admission and graduation requirements in effect at the time of formal acceptance.
   c. Students must follow established UAA procedures for declaring a major and for changing a major or degree. Students who change their major or degree must satisfy the catalog requirements for the new major or degree in effect at the time of the change.

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

GENERAL EDUCATION REQUIREMENTS (GER) FOR BACCALAUREATE DEGREES

PREAMBLE
The GER provides students with a common educational experience in order to (1) provide a foundation for further study, and (2) broaden the educational experience of every degree-seeking student. It is designed to promote an elevation of the student's level in basic, college-level skills (Tier 1), a breadth of exposure to traditional academic disciplines (Tier 2), and experience in applying his/her education in understanding and responding to the evolving state of knowledge and the world in the 21st Century (Tier 3).

TIER 1: BASIC COLLEGE-LEVEL SKILLS 12 credits
The UAA GER begins with Basic College-Level Skills enhancement in written communication, oral communication, and quantitative skills:

- Courses in Written Communication and Oral Communication develop the critical reading, thinking, and communication skills (writing, speaking, and listening) necessary for personal and professional success.
- Courses in Quantitative Skills foster the analytical and mathematical abilities necessary for success in undergraduate study and professional life. Baccalaureate students are
required to complete the 12 credits of Basic College-Level Skills (Oral, Written, and Quantitative) before completing 60 total degree applicable credits. Students may select approved Basic College-Level Skills, which may also fulfill requirements in their intended major. Faculty in English, Communication, and Mathematics provide placement criteria (which may require the completion of preparatory coursework).

**Tier 2: Disciplinary Areas** 22 credits

The GER continues 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.

*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 Chapter 7, Academic Standards and Regulations, Related Undergraduate Admissions Policies).*

**Tier 3: Integrative Capstone** 3 credits

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

Tier 3 (Integrative Capstone) courses may be taken only after the student has completed all Tier 1 (Basic College-Level Skills) requirements.

*GER Advising Note: All students should consult a faculty or academic advisor for appropriate course selections.*

- Baccalaureate students are required to complete 12 credits of Basic College-Level Skills (Oral, Written, and Quantitative) before completing 60 total degree applicable credits.
- Each of the eight General Education Classifications has a list of approved courses (see the General Education Classification List). Only courses from the GER Classification List may be used to satisfy a distribution area requirement.
- Courses used to satisfy distribution area requirements in General Education may also be used to satisfy School/College requirements and/or Degree/Program requirements, but no course may be counted in more than one General Education category.
- Courses ending with numbers _93 or _94 cannot satisfy a GER, and UAA courses not on the approved GER Classification List cannot be petitioned to meet a GER.

*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 Chapter 7, Academic Standards and Regulations, Related Undergraduate Admissions Policies).*

**GER Student Outcomes**

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

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

**Petitions for General Education and/or 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, a copy reflecting that decision will be returned to the student and advisor. Changes in course level, grading, or number of credits awarded are not petitionable. UAA courses not on the approved baccalaureate General Education Requirements (GER) list cannot be petitioned to meet a GER. For more information, see Academic Petition section in Chapter 7 of this catalog.

**General Education Classification List**

Courses listed here as satisfying a General Education Requirement are also identified in the course description area of the catalog.

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

<table>
<thead>
<tr>
<th>Classification</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 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 | Credits**

| 2. Quantitative Skills | 3 |

Quantitative skills courses increase the mathematical abilities of students in order to make them more adept and competent producers and wiser consumers of the mathematical, statistical and computational analyses which will dominate 21st century decision-making. In these courses, all baccalaureate students develop their algebraic, analytic and numeric skills, use them to solve applied problems, and correctly explain their mathematical reasoning.
Courses completed at UAA must be selected from the following

<table>
<thead>
<tr>
<th>Classification</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Quantitative Skills</strong></td>
<td></td>
</tr>
<tr>
<td>MATH A107</td>
<td>College Algebra</td>
</tr>
<tr>
<td>MATH A108</td>
<td>Trigonometry</td>
</tr>
<tr>
<td>MATH A109</td>
<td>Precalculus</td>
</tr>
<tr>
<td>MATH A172</td>
<td>Applied Finite Mathematics</td>
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<tr>
<td>MATH A200</td>
<td>Calculus I</td>
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<tr>
<td>MATH A201</td>
<td>Calculus II</td>
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<tr>
<td>MATH A272</td>
<td>Applied Calculus</td>
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<tr>
<td>STAT A252</td>
<td>Elementary Statistics</td>
</tr>
<tr>
<td>STAT A253</td>
<td>Applied Statistics for the Sciences</td>
</tr>
<tr>
<td>STAT A307</td>
<td>Probability</td>
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<tr>
<th><strong>Written Communication Skills</strong></th>
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<tr>
<td>Written communication courses emphasize that writing is a recursive and frequently collaborative process of invention, drafting, and revising as well as a primary element of active learning in literate cultures. Students practice methods for establishing credibility, reasoning critically, and appealing to the emotions and values of their audience. They write for a variety of purposes and audiences by employing methods of rhetorical and cultural analysis. They develop the tools to read, think, and write analytically about print and non-print texts and to generate texts that engage their own perceptions while synthesizing the ideas of texts and scholars. Students demonstrate their ability to communicate effectively by selecting form and content that fits the situation; adhering to genre conventions; adapting their voice, tone, and level of formality to that situation; and controlling stylistic features such as sentence variety, syntax, grammar, usage, punctuation, and spelling.</td>
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<tr>
<th>Courses completed at UAA must be selected from the following Written Communication courses:</th>
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<td>ENGL A111</td>
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<td>ENGL A211</td>
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<td>ENGL A212</td>
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<td>ENGL A213</td>
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<td>ENGL A311</td>
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<td>ENGL A312</td>
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<td>ENGL A414</td>
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<tr>
<th><strong>Fine Arts</strong></th>
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<tr>
<td>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. <strong>Note: Music Majors must select courses outside the major.</strong></td>
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<tr>
<th>Courses completed at UAA must be selected from the following Fine Arts courses:</th>
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<td>AKNS/</td>
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<td>MUS A215</td>
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<td>ART A160</td>
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<td>ART A261</td>
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<td>ART A262</td>
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<td>ART A360A</td>
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<td>ART A360B</td>
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<td>DNCE A170</td>
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<td>MUS A121</td>
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<td>MUS A124</td>
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<td>THR A411</td>
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<tr>
<th><strong>Humanities</strong></th>
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<tr>
<td>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, to place them in the historical context of the discipline, to articulate the central problems they address, and to 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, to evaluate their soundness or cogency, and to recognize common fallacies. They should also be able to use a formal technique to determine the validity of simple deductive arguments and to 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.</td>
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<th>Courses completed at UAA must be selected from the following Humanities courses:</th>
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<td>AKNS A101</td>
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<td>AKNS A102</td>
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<td>ART A261</td>
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<td>GER A102</td>
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<td>GER A201</td>
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<td>GER A202</td>
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6. Natural Sciences

(must include a laboratory course)

The natural sciences focus on gaining an understanding of the matter, events and processes that form and sustain our universe. Methods of scientific inquiry are diverse, but all aim to formulate general principles that explain observations and predict future events or behaviors within their disciplines.

Laboratory courses illustrate how scientists develop, test, and apply that knowledge in a particular content area.

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.

Classification

Credits

6. Natural Sciences 7

Courses completed at UAA must be selected from the following

Natural Sciences courses:
- ASTR A103/L Introductory Astronomy I
- ASTR A104/L Introductory Astronomy II
- BIOL A102 Introductory Biology
- BIOL A103 Introductory Biology Laboratory
- BIOL A111 Human Anatomy and Physiology I
- BIOL A112 Human Anatomy and Physiology II
- BIOL A115 Fundamentals of Biology I
- BIOL A116 Fundamentals of Biology II
- BIOL A178 Fundamentals of Oceanography
- BIOL A179 Fundamentals of Oceanography Lab
- BIOL/L/
- CPLX A200 Introduction to Complexity
- CHEM A103/L Survey of Chemistry
- CHEM A104/L Introduction to Organic Chemistry and Biochemistry
- CHEM A105/L General Chemistry I
- CHEM A106/L General Chemistry II
- ENVI A202 Earth as an Ecosystem: Introduction to Environmental Science
- GEOG A205/L Elements of Physical Geography
- GEOL A111 Physical Geology
- GEOL A115/L Environmental Geology
- GEOL A178 Fundamentals of Oceanography
- GEOL A179 Fundamentals of Oceanography Lab
- GEOL A221 Historical Geology
- LSIS A101 Discoveries in Science
- LSIS A102 Origins: Earth-Solar Systems-Life
- LSIS A201 Life on Earth
- LSIS A202 Concepts and Processes: Natural Sciences
- PHYS A101 Physics for Poets
- PHYS A123/L Basic Physics I
- PHYS A124/L Basic Physics II
- PHYS A211/L General Physics I
- PHYS A212/L General Physics II

Classification

Credits

7. Social Sciences 6

(outside the major; from two different disciplines)

The social sciences focus on the acquisition, analysis, and interpretation of empirical data relevant to the human experience. Disciplines differ in their focus on collective as opposed to individual behavior, biological as opposed to social or cultural factors, the present as opposed to the past, and quantitative as opposed to qualitative data. Students who complete a general education social sciences course should be motivated to reflect on the workings of the society of which they are apart and should possess a broad perspective on the diversity of human behavior. They should be able to distinguish between empirical and non-empirical truth claims. They should be aware of the limits of human objectivity and understand the rudiments of how ideas about social phenomena may be tested and verified or rejected. They should have an introductory knowledge of social science thinking which includes observation, empirical data analysis, theoretical models, quantitative reasoning, and application to social aspects of contemporary life. A student who has met the social science general education requirement is expected to be able to demonstrate knowledge of social science approaches and to apply that knowledge in a particular content area.

Courses completed at UAA must be selected from the following

Social Sciences courses:
- ANTH A101 Introduction to Anthropology
- ANTH A200 Natives of Alaska
- ANTH A202 Cultural Anthropology
- ANTH A250 The Rise of Civilization
- BA A151 Introduction to Business
- ECON A201 Principles of Macroeconomics
- ECON A202 Principles of Microeconomics
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:

- ANTH A345 Culture and Ecology
- ART A491 Senior Seminar
- BIOL/CHEM/PHYS A456 Nonlinear Dynamics and Chaos
- BIOL 452 Human Genome
- CA A495 Hospitality Internship
- CEL A450 Civic Engagement Capstone
- CHEM A441 Principles of Biochemistry I
- CIS A376 Management Information Systems
- CM A422 Sustainability in Construction
- CM A450 Construction Management Professional Practices
- CS A470 Applied Software Development Project
- ECON A488 Seminar in Economic Research
- EDFN A300 Philosophical and Social Context of American Education
- GEOL A456 Geoarcheology
- HIST/INTL/PS A325 Northeast Asia in 21st Century
- HIST A390A Themes in World History
- HIST A427 Post-Soviet Culture and Society

**Credits**

- 3

See Class Schedule for additional Integrative Capstone courses.

*** 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 Chapter 7, Academic Standards and Regulations, Related Undergraduate Admissions Policies).
1. Meet admission requirements.
2. Complete at least 24 resident credits beyond the last baccalaureate degree(s) awarded.
3. Complete the School/College Requirements, if applicable, and the Major Program Requirements, including any resident and/or upper division requirements, for the second degree.
4. Maintain a cumulative GPA of at least 2.00 (C) at UAA in order to graduate. Some programs may require a higher GPA in the major.

TRANSFER STUDENTS
Students who have received a baccalaureate degree from another regionally accredited college or university and who want to obtain a baccalaureate degree from UAA must:

1. Meet admission requirements.
2. Complete the General University Requirements but not the General Education Requirements.
3. Complete all School/College Requirements, if applicable, and the Major Program Requirements.

INTERDISCIPLINARY BACCALAUREATE DEGREES
Upon completing at least 15 UAA credits, a student may develop an interdisciplinary BA or BS degree program. The proposed program must differ significantly from established degree programs and must not be a substitute for a regular degree program. Interdisciplinary degree programs are not transferable to other University of Alaska campuses.

To receive a baccalaureate degree in Interdisciplinary Studies from UAA, the student must meet General University Requirements, General Education Requirements, and School/College Requirements as applicable. Major Program Requirements are established in the interdisciplinary program plan developed by the student in consultation with an advisory committee.

An interdisciplinary baccalaureate program proceeds as follows:
1. The student develops a proposal specifying the degree (BA or BS), title, and program content, including recommendations for courses to meet General Education Requirements and School/College Requirements as applicable.
2. The student obtains an advisory committee of at least three faculty members from the appropriate academic disciplines. If the interdisciplinary degree program involves more than one school or college, the committee must include a faculty member from each.
3. The student obtains the assistance of one faculty member to chair the advisory committee and serve as the interdisciplinary degree program director.
4. The student presents the proposal for committee review and approval. If the committee supports the proposal, it is forwarded to the appropriate academic Dean(s) or Director(s).
5. The Dean(s) or Director(s) review(s) the proposal, committee membership, and recommendation for degree program director. If the Dean(s) or Director(s) approves the interdisciplinary degree program and committee structure, the degree program plan is forwarded to Enrollment Services.
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 Enrollment Services to insure that all degree requirements are met.

UNIVERSITY HONORS COLLEGE
The University Honors Program has become the University Honors College. Please refer to page 228 for more information about the Honors College and the University Honors Scholar, the Natural and Complex Systems Program, and the 49th State Fellows Program.
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 3
   (ANTH A250)
2. Western Culture 6
   (HIST A101 and HIST A102)
3. American Culture 3
   (HIST A131, HIST A132, PS A101)

B. Arts and Letters

1. Introduction to Literature 3
   (ENGL A121, A301, A302, A305, A306, A307)
2. Language/Humanities 6-8
   Any two semester sequence in one of the following
   humanities sequences or in a language other than
   English: (AKNS A101, A102, ART A261-A262,
   ENGL A201-A202, MUS A221-A222*,
   PHIL A211-A212, PHIL A313B-A314, PS A332-A333,
   THR A311-A312, THR A411-A412)
   *BA Music majors must select courses outside their major.

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, SWK/HUMS 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) 3-4

B. Computer Programming

(CS A109, CS A110, CS A111, CS A201, CS A202, ES A201) 3

C. Language/Humanities

6-8
Any two-semester sequence in French, German, Japanese, Russian, or Spanish or one of the following humanities sequences:
(ART A261-A262, ENGL A201-A202, MUS A221-A222,
PHIL A211-A212, PHIL A313B-A314, PS A332-A333,
THR A311-A312, THR A411-A412)

D. Natural Sciences

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

*The total natural science requirement of each student includes 16 credits
   (7 credits from the General Education natural science requirement and 9
   credits from the CAS Bachelor of Science requirement). These two
   requirements may be met by any combination of applicable courses that
   combine to 16 credits. The total must include two laboratory courses and at
   least 6 credits in each of two disciplines.

BACHELOR OF MUSIC, PERFORMANCE

Language Proficiency 8
Two semesters of oral language study.

BACHELOR OF FINE ARTS

The Bachelor of Fine Arts is a professionally oriented program designed to prepare students for careers in art. No additional college requirements.

BACHELOR OF LIBERAL STUDIES

The Bachelor of Liberal Studies (BLS) degree is an interdisciplinary program intended for students who prefer a broad liberal arts and sciences degree rather than a Bachelor of Arts or Bachelor of Science degree in a single discipline. No additional college requirements.

CAS MINOR

A minor from the College of Arts and Sciences will consist of a minimum of 18 credits, at least 6 of which will be upper division. Refer to each discipline for specific courses required. Also see Minors policy in this chapter.

ASSOCIATE OF ARTS

The Associate of Arts (AA) degree combines studies in the general education areas of written communication, oral communication, mathematics, natural sciences, social sciences, humanities, and fine arts 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 provides a solid foundation for further study at the baccalaureate level.

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 Associate of Arts Degrees located at the beginning of this chapter.

GENERAL EDUCATION REQUIREMENTS

Complete the General Education Requirements for Associate of Arts Degrees outlined below.

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 Associate of Arts degree and then continue on to a baccalaureate degree, consult the *Advising Note for AA Students Who Plan to Pursue a Baccalaureate Degree below.
UNDERGRADUATE PROGRAMS, COLLEGE OF ARTS AND SCIENCES

General Education Requirements

1. Oral Communication Skills
   COMM A111  Fundamentals of Oral Communication (3)

2. Written Communication Skills
   ENGL A111: Methods of Written Communication (3), and one of the following:
   CIOS A260A Business Communications+ (3)
   ENGL A211  Academic Writing About Literature (3)
   ENGL A212  Technical Writing (3)
   ENGL A213  Writing in the Social and Natural Sciences (3)
   ENGL A214  Persuasive Writing (3)

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 Sciences area of GER Classification List (3)*

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

Degree Completion Requirements

6. Electives
   27*
   Total Minimum Credits 60

* Please note: Math A105 and CIOS A260A 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, Written Communication, and Quantitative Skills 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 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 plan to apply AA credits to a UAA baccalaureate (four-year) 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 (four-year) degree, and who do not know which program or major they wish to pursue, should plan as follows:
  1. Oral Communication Skills

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 Native Perspectives 3
   AKNS A492 Seminar: Cultural Knowledge of Native Elders 3

2. Complete one of the following Focus Areas:

   A. Policy Focus
   AKNS A290 Selected Topics in Alaska Native Studies (1-3)
   AKNS A490 Selected Topics in Alaska Native Studies (1-3)
   AKNS/PS A346 Alaska Native Politics (3)
   AKNS/PS A411 Tribes, Nations and Peoples (3)
B. Language Focus 8
AKNS A101 Alaska Native Languages I (4)
AKNS A102 Alaska Native Languages II (4)

3. 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 Alaska Natives and Indigenous Peoples of Northern Regions (3)
AKNS A290 Selected Topics in Alaska Native Studies (1-3)
AKNS/PS A346 Alaska Native Politics (3)
AKNS/PS A411 Tribes, Nations and Peoples (3)
AKNS A420 Alaska Native Education (3)
AKNS A490 Selected Topics in Alaska Native Studies (1-5)
AKNS A495 Alaska Native Studies Internship (1-3)
ANTH A200 Natives of Alaska (3)
ANTH A427 Ethno-History 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 A455 Rural Justice (3)
JUST A462 Indian Law and the Settlement Act (3)

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

FACULTY
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Nancy Furlow, Interim Director, AFNJF1@uaa.alaska.edu
Marie Meade, Master Teacher, AFMM1@uaa.alaska.edu

ANTHROPOLOGY
Beatrice McDonald Hall (BMH), Room 214, (907) 786-6840
http://anthro.uaa.alaska.edu

Anthropology is the study of human diversity on a cross-cultural basis, aimed at achieving both scientific and humanistic education goals. Anthropology is comprised of four sub-fields: sociocultural anthropology, biological anthropology, archaeology, and anthropological linguistics. The BA/BS degrees are designed to provide the student with a solid general foundation in the discipline by emphasizing understanding of different cultures and peoples as well as different theories and methodologies. Although there is some opportunity for limited specialization in either archaeology or sociocultural anthropology 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. Satisfy all of the requirements for a BA or BS degree in Anthropology.
3. Meet the requirements for Graduation with Honors, as listed in Chapter 7 of the UAA catalog.
4. Earn a grade point average of 3.50 or above in courses specific to the Anthropology major.
5. Complete a senior thesis project (taken as ANTH A499), based on library, laboratory, or field research resulting in a substantial, thesis-quality paper defended before the Anthropology faculty. Note: the course may be taken on a one-semester (3 credit) or two-semester (6 credit) basis.

ADMISSION REQUIREMENTS
Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.

GRADUATION REQUIREMENTS
Students must complete the following graduation requirements:

A. GENERAL UNIVERSITY REQUIREMENTS
Complete the General University Requirements for All Baccalaureate Degrees located at the beginning of this chapter.

B. GENERAL EDUCATION REQUIREMENTS
Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

C. COLLEGE OF ARTS AND SCIENCES REQUIREMENTS
Complete the College of Arts and Sciences Requirements for either a BA or BS degree listed at the beginning of the CAS section.

D. MAJOR REQUIREMENTS

BACHELOR OF ARTS, ANTHROPOLOGY
1. Complete 36 credits from items 2 through 6, 18 of which must be upper division credits.
2. Complete three of the following core courses: 9
   ANTH A202 Cultural Anthropology (3)
   ANTH A205 Biological Anthropology (3)
   ANTH A210 Introduction to Anthropological Linguistics (3)
3. Complete the following courses:
   ANTH A250 Rise of Civilization (3)
   ANTH A410 History of Anthropology (3)
   ANTH A427 Ethnohistory of Alaska Natives (3)
   ANTH A429 Contemporary Alaska Native Societies (3)
4. Complete three Ethnographic Area courses from the following: 9
   ANTH A200 Natives of Alaska (3)
   ANTH A325 Cook Inlet Anthropology (3)
   ANTH A333 Peoples and Cultures of Southeast Asia (3)
   ANTH A335 Native North Americans (3)
   ANTH A336 Peoples and Cultures of South America (3)
   ANTH A338 Peoples and Cultures of Scandinavia (3)
   ANTH A427 Ethnohistory of Alaska Natives (3)
   ANTH A435 Northwest Coast Cultures (3)
   ANTH A436 Aleut Adaptations (3)
   ANTH A437 Eskimo Adaptations (3)
   ANTH A439 Athapaskan Adaptations (3)
   Of the following Ethnographic Area courses which emphasize archaeology, no more than 6 credits can be used to satisfy the Ethnographic Area requirement:
   ANTH A312 North American Archaeology (3)
   ANTH A330 Ancient Civilizations of Mexico and Guatemala (3)
   ANTH A413 Peopling of the Americas (3)
   ANTH A416 Arctic Archaeology (3)
5. Complete two courses from the following Topical/Theoretical courses: 6
ANTH A270 Cross-Cultural Perspectives on Women (3)
ANTH A324 Psychological Anthropology (3)
ANTH A350 Survey of the Primates (3)
ANTH A354 Culture and Ecology (3)
ANTH A360 Anthropology of Art (3)
ANTH A361 Language and Culture (3)
ANTH A365 Races: Modern Human Diversity (3)
ANTH A375 Introduction to Cultural Resource Management (3)
ANTH A400 Anthropology of Religion (3)
ANTH A415 Applied Anthropology (3)
ANTH A425 Archaeology of Identity (3)
ANTH A432 Hunting and Gathering Societies (3)
ANTH A445 Evolution of Humans and Disease (3)
ANTH A450 Human Evolution (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, 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: 3-4
   STAT A252 Elementary Statistics (3)
   STAT A253 Applied Statistics for the Sciences (4)
   STAT A307 Probability (3)

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: 9
   ANTH A202 Cultural Anthropology (3)
   ANTH A205 Biological Anthropology (3)
   ANTH A210 Introduction to Anthropological Linguistics (3)
   ANTH A211 Fundamentals of Archaeology (3)
3. Complete the following courses: 6
   ANTH A250 Rise of Civilization (3)
   ANTH A410 History of Anthropology (3)
4. Complete three Ethnographic Area courses from the following: 9
   ANTH A200 Natives of Alaska (3)
   ANTH A325 Cook Inlet Anthropology (3)
   ANTH A333 Peoples and Cultures of Southeast Asia (3)
   ANTH A335 Native North Americans (3)
   ANTH 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 Haidan Adaptations (3)
   ANTH A439 Athapaskan Adaptations (3)

5. Complete two courses from the following Topical/Theoretical courses: 6
   ANTH A270 Cross-Cultural Perspectives on Women (3)
   ANTH A324 Psychological Anthropology (3)
   ANTH A350 Survey of the Primates (3)
   ANTH A354 Culture and Ecology (3)
   ANTH A360 Anthropology of Art (3)
   ANTH A361 Language and Culture (3)
   ANTH A365 Races: Modern Human Diversity (3)
   ANTH A375 Introduction to Cultural Resource Management (3)
   ANTH A400 Anthropology of Religion (3)
   ANTH A415 Applied Anthropology (3)
   ANTH A425 Archaeology of Identity (3)
   ANTH A432 Hunting and Gathering Societies (3)
   ANTH A445 Evolution of Humans and Disease (3)
   ANTH A450 Human Evolution (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, A497) may be petitioned to satisfy Ethnographic Area or Topical/Theoretical course requirements, depending on course content.

6. Anthropology Electives: Any 6 courses in Anthropology

7. Complete one statistics course from the following: 3-4
   STAT A253 Applied Statistics for the Sciences (4)
   STAT A307 Probability (3)

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 from the following: 6
   ANTH A101 Introduction to Anthropology (3)
   ANTH A202 Cultural Anthropology (3)
   ANTH A205 Biological Anthropology (3)
   ANTH A210 Introduction to Anthropological Linguistics (3)
   ANTH A221 Fundamentals of Archaeology (3)
   ANTH A250 Rise of Civilization (3)
2. Complete at least one course from either the Ethnographic Area or the Topical/Theoretical area, as specified above for majors in Anthropology: 3
3. Complete three courses of Anthropology electives: 9
**ART
Fine Arts Building (ARTS), Room 302A, (907) 786-1783
http://art.uaa.alaska.edu**

The aim of the Department of Art is to prepare and empower students to use their artistic abilities to make a difference in society. A comprehensive multi-studio approach encourages independent thinking, strengthens creativity, and develops a knowledge of the critical and historical aspects of art.

Students acquire technical skills and gain confidence to work with a variety of materials while exploring and evaluating a broad heritage of past and contemporary art and design.

Students choose from several areas of study:

- **BA in Art** — Creative problem solving in a liberal arts context
- **BFA in Art** — The Department of Art offers the Bachelor of Fine Arts Degree in Art with a Studio Emphasis in Graphic Design. Refer to the Bachelor of Fine Arts section following for degree requirements.
- **Art Education** — Pre-preparation for future Art Educators. Students preparing to teach art should consult the College of Education concerning university programs leading to art teacher certification.
- **Continuing education** — Either as a pre or post-baccalaureate student.

The Bachelor of Arts and the Bachelor of Fine Arts are accredited by the National Association of Schools of Art and Design.

Students must note the following:

1. Some courses do not apply to degree programs.
2. Some courses may be taken for repeat credit.
3. Many art courses require completion of certain prerequisite art courses. Non-art majors who wish to enroll in an art class without first having completed the recommended prerequisites are free to do so with appropriate instructor permission, but may find the classroom experience difficult or unrewarding.
4. Art majors must obtain pre-registration approval from art faculty for upper division art course work undertaken each semester.

**BACHELOR OF ARTS IN ART**

**ADMISSION REQUIREMENTS**
Complete the Baccalaureate Degree Program Admission Requirements in the front of this chapter.

**GRADUATION REQUIREMENTS**
Students must complete the following:

**A. GENERAL UNIVERSITY REQUIREMENTS**
Complete the General University Requirements for Baccalaureate Degrees in the front of this chapter. A maximum of 60 credits in Art may be applied toward the degree. Transfer students who are candidates for the BA degree with a major in Art must complete a minimum of 18 Art credits in residence.

**B. GENERAL EDUCATION REQUIREMENTS**
Complete the General Education Requirements for Baccalaureate Degrees in the front of this chapter.

**C. COLLEGE OF ARTS AND SCIENCES REQUIREMENTS**
Complete the College of Arts and Sciences requirements in the front of this chapter.

**D. MAJOR REQUIREMENTS**

**LOWER-DIVISION ART (27 CREDITS)**

1. Complete the following core courses:
   
   - **ART A105** Beginning Drawing (3)
   - **ART A111** Two-Dimensional Design (3)
   - **ART A113** Three-Dimensional Design (3)
   - **ART A205** Intermediate Drawing (3)
   - **ART A261** History of Western Art I (3)
   - **ART A262** History of Western Art II (3)
   
2. Choose one two-dimensional course, one three-dimensional course, and one course from either list to total 9 credits:

   **Two-Dimensional Area:**
   
   - **ART A112** Color Design (3)
   - **ART A213** Beginning Painting (3)
   - **ART A215** Beginning Printmaking (3)
   - **ART A224** Beginning Photography (3)
   - **ART A257** Digital Art and Design I (3)
   - **ART A271** Beginning Surface Design (3)
   - **ART A273** Beginning Woven Forms (3)

   **Three-Dimensional Area:**
   
   - **ART A201** Beginning Handbuilt Ceramics (3)
   - **ART A202** Beginning Wheelthrown Ceramics (3)
   - **ART A209** Beginning Metalsmithing and Jewelry (3)
   - **ART A211** Beginning Sculpture (3)
   - **ART A272** Beginning Fiber Structures (3)

**UPPER-DIVISION STUDIO ART (15 CREDITS)**

3. Complete a total of 15 credits in the areas of studio emphasis listed below, a minimum of 9 credits must be in a single area of studio emphasis:

   - **Ceramics**
   - **Drawing**
   - **Digital Art & Graphic Design**
   - **Fibers* (All courses in Fibers are currently taught at the Matanuska-Susitna College and Kenai Peninsula College campuses.)
   - **Jewelry/Metalsmithing**
   - **Painting**
   - **Photography**
   - **Printmaking**
   - **Sculpture**

4. **Select 6 credits from the following:**

   - **ART 360A** History of Non-Western Art I (3)
   - **ART 360B** History of Non-Western Art II (3)
   - **ART 361** History of Graphic Design (3)
   - **ART 362** History of Modern Art (3)
   - **ART 363** History of Contemporary Art (3)
   - **ART 364** Italian Renaissance Art (3)
   - **ART 365** Native Art of Alaska (3)
   - **ART 366** Asian Art (3)
   - **ART 367** History of Photography (3)
   - **ART 492** Art History Seminar (3)

**UPPER-DIVISION ART HISTORY (6 CREDITS)**

5. Complete the following:

   - **ART 360A** History of Non-Western Art I (3)
   - **ART 360B** History of Non-Western Art II (3)
   - **ART 361** History of Graphic Design (3)
   - **ART 362** History of Modern Art (3)
   - **ART 363** History of Contemporary Art (3)
   - **ART 364** Italian Renaissance Art (3)
   - **ART 365** Native Art of Alaska (3)
   - **ART 366** Asian Art (3)
   - **ART 367** History of Photography (3)
   - **ART 492** Art History Seminar (3)

**MISCELLANEOUS REQUIREMENTS (21 CREDITS)**

5. Complete the following:

   - **PHIL A401** Aesthetics (3)
   - **ART A491** Senior Seminar (Capstone) (3)
   - **BA A166** Small Business Management (3)

Upper division General Electives 12 credits
BACHELOR OF FINE ARTS, ART

The Bachelor of Fine Arts degree is a professionally oriented program designed to prepare students for careers in art. Enrollment in the BFA program is recommended only for those students willing to make the considerable commitment of time and energy necessary to achieve professional competence in their primary area of studio emphasis. Students desiring to enter the BFA program should request a copy of the current program policy from the Department.

ADMISSION REQUIREMENTS
Complete the Baccalaureate Degree Programs Admission Requirements at the beginning of this chapter. Admission into the BFA program, termination from it, and granting of the degree are done at the discretion of the BFA Committee.

Applicants for admission into the BFA program must meet the following minimum requirements:
1. Applicants must have been officially admitted to UAA and declared an intention to pursue the BFA Degree.
2. Applicants must have completed all Lower-Division Foundation Core Course requirements for the BFA degree.
3. Applicants must have been enrolled at UAA for at least one semester.
4. Applicants must meet minimum academic GPA requirements of:
   - 2.50 overall course work
   - 3.00 overall art course work

GPA requirements: To graduate with a BFA in Art students must have met the following graduation requirements:

ACADEMIC PROGRESS

To graduate with a BFA in Art students must have met the following GPA requirements:

1. A minimum overall major GPA of 3.00.
2. A minimum GPA of 3.50 in the primary area of studio emphasis.
3. A minimum cumulative GPA of 2.50 in all university course work.

SEMESTER REVIEWS

The progress of all BFA candidates will be reviewed a minimum of once a semester by the BFA committee.

THESIS PROJECT AND CAPSTONE COURSE

With approval, upon completion of all studio courses in the student's primary and secondary areas of emphasis, BFA Candidates will enroll in ART A491 Senior Seminar offered Fall Semesters only, and ART A499 Thesis offered Spring Semester 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.

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 of the student's thesis will be furnished to the Department of Art. These slides must be acceptable to the BFA Committee and will become the property of the Department of Art. Slides 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. After successfully completing all BFA requirements, the student is responsible for submitting an Application for Graduation to obtain the degree.

GRADUATION REQUIREMENTS

Students must complete the following graduation requirements:

A. GENERAL UNIVERSITY REQUIREMENTS

Complete the General University Requirements for Baccalaureate Degrees in the front of this chapter.

B. GENERAL EDUCATION REQUIREMENTS

Complete the General Education Requirements for Baccalaureate Degrees in the front of this chapter.

C. COLLEGE OF ARTS AND SCIENCES REQUIREMENTS

There are no additional college requirements for the BFA degree.

D. MAJOR REQUIREMENTS

Complete the following required art courses with a minimum overall major GPA of 3.00 and a minimum GPA of 3.50 in the primary area of studio emphasis. A minimum cumulative GPA of 2.50 in all university course work is required to graduate. A maximum of 84 credits in Art may be applied toward the degree.

FOUNDATION CORE COURSES (18 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 A307 Life Drawing and Composition I (3)

BEGINNING STUDIO ELECTIVES (6 credits)

2. Choose one course from the two-dimensional list and one course from the three-dimensional list.
   - Two-Dimensional Area:
     - ART A213 Beginning Painting (3)
     - ART A215 Beginning Printmaking (3)
ART A224  Beginning Photography (3)  
ART A257  Digital Art and Design I (3)  
ART A271  Beginning Surface Design (3)  
ART A273  Beginning Woven Forms (3)  

Three-Dimensional Area:  
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 (15 credits)  
3. Complete the following required art history courses:  
   ART 261  History of Western Art I (3)  
   ART 262  History of Western Art II (3)  
4. Select 9 credits of upper division art history courses:  
   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 Seminars (3)  
   Complete the following courses:  
   ART A367  History of Photography (3)  
   ART A492  Art History Seminars (3)  

PRIMARY STUDIO CONCENTRATION (18 credits)  
5. Select a primary studio concentration from the list below and complete the following studio courses in the same discipline:  
   200-level  Beginning studio course (3) - must be other than a course selected to fill the beginning studio electives listed above.  
   300-level  Intermediate studio course (6)  
   400-level  Advanced studio course (6)  
6. Select a support course from following (3 credits):  
   ART A390  Selected Topics in Studio Art (1-3)  
   ART A490  Individual Research (1-3)  
   or other by permission of advisor  
   Select Primary and Secondary Studio Concentrations from the following:  
   Ceramics  Drawing  
   Digital Art and Graphic Design  Fibers*  
   Jewelry & Metalsmithing  Painting  
   Photography  Printmaking  
   Sculpture  
*Fibers courses are available at Matanuska-Susitna and Kenai Peninsula College Campuses only.  

SECONDARY STUDIO CONCENTRATION (9 credits)  
7. Select a secondary studio concentration from the list and complete the following studio courses in the same discipline:  
   200-level  Beginning studio course (3) - must be other than a course selected to fill the beginning studio electives listed above.  
   300-level  Intermediate studio course (6)  
8. 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 (1-3)  
   ART A490  Individual Research (1-3)  
   ART A498  Individual Research (1-3)  
THESIS REQUIREMENTS (6 credits)  
9. Complete the following courses:  
   ART A491  Senior Seminar (3)  
   ART A499  Thesis (Spring Semesters only)  
   (Fall Semesters only)/Capstone Class  
MISCELLANEOUS REQUIREMENTS (12 credits)  
10. Complete the following courses:  
   PHIL A401  Aesthetics  
   Complete BA A166  Small Business Management  
   Complete 6 credits of electives selected from art history, art education or art studio courses.  
   A total of 84 credits is required 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 of which must be upper division. ART/ED A418 and A442 are not applicable to the Art Minor.  
   Art History (ART A261 or A262) 3  
   Design (ART A111 or A113) 3  
   Drawing (ART A105, A205, A305, A307, A405, or A407) 3  
   Studio Emphasis Courses 6  
   Art History or Studio Emphasis Course 3  

FACULTY  
Charles “Sean” Licka, Professor/Chair  
Hermenia Din, Assistant Professor, HIDN@uaa.alaska.edu  
Steven Godfrey, Assistant Professor, AFSMG@uaa.alaska.edu  
Mariano Gonzalez, Associate Professor  
Garry Kaulitz, Professor, AFGCK@uaa.alaska.edu  
B. Hugh McPeck, Associate Professor, AFBHM@uaa.alaska.edu  
Garry Mealor, Term Instructor, Foundation Coordinator  
Deborah Tharp, Associate Professor, AFDKT@uaa.alaska.edu  
Kat Tomka, Associate Professor, AFKAI@uaa.alaska.edu  

DIGITAL ART  
Kenai Peninsula College – Department of Art  
Brockel Building Room 137A  
www.kpc.alaska.edu  
Contact: Celia Anderson (907) 262-0361 ifcra@uaa.alaska.edu  
or Jayne Jones (907) 262-0374 ifjmj@uaa.alaska.edu  

The Associate of Applied Science Degree 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
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 Degree in Digital Art is a launch pad to a professional application or to further education in a more specialized degree.

**Transfer of credits for institutions outside the UAA system is not guaranteed. Each University and College makes their 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 in a course using one or more of the following applications: word processing, spreadsheets, databases, and communications, or an introductory course in data processing, microcomputers, or image-editing.

It is the student's responsibility to design their course of study with Digital Art faculty in the Department of Art at Kenai Peninsula College to ensure all prerequisites and computer competencies have been met and that the University and Major Degree Requirements are understood and followed.

**ASSOCIATE OF APPLIED SCIENCE, DIGITAL ART**

**ADMISSION REQUIREMENTS FOR DEGREE COMPLETION**

Satisfy the Admission to Certificate and Associate Degree Program Requirements in Chapter 7, Academic Standards and Regulations.

**GRADUATION REQUIREMENTS**

Students are required to make a presentation of portfolio work before the Digital Art Program Advisory Board in their graduating semester.

Students must complete the following graduation requirements:

### A. GENERAL UNIVERSITY REQUIREMENTS

1. Complete the General University Requirements for associate Degree Programs located at the beginning of this chapter.

2. Complete the Associate of Applied Science General Degree Requirements (15 credits) located at the beginning of this chapter.

### B. MAJOR REQUIREMENTS

Complete the following Digital Art Core Courses (21 Credits):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART A113</td>
<td>Three-Dimensional Design</td>
<td>3</td>
</tr>
<tr>
<td>ART A112</td>
<td>Color Design</td>
<td>3</td>
</tr>
<tr>
<td>JPC A201</td>
<td>Reporting and Writing News</td>
<td>3</td>
</tr>
<tr>
<td>JPC A101</td>
<td>Media and Society</td>
<td>3</td>
</tr>
<tr>
<td>JPC A201</td>
<td>Reporting and Writing News</td>
<td>3</td>
</tr>
<tr>
<td>JPC A211</td>
<td>Visual Literacy</td>
<td>3</td>
</tr>
</tbody>
</table>

**Digital Arts Specialty: Areas of Concentration**

#### A. Digital Photography Concentration (24 Credits Total):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ART A225</td>
<td>Beginning Photography - Digital</td>
<td>3</td>
</tr>
<tr>
<td>ART A228</td>
<td>Art as a Profession</td>
<td>3</td>
</tr>
<tr>
<td>ART A323</td>
<td>Color Photography</td>
<td>3</td>
</tr>
<tr>
<td>ART A325</td>
<td>Digital Media for Photography</td>
<td>3</td>
</tr>
<tr>
<td>ART A367</td>
<td>History of Photography</td>
<td>3</td>
</tr>
</tbody>
</table>

**Digital Photography Concentration Electives (9 Credits Minimum), Suggested Electives:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ART A205</td>
<td>Intermediate Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART A213</td>
<td>Beginning Painting</td>
<td>3</td>
</tr>
<tr>
<td>ART A215</td>
<td>Beginning Printmaking</td>
<td>3</td>
</tr>
<tr>
<td>ART A224</td>
<td>Beginning Photography</td>
<td>3</td>
</tr>
<tr>
<td>ART A295V</td>
<td>Internship/Visual Art</td>
<td>1-6</td>
</tr>
<tr>
<td>ART A324</td>
<td>Intermediate Photography</td>
<td>3</td>
</tr>
</tbody>
</table>

**B. Darkroom/ Digital Concentration (24 Credits Total):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART A224</td>
<td>Beginning Photography</td>
<td>3</td>
</tr>
<tr>
<td>ART A228</td>
<td>Art as a Profession</td>
<td>3</td>
</tr>
<tr>
<td>ART A323</td>
<td>Color Photography</td>
<td>3</td>
</tr>
<tr>
<td>ART A324</td>
<td>Intermediate Photography</td>
<td>3</td>
</tr>
<tr>
<td>ART A325</td>
<td>Digital Media for Photography</td>
<td>3</td>
</tr>
</tbody>
</table>

**Darkroom/ Digital Photography Concentration Electives (9 credits minimum):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART A205</td>
<td>Intermediate Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART A213</td>
<td>Beginning Painting</td>
<td>3</td>
</tr>
<tr>
<td>ART A215</td>
<td>Beginning Printmaking</td>
<td>3</td>
</tr>
<tr>
<td>ART A225</td>
<td>Beginning Photography - Digital (3) (recommended)</td>
<td>3</td>
</tr>
<tr>
<td>ART A295V</td>
<td>Internship/Visual Art</td>
<td>1-6</td>
</tr>
<tr>
<td>ART A367</td>
<td>History of Photography</td>
<td>3</td>
</tr>
<tr>
<td>BA A166</td>
<td>Small Business Management</td>
<td>3</td>
</tr>
<tr>
<td>BA A260</td>
<td>Marketing Practices</td>
<td>3</td>
</tr>
<tr>
<td>BA A264</td>
<td>Personal Selling</td>
<td>3</td>
</tr>
<tr>
<td>JPC A101</td>
<td>Media and Society</td>
<td>3</td>
</tr>
<tr>
<td>JPC A201</td>
<td>Reporting and Writing News</td>
<td>3</td>
</tr>
<tr>
<td>JPC A211</td>
<td>Visual Literacy</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Minimum Credits 60**

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

http://biology.uaa.alaska.edu
The WWAMI/Biomedical program may be found at
http://biomed.uaa.alaska.edu
Engineering Building (ENGR), Room 333, (907) 786-4770

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

The curriculum of the UAA Biological Sciences program is designed to produce graduates who:

1. Have a basic knowledge of the principles relating to the biological sciences with an emphasis in either molecular or organismal biology.
2. Have an ability to think critically, dissect problems, and offer solutions.
3. Have developed written and oral communications skills consistent with a career in biological sciences.
4. Have developed sufficient competency in knowledge and skills to obtain employment as an entry level biologist and be able to progress professionally within the discipline.
5. Have developed a mental attitude that learning is a lifetime occupation to maintain relevancy in the biological profession.

In keeping with the objectives, it is expected that graduates of the Biological Sciences program will have:

1. An ability to apply their knowledge of general biology to the workplace or higher education pursuits.
2. An ability to accept challenges and think through problems until solutions are derived and effectively communicate the solutions to supervisors.
3. An ability to design and conduct projects that include fieldwork, laboratory analyses, and interpretation in the discipline.
4. An ability to recognize that education does not stop at graduation, but looks to continuing education as a professional responsibility.

COMMUNITY SERVICE COURSES

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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL A074</td>
<td>Field Natural History</td>
</tr>
<tr>
<td>BIOL A075</td>
<td>Local Flora</td>
</tr>
<tr>
<td>BIOL A100</td>
<td>Human Biology</td>
</tr>
<tr>
<td>BIOL A104</td>
<td>Natural History of Alaska</td>
</tr>
<tr>
<td>BIOL A124</td>
<td>Biota of Alaska: Selected Topics</td>
</tr>
<tr>
<td>BIOL A126</td>
<td>Birds in Field and Laboratory</td>
</tr>
<tr>
<td>BIOL A150</td>
<td>Introduction to Marine Biology</td>
</tr>
</tbody>
</table>

DEPARTMENTAL HONORS IN BIOLOGY

Undergraduate Biology majors may be recognized for exceptional performance by earning Departmental Honors in Biology. The award will be noted on their permanent university transcript. 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 of the UAA catalog.
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’s faculty members must approve the project proposal and final written report.

BACHELOR OF ARTS, BIOLOGICAL SCIENCES

ADMISSION REQUIREMENTS

Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.

ACADEMIC PROGRESS

In order to graduate with a BA in Biological Sciences, all courses covered under Major Requirements for a BA in Biological Sciences must be completed with a grade of C or better. Students who audit a course in biology or who are unable to earn a grade of C or better in the course may repeat the course. All prerequisites for biology courses must be completed with a grade of C or better.

GRADUATION REQUIREMENTS

Students must complete the following graduation requirements:

A. GENERAL UNIVERSITY REQUIREMENTS

Complete the General University Requirements for All Baccalaureate Degrees located at the beginning of this chapter.

B. GENERAL EDUCATION REQUIREMENTS

Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

C. COLLEGE OF ARTS AND SCIENCES REQUIREMENTS

Complete the College of Arts and Sciences Requirements listed at the beginning of the CAS section.

D. MAJOR REQUIREMENTS

1. Complete these required core courses:
   - BIOL A115 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
BACHELOR OF SCIENCE, BIOLOGICAL SCIENCES

The Bachelor of Science degree includes a single core program of course work 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 A394 and A485, which are our selected topics courses. It is imperative that students consult their academic advisors within the Department of Biological Sciences to determine which electives are most appropriate to their career interests. Some of these elective courses are offered periodically, depending on demand. Refer to course descriptions to identify these courses.

ADMISSION REQUIREMENTS

Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.

ACADEMIC PROGRESS

In order to graduate with a BS in Biological Sciences, all courses covered under Major Requirements for a BS in Biological Sciences must be completed with a grade of C or better. Students who audit a course in biology or who are unable to earn a grade of C or better in the course may repeat the course. All prerequisites for biology courses must be completed with a grade of C or better.

GRADUATION REQUIREMENTS

Students must complete the following graduation requirements:

A. GENERAL UNIVERSITY REQUIREMENTS

Complete the General University Requirements for All Baccalaureate Degrees located at the beginning of this chapter.

B. GENERAL EDUCATION REQUIREMENTS

Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

C. COLLEGE OF ARTS AND SCIENCES REQUIREMENTS

Complete the College of Arts and Sciences Requirements listed at the beginning of the CAS section.

D. MAJOR REQUIREMENTS

1. Some major requirements may also be used to satisfy the College of Arts and Sciences BS requirements.

2. Complete these required support courses:

   - BIOL A115/L Fundamentals of Biology I 4
   - BIOL A116/L Fundamentals of Biology II 4
   - BIOL A242/L Fundamentals of Cell Biology 4
   - BIOL A252/L Principles of Genetics 4
   - BIOL A271/L Principles of Ecology 4
   - BIOL A308 Principles of Evolution 3
   - BIOL A310 Principles of Physiology 3
   - BIOL A340 General Microbiology 5
   - BIOL A492 Undergraduate Seminar 1

   or

   - STAT A308 Intermediate Statistics * 3
   - STAT A307 Probability (3)
   - STAT A306 Intermediate Statistics (3)

3. Complete biology core courses:

   - BIOL A115/L Fundamentals of Biology I 4
   - BIOL A116/L Fundamentals of Biology II 4
   - BIOL A242/L Fundamentals of Cell Biology 4
   - BIOL A252/L Principles of Genetics 4
   - BIOL A271/L Principles of Ecology 4
   - BIOL A308 Principles of Evolution 3
   - BIOL A310 Principles of 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:

   - BIOL A452 Human Genome (3)
   - BIOL A461 Molecular Biology (3)
   - BIOL A461L Molecular Biology Laboratory (1)
   - BIOL A462 Virology (3)
   - BIOL A471 Immunochemistry (4)
   - BIOL A488 Developmental Biology (4)
   - BIOL A327 Parasitology (4)
   - BIOL A415 Comparative Animal Physiology (4)
   - BIOL A487 Comparative Anatomy of Vertebrates (4)
   - BIOL A403 Microtechnique (4)
   - BIOL A495 Instructional Practicum: Laboratory (1)

   or

   - 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 A439 Plant Ecology Field Course (3)

   or

   - BIOL A105 General Chemistry I 4
   - BIOL A105L General Chemistry I Laboratory 4
   - BIOL A106 General Chemistry II 4
   - BIOL A106L General Chemistry II Laboratory 4
   - BIOL A321 Organic Chemistry I 3
   - BIOL A322 Organic Chemistry II 3
   - BIOL A323L Organic Chemistry Laboratory 2
   - MATH A200 Calculus I 4
   - MATH A201 Calculus II 4
   - PHYS A123 Basic Physics I (3)
   - PHYS A123L Basic Physics I Laboratory (1)
   - PHYS A124 Basic Physics II (3)
   - PHYS A124L Basic Physics II Laboratory (1)
   - PHYS A211 General Physics I (3)
   - 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 A306 Intermediate Statistics (3)
   - STAT A307 Probability (3)
   - STAT A308 Intermediate Statistics (3)

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

   or

   - 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 A439 Plant Ecology Field Course (3)
Sciences must complete the following requirements. A total of 28 Students majoring in another subject who wish to minor in Biological
MINOR, BIOLOGICAL SCIENCES

This chapter. For a complete program description see the Natural Sciences section of preparing to teach science at the secondary level.

The Department of Biological Sciences also oversees the Bachelor of Science in Natural Sciences. This curriculum emphasizes the
interrelationships among the sciences. This flexible degree program can be used to meet admissions requirements of specific professional
schools in medicine, dentistry, and veterinary medicine. It is also designed for health sciences practitioners who wish to obtain a stronger
background in both the biological and chemical sciences, and for those preparing to teach science at the secondary level.

For a complete program description see the Natural Sciences section of this chapter.

MINOR, BIOLOGICAL SCIENCES

Students majoring in another subject who wish to minor in Biological Sciences must complete the following requirements. A total of 28 credits is required for the minor, 12 of which must be upper division.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL A115</td>
<td>Fundamentals of Biology I</td>
</tr>
<tr>
<td>BIOL A115L</td>
<td>Fundamentals of Biology I Laboratory</td>
</tr>
<tr>
<td>BIOL A116</td>
<td>Fundamentals of Biology II</td>
</tr>
<tr>
<td>BIOL A116L</td>
<td>Fundamentals of Biology II Laboratory</td>
</tr>
<tr>
<td>BIOL A242</td>
<td>Fundamentals of Cell Biology</td>
</tr>
<tr>
<td>BIOL A242L</td>
<td>Fundamentals of Cell Biology Laboratory</td>
</tr>
<tr>
<td>BIOL A252</td>
<td>Principles of Genetics</td>
</tr>
<tr>
<td>BIOL A252L</td>
<td>Principles of Genetics Laboratory</td>
</tr>
<tr>
<td>Upper division Biology electives</td>
<td>12</td>
</tr>
</tbody>
</table>

Faculty

- Lilian Alessa, Associate Professor, ALIIAt@uaa.alaska.edu
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- Marilyn Barker, Affl. Associate Professor, AFMBH@uaa.alaska.edu
- Loren Buck, Associate Professor
- Allison Butler, Instructor/Coordinator, AFADB@uaa.alaska.edu
- Douglas Causey, Professor, AFDCG@uaa.alaska.edu
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- Donald Spalinger, Associate Professor, AFDES@uaa.alaska.edu
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- Frank von Hippel, Associate Professor, AFFVH@uaa.alaska.edu

CHEMISTRY

Engineering Building (ENGR), Room 333D, (907) 786-1238
http://chem.uaa.alaska.edu

Chemistry is the science concerned with substances; 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 degree 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 course work which a freshman student must have mastered for admission to the Chemistry program without a deficiency includes:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>4 years</td>
</tr>
<tr>
<td>Mathematics</td>
<td>2 years</td>
</tr>
<tr>
<td><strong>(This must have included at least complex numbers, logarithms, quadratic functions, inequalities and absolute values, plus conic sections).</strong></td>
<td></td>
</tr>
<tr>
<td>Geometry</td>
<td>1 year</td>
</tr>
<tr>
<td>Trigonometry</td>
<td>1/2 year</td>
</tr>
</tbody>
</table>
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Undergraduate Programs, College of Arts and Sciences

HONORS IN CHEMISTRY
The department of Chemistry awards Departmental Honors in Chemistry to undergraduate students who show exceptional performance in all their course work. 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 of this catalog.
3. Maintain a minimum GPA of 3.50 in chemistry classes.
4. Complete, with distinction, a written assignment in the style of a degree. Students are reminded that it is imperative for them to regularly (at least once per semester) consult a departmental advisor to evaluate their progress through the program of study.

Bachelor of Science, Chemistry

Admission Requirements
Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.

Academic Progress
In order to graduate with a BS in Chemistry, all courses covered under Major Requirements for a BS in Chemistry must be completed with a grade of C or better.

Graduation Requirements
Students must complete the following graduation requirements:

A. General University Requirements

Complete the General University Requirements for All Baccalaureate Degrees located at the beginning of this chapter.

B. General Education Requirements

Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

C. College of Arts and Sciences Requirements

Complete the College of Arts and Sciences Requirements listed at the beginning of the CAS section.

D. Major Requirements

Students are strongly encouraged to talk to a faculty advisor in the Chemistry Department to insure that the necessary math and science courses are taken in the first two years of study.

1. Students working toward a degree in Chemistry can choose one of two options:

<table>
<thead>
<tr>
<th>Natural Sciences</th>
<th>1 year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physics</td>
<td>(This must cover mechanics, thermodynamics, electricity and magnetism, and optics).</td>
</tr>
<tr>
<td>Chemistry</td>
<td>1 year</td>
</tr>
<tr>
<td>(This must cover elementary laboratory procedures, introduction to atoms and molecules, chemical reactions, equilibrium, and an introduction to chemical calculations).</td>
<td></td>
</tr>
</tbody>
</table>

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 (at least once per semester) consult a departmental advisor to evaluate their progress through the program of study.

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

<table>
<thead>
<tr>
<th>Biol A115</th>
<th>Fundamentals of Biology I</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chem A105</td>
<td>General Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>Chem A105L</td>
<td>General Chemistry I Lab</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 Lab</td>
<td>1</td>
</tr>
<tr>
<td>Chem A212</td>
<td>Quantitative Analysis</td>
<td>5</td>
</tr>
<tr>
<td>Chem A253</td>
<td>Principles of Inorganic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>Chem A321</td>
<td>Organic Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>Chem A322</td>
<td>Organic Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>Chem A323L</td>
<td>Organic Chemistry Lab</td>
<td>2</td>
</tr>
<tr>
<td>Chem A331</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 Lab</td>
<td>2</td>
</tr>
<tr>
<td>Chem A434</td>
<td>Instrumental Methods</td>
<td>4</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</td>
<td>2</td>
</tr>
<tr>
<td>Chem A498</td>
<td>Individual Research</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 Lab</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 Lab</td>
<td>1</td>
</tr>
</tbody>
</table>

Upper division Biology

(choose one of the following)

<table>
<thead>
<tr>
<th>Biochem A310</th>
<th>Principles of Physiology</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biochem A415</td>
<td>Comparative Animal Physiology</td>
<td>4</td>
</tr>
<tr>
<td>Biochem A461</td>
<td>Molecular Biology</td>
<td>3</td>
</tr>
<tr>
<td>Chem A442</td>
<td>Principles of Biochemistry II</td>
<td>3</td>
</tr>
<tr>
<td>Chem A450</td>
<td>Environmental Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>Chem A456</td>
<td>Non-linear Dynamics and Chaos</td>
<td>3</td>
</tr>
<tr>
<td>Chem A460</td>
<td>Chemical Ecotoxicology</td>
<td>3</td>
</tr>
<tr>
<td>Chem A471</td>
<td>Immunochemistry</td>
<td>4</td>
</tr>
<tr>
<td>Geol A321</td>
<td>Mineralogy</td>
<td>4</td>
</tr>
<tr>
<td>Geol A360</td>
<td>Geochemistry</td>
<td>3</td>
</tr>
<tr>
<td>Geol A460</td>
<td>Environmental Geochemistry</td>
<td>3</td>
</tr>
<tr>
<td>Math A302</td>
<td>Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>Math A310</td>
<td>Numerical Methods</td>
<td>3</td>
</tr>
<tr>
<td>Math A422</td>
<td>Partial Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>Phys A303</td>
<td>Modern Physics</td>
<td>3</td>
</tr>
<tr>
<td>Phys A320</td>
<td>Simulation of Physical Systems</td>
<td>3</td>
</tr>
<tr>
<td>Phys A403</td>
<td>Quantum Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>Phys A413</td>
<td>Statistical Methods</td>
<td>3</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Biol A115</th>
<th>Fundamentals of Biology I</th>
<th>4</th>
</tr>
</thead>
<tbody>
<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>
</tr>
</tbody>
</table>

Upper division Biology

(choose one of the following)

<table>
<thead>
<tr>
<th>Biochem A310</th>
<th>Principles of Physiology</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biochem A415</td>
<td>Comparative Animal Physiology</td>
<td>4</td>
</tr>
<tr>
<td>Biochem A461</td>
<td>Molecular Biology</td>
<td>3</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 Lab</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 Lab</td>
<td>1</td>
</tr>
<tr>
<td>Chem A253</td>
<td>Principles of Inorganic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>Chem A212</td>
<td>Quantitative Analysis</td>
<td>5</td>
</tr>
<tr>
<td>Chem A321</td>
<td>Organic Chemistry I</td>
<td>3</td>
</tr>
</tbody>
</table>
18 credits is required for the minor. Communication must complete the following requirements. A total of 24 credits is required for the minor.

COMM A101 Introduction to Human Communication (3)
COMM A111 Fundamentals of Oral Communication (3)
COMM A235 Small Group Communication (3)
COMM A237 Interpersonal Communication (3)
COMM A241 Public Speaking (3)

Select (9) credits from the following: 9
COMM A111 Fundamentals of Oral Communication (3)
COMM A235 Small Group Communication (3)
COMM A237 Interpersonal Communication (3)
COMM A241 Public Speaking (3)

2. A total of 120-126 credits is required for the degree, of which 42 credits must be upper division.

MINOR, CHEMISTRY

Students majoring in another subject who wish to minor in Chemistry must complete the following requirements. A total of 24 credits is required for the minor.

CHEM A105 General Chemistry I 3
CHEM A105L General Chemistry I Lab 1
CHEM A106 General Chemistry II 3
CHEM A106L General Chemistry II Lab 1
CHEM A212 Quantitative Analysis 5
CHEM A321 Organic Chemistry I 3
CHEM A322 Organic Chemistry II 3
CHEM A323L Organic Chemistry Lab 2
CHEM A331 Physical Chemistry: A Biological Orientation (3)
or
CHEM A331 Physical Chemistry I (3)

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COMPUTER SCIENCE

Social Sciences Building (SSB), Room 154, (907) 786-1744/4824
www.math.uaa.alaska.edu

The Department of Mathematical Sciences offers courses covering the major areas of computer science. These courses constitute the basis for an undergraduate major that prepares students for a variety of professional and technical careers in business; industry; and government, or for graduate work leading to advanced degrees. In addition, the department offers courses for students from other fields that will use computer science as a tool in their own areas.

The department offers two degrees in computer science: the Bachelor of Arts in Computer Science, and the Bachelor of Science in Computer Science. The BA degree gives the student the opportunity to obtain a liberal arts background while the BS program gives the student the opportunity to pursue a sciences background. The BS degree is recommended for those seeking to pursue a graduate degree in Computer Science.

Both degrees prepare the student to pursue a professional career in the computing field and are based on the 2001 computing curriculum guidelines developed by the Association for Computing Machinery (ACM) and the Accreditation Board for Engineering and Technology's Computing Accreditation Commission (CAC). The core of both degrees emphasizes broad fundamental principles of computer science and teaches the student the necessary skills to develop solutions using current or future technology. The core topics include computer programming, systems organization, software engineering, databases, and theory. Upon completion of the core topics, the student may select electives that explore specific areas of computer science, such as computer graphics, architecture, or intelligent systems.

HONORS IN COMPUTER SCIENCE

Students majoring in Computer Science are eligible to graduate with Departmental Honors if they satisfy the following requirements:

1. Meet the requirements for Graduation with Honors as listed in Chapter 7 of this UAA catalog.
2. Meet the requirements for a BA/BS degree in Computer Science.
3. Earn a grade point average of 3.50 or above in the major requirements.
4. Complete a minimum of 12 upper division credits required for the major in residence.

**BACHELOR OF ARTS, COMPUTER SCIENCE**

**ADMISSION REQUIREMENTS**

Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.

**GRADUATION REQUIREMENTS**

Students must complete the following graduation requirements:

**A. GENERAL UNIVERSITY REQUIREMENTS**

Complete the General University Requirements for All Baccalaureate Degrees located at the beginning of this chapter.

**B. GENERAL EDUCATION REQUIREMENTS**

Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

**C. COLLEGE OF ARTS AND SCIENCES REQUIREMENTS**

Complete the College of Arts and Sciences Requirements for a BA degree listed at the beginning of the CAS section.

**D. MAJOR REQUIREMENTS**

1. Complete the following core courses (33 credits)
   - CS A201 Programming Concepts I 3
   - CS A202 Programming Concepts II 3
   - CS A221 Computer Organization and Assembly Programming 3
   - CS A320 Operating Systems 3
   - CS A330 Algorithms and Data Structures 3
   - CS A331 Programming Language Concepts 3
   - CS A342 Networks 3
   - CS A351 Automata, Algorithms, and Complexity 3
   - CS A360 Database Systems 3
   - CS A401 Software Engineering 3
   - CS A470 Applied Software Development Project (3) 3
   - CS A495 Internship Project (3)

2. Complete the following required support courses (12-14 credits):
   - MATH A200 Calculus I (4) 3-4
   - MATH A272 Applied Calculus (3)
   - MATH A231 Introduction to Discrete Mathematics 3
   - STAT A253 Applied Statistics for the Sciences (4) 3-4
   - STAT A307 Probability (3)
   - ENGL A312 Advanced Technical Writing (3) 3
   - ENGL A414 Research Writing (3)

3. Complete an additional 15 upper division credits in Computer Science, Mathematics (excluding MATH A420 and MATH A495), or Statistics. Nine (9) of these credits must be in Computer Science. A maximum of 3 credits of CS A395 may be applied to degree requirements.

4. A grade of C or higher must be received in all MATH, CS, and STAT courses required to satisfy the above program requirements.

5. All computer science majors must take a standardized test of knowledge of computer science approved by the computer science faculty for the purpose of evaluating program effectiveness. There is no minimum score required for graduation. This test will normally be taken during the senior year.

6. Students are encouraged to develop their program with a Computer Science advisor.

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

**BACHELOR OF SCIENCE, COMPUTER SCIENCE**

**ADMISSION REQUIREMENTS**

Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.

**GRADUATION REQUIREMENTS**

Students must complete the following graduation requirements:

**A. GENERAL UNIVERSITY REQUIREMENTS**

Complete the General University Requirements for All Baccalaureate Degrees located at the beginning of this chapter.

**B. GENERAL EDUCATION REQUIREMENTS**

Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

**C. COLLEGE OF ARTS AND SCIENCES REQUIREMENTS**

Complete the College of Arts and Sciences Requirements for a BS degree listed at the beginning of the CAS section.

**D. MAJOR REQUIREMENTS**

1. Complete the following core courses (37 credits):
   - CS A201 Programming Concepts I 3
   - CS A202 Programming Concepts II 3
   - CS A221 Computer Organization and Assembly Programming 3
   - CS/EE A241 Computer Hardware Concepts 4
   - CS A320 Operating Systems 3
   - CS A330 Algorithms and Data Structures 3
   - CS A331 Programming Language Concepts 3
   - CS A342 Networks 3
   - CS A351 Automata, Algorithms, and Complexity 3
   - CS A360 Database Systems 3
   - CS A401 Software Engineering 3
   - CS A470 Applied Software Development Project (3) 3
   or
   - CS A495 Internship Project (3)

2. Complete the following required support courses (25 credits):
   - MATH A200 Calculus I 4
   - MATH A201 Calculus II 4
   - MATH A231 Introduction to Discrete Mathematics 3
   - STAT A307 Probability 3
   - PHYS A123/L Basic Physics I (4) 4
   or
   - PHYS A211/L General Physics I (4)
   - PHYS A124/L Basic Physics II (4) 4
   or
   - PHYS A212/L General Physics II (4)
   - ENGL A312 Advanced Technical Writing (3) 3
   or
   - ENGL A414 Research Writing (3)

3. Complete an additional 12 upper division credits in Computer Science, Mathematics (excluding MATH A420 and MATH A495), or Statistics. Nine (9) of these credits must be in Computer Science. A maximum of three (3) credits of CS A395 may be applied to degree requirements.

4. A grade of C or higher must be received in all MATH, CS, and STAT courses required to satisfy the above program requirements.
5. All computer science majors must take a standardized test of knowledge of computer science approved by the computer science faculty for the purpose of evaluating program effectiveness. There is no minimum score required for graduation. This test will normally be taken during the senior year.
6. Students are encouraged to develop their program with a Computer Science advisor.
7. A total of 120 credits is required for the degree, of which 42 credits must be upper division.

MINOR, COMPUTER SCIENCE

Students majoring in another subject who wish to minor in Computer Science must complete the following requirements:
1. Complete the five required courses:
   - CS A101 Introduction to Computer Science 3
   - CS A201 Programming Concepts I 3
   - CS A202 Programming Concepts II 3
   - CS A221 Computer Organization and Assembly Programming 3
   - MATH A231 Introduction to Discrete Mathematics 3
2. Complete 9 credits of upper division Computer Science courses.
3. A total of 24 credits is required for the minor.

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MINOR WITH DISTINCTION, CREATIVE WRITING AND LITERARY ARTS

Students majoring in another subject who wish to minor in Creative Writing and Literary Arts with Distinction will be required to produce a thesis project in consultation with their advisor, consisting of approximately 30 pages of fiction, creative nonfiction, drama, or poetry, prefaced by an analytical essay and followed by an annotated bibliography. For a CWLA Minor with Distinction, a student must maintain a GPA of 3.5 in the minor.

1. Complete 9 credits from the following list of undergraduate writing workshops and magazine production course offerings. Note that at least 6 credits must be upper division:
   - CWLAA259 Short Format Introduction to Creative Writing (1)
   - CWLAA260 Introduction to Creative Writing (3)
   - CWLAA261 Art/Literary Magazine Production (3)
   - CWLAA352 Undergraduate Writer's Workshop: Poetry (3)
   - CWLAA362 Undergraduate Writer's Workshop: Fiction (3)
   - CWLAA372 Undergraduate Writer's Workshop: Nonfiction (3)
2. Complete 6 credits from the following:
   - CWLAA461 Writing and Gender (3)
   - CWLAA490 The Writer's Craft (3)
3. Complete the following required project:
   - CWLAA499 Thesis (3)
4. A total of 18 credits is required for the minor.

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Jo-Ann Mapson, Assistant Professor, AFJM2@uaa.alaska.edu
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CREATIVE WRITING AND LITERARY ARTS

Social Sciences Building (SSB), Room 352, (907) 786-4330
http://cwla.uaa.alaska.edu
aycwla@uaa.alaska.edu

MINOR, CREATIVE WRITING AND LITERARY ARTS

Students majoring in another subject who wish to minor in Creative Writing and Literary Arts must complete the following requirements:
1. Complete 12 credits from the following list of undergraduate writing workshops and magazine production course offerings. Note that at least 6 credits must be upper division:
   - CWLAA259 Short Format Introduction to Creative Writing (1)
   - CWLAA260 Introduction to Creative Writing (3)
   - CWLAA261 Art/Literary Magazine Production (3)
   - CWLAA352 Undergraduate Writer's Workshop: Poetry (3)
   - CWLAA362 Undergraduate Writer's Workshop: Fiction (3)
   - CWLAA372 Undergraduate Writer's Workshop: Nonfiction (3)
2. Complete 6 credits from the following:
   - CWLAA461 Writing and Gender (3)
   - CWLAA490 The Writer's Craft (3)
3. A total of 18 credits is required for the minor.

FACULTY

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ENGLISH

Professional Studies Building (PSB), Suite 212, (907) 786-4355
http://english.uaa.alaska.edu/

The programs offered by the Department of English provide an opportunity for a truly liberal education, one that encourages both self-discovery and an exploration of enduring ideas. The curriculum includes courses in composition, rhetoric, literature, linguistics, and thinking strategies. The composition program provides courses that fulfill the university's general education requirement in written communication. More advanced writing courses offer opportunities for students to develop skill in electronic communication, disciplinary writing, and research.

Students who major in English choose one of three options: literature, rhetoric and language, or education. The literature option focuses on significant examples of literature from different periods and genres, as well as the social and cultural forces that shape them. The rhetoric and language option focuses on rhetorical strategies and techniques of composition, emphasizing historical and theoretical perspective in contemporary settings. The education option prepares students for teaching literature and writing at the middle school and secondary levels, and for admission to UAA's Masters of Arts in Teaching program. All three options prepare majors to conduct research in the discipline and to write for a variety of purposes and audiences. In addition, all three options offer the opportunity to earn honors in English.
The Literature minor enhances the experience of students majoring in other subjects by providing a study of significant authors and literary works, as well as by developing skills in writing and critical analysis.

The Professional Writing minor prepares students to interpret and present complex information in a readable form to various audiences using a variety of media, including written words, illustrations, digital multimedia, online help systems, web sites, and videos. The minor develops strong language, visual, and analytical skills, as well as aptitude for technical information, particularly in the industry in which students plan to work: computer science, engineering, medicine, aerospace, or business.

The Linguistics minor is designed for non-English majors who wish to build a foundation in linguistic studies for complementary majors, such as Anthropology and Languages, and for those who are interested in the study and teaching of languages. The minor includes two introductory courses and four elective courses which are offered through the Anthropology and English departments. Most courses emphasize the structure of the English language.

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

**HONORS IN ENGLISH**

The Department of English recognizes exceptional undergraduate students by awarding them Departmental Honors in English and noting the award on their permanent university transcript. Honors in English may be coordinated with the UAA Honors Program. To graduate with Departmental Honors, the student must be a declared English major, satisfy all requirements for a BA degree in English (literature, rhetoric, or education option), and meet the following requirements:

1. Meet the requirements for Graduation with Honors as listed in Chapter 7 of this catalog.
2. Maintain a GPA of 3.5 in all courses in the English major.
3. Complete 6 credits of the following 400-level topics courses with a grade of A:
   - ENGL A403: Topics in Autobiography (3)
   - ENGL A404: Topics in Women's Literature (3)
   - ENGL A429: Major Authors (3)
   - ENGL A440: Topics in Twentieth-Century Comparative Literature (3)
   - ENGL A444: Topics in Native Literatures (3)
   - ENGL A490: Selected Topics in English (1-3)
4. Complete ENGL A499 English Honors Thesis, with a grade of A in the judgment of two faculty readers. The thesis must be completed under the guidance of a member of the English faculty and should be 30-40 pages in length. Students are encouraged to enroll concurrently in ENGL A414: Research Writing.

**BACHELOR OF ARTS, ENGLISH**

**ADMISSION REQUIREMENTS**

Complete the Baccalaureate Degree Programs Admission Requirements at the beginning of this chapter.

**GRADUATION REQUIREMENTS**

Students must complete the following graduation requirements:

**A. GENERAL UNIVERSITY REQUIREMENTS**

Complete the General University Requirements for Baccalaureate Degrees located at the beginning of this chapter.

**B. GENERAL EDUCATION REQUIREMENTS**

Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

**C. COLLEGE OF ARTS AND SCIENCES REQUIREMENTS**

Complete the College of Arts and Sciences requirements listed at the beginning of the CAS section.

**D. MAJOR REQUIREMENTS**

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

1. Complete the following core courses (15 credits):
   - ENGL A201 Masterpieces of World Literature I (3)
   - ENGL A202 Masterpieces of World Literature II (3)
   - ENGL A351 Poetry (3)
   - ENGL A434 History of Rhetoric (3)
   - ENGL A435 History of Criticism (3)

2. Complete one of the following options:
   - **Literature Option** (24 credits)
     - Complete 3 credits from National Literatures:
       - ENGL A301 Literature of Britain I (3)
       - ENGL A302 Literature of Britain II (3)
       - ENGL A305 Topics in National Literatures (3)
       - ENGL A306 Literature of the United States I (3)
       - ENGL A307 Literature of the United States II (3)
     - Complete 3 credits from each Period:
       - **Early**
         - ENGL A310 Ancient Literature (3)
         - ENGL A315 Medieval Literature (3)
         - ENGL A320 Renaissance Literature (3)
       - **Middle**
         - ENGL A325 Neoclassical Literature (3)
         - ENGL A330 Literature of Romanticism (3)
         - ENGL A340 The Victorian Period (3)
       - **Late**
         - ENGL A342 The Modernist Period (3)
         - ENGL A343 Contemporary Literature (3)
         - ENGL A440 Topics in 20th Century Comparative Literature (3)
   - **Complete 3 credits from Genre:**
     - ENGL A361 The Novel (3)
     - ENGL A363 The Short Story (3)
     - ENGL A371 Prose Nonfiction (3)
     - ENGL A381 Drama (3)
     - ENGL A383 Film Interpretation (3)
     - ENGL A391 Genres of Subject and Theme (3)
   - **Complete 6 credits from Specialized Studies:**
     - ENGL A424 Shakespeare (3)
     - ENGL A435 Comparative Literature (3)
     - ENGL A436 Comparative Literature (3)
     - ENGL A437 Comparative Literature (3)
     - ENGL A438 Comparative Literature (3)
     - ENGL A439 Comparative Literature (3)

   - **Complete upper division English elective**

- **Rhetoric and Language Option** (24-25 credits)
  - **Complete 6 credits from Nature of Language:**
    - LING A101 The Nature of Language (3)
    - LING A201 Intermediate Grammar (3)
  - **Complete 6 credits from Advanced Composition:**
    - ENGL A311 Advanced Composition (3)
    - ENGL A312 Advanced Technical Writing (3)
    - ENGL A313 Professional Writing and Editing (3)
    - ENGL A414 Research Writing (3)
  - **Complete 3-4 credits from Applied Linguistics:**
    - ENGL A450 Linguistics and Language Teaching (4)
    - ENGL A452 English Grammar and Language Teaching (4)
ENGL A487 Standard Written English (3)
ENGL A495 Internship in Professional Writing (1-3)

Complete 3 credits from Rhetoric and Language Theory:

- ENGL A475 Modern Grammar (3)
- ENGL A476 History of the English Language (3)
- ENGL A491 Topics in Composition and Rhetoric (3)

Complete 6 credits upper division elective:

- One upper division Rhetoric course
- One upper division English course

Education Option (25 credits)

Complete 12 credits from Reading & Literature:

- ENGL A424 Shakespeare (3)*
- and one of the following:
  - ENGL A361 The Novel (3)
  - ENGL A363 The Short Story (3)
  - ENGL A371 Prose Nonfiction (3)
  - ENGL A383 Film Interpretation* (3)
  - ENGL A391 Genres of Subject and Theme (3)

Complete 3 credits from Language & Composition:

- ENGL A311 Advanced Composition (3)
- ENGL A312 Advanced Technical Writing (3)
- ENGL A313 Professional Writing and Editing (3)
- ENGL A414 Research Writing (3)
- ENGL A491 Topics in Composition and Rhetoric (3)

Complete 10 credits from Language Development & Analysis:

- LING A201 Intermediate Grammar (3)
  - and one of the following:
    - ENGL A450 Linguistics and Language Teaching (4)
    - ENGL A452 English Grammar and Language Teaching (4)
  - ENGL A475 Modern Grammar (3)
  - ENGL A476 History of English Language (3)
  - ENGL A487 Standard Written English (3)

*Recommended course

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

MINOR, ENGLISH

The Department of English offers a minor in English with an emphasis in Literature, Linguistics, or Professional Writing. A total of 18 credits is required for the minor.

Students majoring in another subject who wish to minor in English must complete the following requirements.

LINGUISTICS EMPHASIS

1. Complete these required courses (6 credits):
   - LING A101 The Nature of Language (3)
   - LING A201 Intermediate Grammar (3)

2. Complete 12 credits from the following:
   - ANTH A210 Introduction to Anthropological Linguistics (3)
   - ANTH A361 Language and Culture (3)
   - ENGL A450 Linguistics and Language Teaching (4)
   - ENGL A452 English Grammar and Language Teaching (4)
   - ENGL A475 Modern grammar (3)
   - ENGL A476 History of English Language (3)
   - ENGL A487 Standard written English (3)
   - ENGL A490 Selected topics in English (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 and Editing (3)

One of the following:
- ENGL A414 Research Writing (3)
- ENGL A495 Internship in Professional Writing (1-3)

And both of the following:
- ENGL A434 History of Rhetoric
- Upper division elective approved by the English Department

3

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Jennifer Stone, Assistant Professor
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Toby Widdicombe, Professor, AFRTW@uaa.alaska.edu
ENVIRONMENTAL STUDIES

Beatrice McDonald Hall (BMH), Room 213 (907) 786-6049
www.uaa.alaska.edu/ees
ENVIRONMENTALSTUDIES@uua.alaska.edu

Which is better: paper or plastic? How wet is a wetland? What are xenoestrogens and polycyclic aromatic hydrocarbons, and why should we care? Is sustainable development possible? Is global warming real?

Addressing today's environmental issues requires skills in the natural and social sciences, a coherent ethical stance informed by knowledge of history, other cultures, and the humanities, and the ability to think critically in an interdisciplinary way. UAA offers two ways for undergraduates to increase their environmental literacy. The interdisciplinary minor in Environmental Studies allows students to organize a portion of their studies around the environment and begin to acquire problem-solving skills that combine sound science with an appreciation of economic, social, and ethical trade-offs. In addition, the introductory courses ENVI A201-A202 by themselves offer a broad-based introduction to the field and its many relationships to other disciplines.

MINOR, ENVIRONMENTAL STUDIES

Students majoring in another subject who wish to minor in Environmental Studies must complete the following requirements. At least 18 credits are required for the minor.

1. Complete the following required core courses:
   - ENVI A201 Living on Earth: Introduction to Environmental Studies
   - ENVI A202 Earth as an Ecosystem: Introduction to Environmental Science
   - BIOL A373 Conservation Biology
   - ENVI A492 Proseminar in Environmental Studies

2. Complete at least 3 credits of approved electives related to environmental science and engineering. The following courses are automatically approved. Other courses may be approved on a one-time basis by the designated Director of Environmental Studies if a student demonstrates sufficient environmental studies content.
   - BIOL A309 Biogeography
   - BIOL A331 Systematic Botany
   - BIOL A475 Arctic Tundra Ecosystems
   - BIOL A476 Boreal Ecosystems
   - BIOL A485 Selected Topics in Biology
   - CE A344 Water Resources Engineering
   - CE A441 Introduction to Environmental Engineering
   - CHEM A450 Environmental Chemistry
   - GIS A370 GIS and Remote for Natural Resources
   - GEOG A205 Elements of Physical Geography
   - GEOL A115 Environmental Geology
   - GEOL A350 Geomorphology

Note: BIOL A485 is conditional on appropriate environmental content as determined by designated Director of Environmental Studies. Determination to be made when course content is announced.

3. Complete at least 3 credits of approved electives related to environmental policy, values, and history. The following courses are automatically approved. Other courses may be approved on a one-time basis by the designated Director of Environmental Studies if a student demonstrates sufficient environmental studies content.
   - AKNS A201 Native Perspectives
   - ANTH A354 Culture and Ecology
   - ANTH A432 Hunting and Gathering Societies
   - ECON A210 Environmental Economics and Policy
   - ECON A435 Economics of Resources
   - ENVI A492 Environmental Ethics

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GEOLOGICAL SCIENCES

Beatrice McDonald Hall (BMH), Room 212, (907)-786-6840
www.uua.alaska.edu/geology

Geology is the science that pursues an understanding of planet Earth. The geological sciences program incorporates areas of study in:

1. Earth materials including mineralogy, petrology, sedimentology and stratigraphy, volcanology, ore deposits, and structure;
2. Geologic Earth history including historical geology and paleontology;
3. Earth surface processes including geomorphology, soils, paleoclimatology, and glacial geology; and
4. Earth's environmental systems including hydrogeology, environmental geochemistry and geophysics. The curriculum is designed to provide students with a solid understanding of the geological sciences that will prepare them for graduate studies, government and industry employment, and teaching. A Bachelor of Science degree in Geological Sciences is available for undergraduates.

The geological sciences focus on combining classroom education with field work and laboratory experiments, and strive to involve students in all aspects of the science. The Geological Sciences faculty is highly motivated to transmit both their knowledge and passion for the geological sciences. Students who enjoy working outdoors, have a strong scientific background, and are interested in earth processes will find the geological sciences an intriguing and rewarding area of study.

A program of study in the geological sciences requires completion of a basic science curriculum in the chemical, physical, and mathematical sciences in addition to core courses and elective courses in the geological sciences. The undergraduate degree in geology offers students with a choice of focus in either general geology or environmental geology. The general geology track includes core geology courses with a range of upper division courses as electives. The environmental geology track requires the core geology courses as well as specific upper division electives that focus on environmental topics such as environmental geochemistry, hydrogeology, and soils. Students are strongly encouraged to consult with faculty in the geologic sciences to choose an appropriate direction of study that suits their goals.

The Bachelor of Science degree program in Geological Sciences requires a minimum of 120 credits for graduation, and can be completed in four years by students who have adequate high school preparation in the sciences and math. Consult the College of Arts and Sciences list of recommended preparatory courses in all disciplines.
PROGRAM OBJECTIVES AND EXPECTED OUTCOMES

The curriculum of the UAA Geological Sciences program is designed to produce graduates who:

1. Have a basic knowledge of the principles related to the geological sciences with either an emphasis in environmental geology or general geology;
2. Have an understanding of how to think scientifically and apply their knowledge to solve geologic problems;
3. Have sufficient competence to obtain employment as an entry level geologist or environmental geologist, and be able to progress professionally within the discipline and are prepared for advanced study;
4. Have a fundamental understanding of Alaskan geology and environmental problems in Alaska;
5. Are able to communicate their ideas; and
6. Are prepared for and understand the need for continued professional development throughout their careers.

In keeping with the objectives, it is expected that graduates of the UAA Geological Sciences program will have:

1. An ability to apply their knowledge of general geology and/or environmental geology;
2. An ability to accept challenges and think through problems until they are solved;
3. An ability to design and conduct projects that include field work, laboratory analyses and interpretation in one of the areas 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 life-long learning.

HONORS IN GEOLOGICAL SCIENCES

The Department of Geological Sciences offers recognition to students who demonstrate exceptional promise in the science by awarding them with the Departmental Honors in Geological Sciences and noting the award on their permanent university transcript. To graduate with Departmental Honors, the student must be a declared Geological Sciences Major and meet the following requirements:

1. Satisfy all requirements for a BS degree in Geological Sciences.
3. Complete 6 credits of GEOL A499 Senior Thesis or 3 credits of GEOL A498 Directed Research and 3 credits of GEOL A499 Senior Thesis in Geological Sciences with a B or better.
4. Students intending to graduate with Departmental Honors must notify the Departmental Honors Committee, in writing, on or before the date they file their Application for Graduation with the Enrollment Services Office.

BACHELOR OF SCIENCE, GEOLOGICAL SCIENCES

ADMISSION REQUIREMENTS

Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.

ACADEMIC PROGRESS

In order to graduate with a BS in Geological Sciences, all courses covered under Major Requirements for a BS in Geological Sciences must be completed with a grade of C or better. Students who audit a course in geology or who are unable to earn a grade of C or better in the course may repeat the course. All prerequisites for geological sciences courses must be completed with a grade of C or better.

Please consult the undergraduate academic advisor in the Department of Geological Sciences to obtain a student handbook for the Geological Sciences major.

GRADUATION REQUIREMENTS

Students must complete the following graduation requirements:

A. GENERAL UNIVERSITY REQUIREMENTS

Complete the General University Requirements for All Baccalaureate Degrees located at the beginning of this chapter.

B. GENERAL EDUCATION REQUIREMENTS

Complete the General Education Requirements for Baccalaureate Degrees located at the beginning of this chapter.

C. COLLEGE OF ARTS AND SCIENCES REQUIREMENTS

Complete the College of Arts and Sciences Requirements listed at the beginning of the CAS section of this catalog.

D. MAJOR REQUIREMENTS

1. Some major requirements may also be used to satisfy the College of Arts and Sciences BS requirements.
2. Complete these required support courses (23-24 credits):
   - 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) 3-4 or
   - STAT A307 Probability (3)

   Note: Math A201 Calculus II is highly recommended for majors in the 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 A410 Research Techniques in Geology 3
      - GEOL A452 Sedimentology and Stratigraphy 4

   B. Complete a minimum of 6 credits of the following required field courses 6
      - GEOL A480 Geologic Field Methods* (3)
      - GEOL A481 Alaska Field Investigations (3)
      - GEOL A480 Geologic Field Camp* (3-6)

   *GEOL A480 and 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 2.0.

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 A421 Invertebrate Paleontology (4)
B. Environmental Geological Sciences Track (13-14 credits)

1.a Complete the following 3 required credits:
   GEOL A340 Hydrogeology 3

1.b Complete at least 6 additional credits from the following:
   GEOL A454 Glacial and Quaternary Geology (3)
   GEOL A455 Permafrost (3)
   GEOL A457 Soil Genesis and Classification (4)
   GEOL A460 Environmental Geochemistry (3)
   GEOL A475 Environmental Geophysics (3)
   GEOL A480 Alaska Geologic Field Investigations (3)
   GEOL A482 Geologic Field Investigations (3)
   GEOL A490 Advanced Topics in Geology (1-4)
   GEOL A492 Geology Seminar (1)
   GEOL A495 Geology Internship (1-3)
   GEOL A498 Student Research (1-6)
   GEOL A499 Senior Thesis (3)

**GEOL A480 and A481 may be applied towards recommended electives if they are not being applied to satisfy the core curriculum credits.

MINOR, GEOLOGICAL SCIENCES

Students majoring in another subject who wish to minor in Geological Sciences must complete the following requirements. Completion of a minimum of 18 credits is required for the minor, 8 of which must be upper division.

   GEOL A111 Physical Geology 4
   GEOL A221 Historical Geology 4
   Upper division Geological Sciences electives 8
   Other Geological Sciences electives 2 or more

HISTORY

History as a subject in its broadest sense is all that human beings have thought and done. Knowledge of history is the principal means by which humans discover and preserve their collective identity, for through such knowledge, we gain a clear view of our limitations, and a glimpse of our potential.

History as an intellectual discipline examines and interprets the documentary records of human activity, records that are often fragmentary and incomplete. As a discipline, history is both a science and an art; it requires an intricate balance of scientific technique and creative imagination to weave fragments of evidence into an intelligent account of human experience.

HONORS IN HISTORY

The award of honors in history recognizes distinguished achievement by undergraduate majors in the study and writing of history.

To be eligible for departmental honors a student must satisfy the following requirements:

1. Be a declared history major.
2. Satisfy all the requirements for a BA degree in history.
3. Meet the requirements for Graduation with Honors as listed in Chapter 7 of the UAA Catalog.
4. Maintain a grade point average of 3.50 or above in courses specific to the history major.
5. Complete HIST A377 Historiography with a grade of A.
6. Complete the senior seminar paper HIST A477 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.
A total of 18 credits is required for the minor, 9 of which must be upper division. Upper division History electives* 9
History elective, any level 3
*Note: Only 3 credits of HIST A444 may be applied to a minor in History.

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INTERNATIONAL STUDIES
Social Sciences Building (SSB), Room 359, 786-4856
www.uaa.alaska.edu/intl/degree/index.cfm

The International Studies program at UAA prepares students to be global citizens in an increasingly 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 sensibilities 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 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 Far East, Northeast Asia) informed by multiple perspectives.

HONORS IN INTERNATIONAL STUDIES
Students majoring in International Studies are eligible to graduate with Honors if they satisfy the following requirements:
A. Meet the requirements for Graduation with Honors as listed in Chapter 7 of the UAA catalog.
B. Meet the requirements for a Bachelor of Arts in International Studies.
C. Maintain a grade point average of 3.50 or above in courses applicable to the degree requirements.
D. Complete the program capstone course (HIST A390) with an honor grade (A).

BACHELOR OF ARTS, INTERNATIONAL STUDIES
ADMISSION REQUIREMENTS
Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.

GRADUATION REQUIREMENTS
Students must complete the following graduation requirements:

MINOR, HISTORY
A total of 18 credits is required for the minor, 9 of which must be upper division.

HIST A101 Western Civilization I (3) 6 and
HIST A102 Western Civilization II (3) or
HIST A131 History of United States I (3) and
HIST A132 History of United States II (3)
Upper division History electives* 9
History elective, any level 3

*Note: Only 3 credits of HIST A444 may be applied to a minor in History.
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: Courses which may be used to meet GER and/or CAS BA requirements are designated by an asterisk (*) after their numbers.

Courses in the GER lists for Tier 2 Social Sciences and Humanities requirements may be used to fulfill both International Studies requirements and GER Tier 2 requirements in Social Sciences and Humanities.

1. Complete 18 credits of required core courses

   **Introductory Survey**
   
   (May be used to fulfill both an International Studies degree requirement and the Tier 2 GER Social Sciences requirement.)
   
   GEOG/INTL A101* Local Places/Global Regions: An Introduction to Geography (3)

   **Social Sciences Selection**
   
   (Courses below that are also listed in the list for Tier 2 GER Social Sciences may be used to fulfill both an International Studies degree requirement and the Tier 2 GER Social Sciences requirement.)
   
   ANTH A250* Rise of Civilization (3)
   GEOG/PS A327 Political Geography (3)
   GEOG A323 Economic Geography and the Global Economy (3)
   INTL A315* Canada: Nation and Identity (3)
   JUST A365 Comparative Justice System (3)
   PS A102* Introduction to Political Science (3)
   PS A321 International Relations (3)

   **Humanities and Fine Arts Selection**
   
   ART A262* History of World Art II (3)
   ENGL A202* Masterpieces of World Literature II
   ENGL A343 Contemporary Literature (3)
   PHIL A212 History of Philosophy II (3)
   THR A312* Representative Plays II (3)

   **Capstone Course Selection**
   
   HIST A390A* Themes in World History (3) or PHIL A400 Ethics, Community, and Society (3)

2. Complete four semesters of college-level language appropriate to track (101-102, 201-202, or higher) 16

3. Complete 12 credits as specified in one of the tracks below

   **Russia Track (Language: Russian)**
   
   HIST A330 Russia in East Asia (3) or INTL A355 Russian Far East (3)

   **Russia Elective Course Selection**
   
   Either course above (over and above the 3 credits required) (3)
   
   ANTH A434 Peoples and Cultures of Northeast Asia (3)
   ART A492 Art History Seminar (with topic 20th Century Russian Art: Symbolist Developments-Perestroika and Beyond) (3)

   **Northeast Asia Track (Language: Chinese or Japanese)**
   
   INTL/HIST/PS A325 Northeast Asia in the 21st Century (3)

   **Northeast Asia Elective Course Selection**
   
   ANTH A434 Peoples and Cultures of Northeast Asia (3)
   ART A366 Asian Art (3)
   HIST A320 Rise, Fall, and Reinvention of the Samurai (3)
   HIST A321 Modern China (3)
   HIST A322 Modern Japan (3)
   HIST A323 Communist China (3)
   HIST A330 Russia in East Asia (3)
   HIST A477 Senior Seminar (with appropriate content) (3)
   JPN A310 Selected Topics in Advanced Japanese (3)
   PHIL A313B Eastern Philosophy and Religion (3)
   PS A312 Comparative Politics: Case Studies (with China, Japan cases) (3)
   PS A490 Studies in Politics (with appropriate content) (3)
   PS A492 Senior Seminar in Politics (with appropriate content) (3)

   Any course with the appropriate focus and approved for the category. For example, a topics course that focuses on Russia. (3)

   **Europe Track (Language: French, German, Spanish)**
   
   HIST A316 Twentieth Century Europe (3)

   **European Elective Course Selection**
   
   ART A362 History of Modern Art (3)
   ART A363 History of Contemporary Art (3)
   ECON A360 Modern Economic History (3)
   ENGL A342 The Modernist Period (3)
MINOR IN INTERNATIONAL NORTH PACIFIC STUDIES

Students majoring in another subject and wishing to minor in International North Pacific Studies must complete the following requirements:

1. Complete the following courses:
   - INTL A315* Canada: Nation and Identity (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 track of the Bachelor of Arts in International Studies.

4. A total of 20 credits is required for the minor.

MINOR, CANADIAN STUDIES

Students majoring in another subject and wishing to minor in Canadian Studies must complete the following requirements:

1. Complete the following course:
   - INTL A315* Canada: Nation and Identity (3)

2. Complete 8 credits of a language appropriate to the Canada track of the Bachelor of Arts in International Studies.

3. Complete three elective courses from the Canada track of the Bachelor of Arts in International Studies.

4. A total of 20 credits is required for the minor.

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JOURNALISM AND PUBLIC COMMUNICATIONS

Professional Studies Building (PSB), Room 201B (907) 786-4180
http://jpc.uaa.alaska.edu

The Department of Journalism and Public Communications (JPC) offers an undergraduate program leading to the Bachelor of Arts with concentrations in Journalism, Strategic Communications, Telecommunications and Film, Digital Graphics and Design, and Integrated Media.

The Department of Journalism and Public Communications is nationally accredited by the Accrediting Council on Education in Journalism and Mass Communications (ACEJMC). The department places great emphasis on preparing graduates for careers in professional communications and media industries.

The department’s academic programs are designed to prepare graduates to understand principles and practices of contemporary journalism, professional communications, and media industries. The program prepares students to develop skills for gathering and presenting information through various media. Computers are used throughout the program and students are required to produce media against deadlines. Students also are required to develop a portfolio of their media work for faculty review in their final year.

Department courses examine the role of the media in society and explore contemporary social, ethical, and legal issues related to journalism, professional communications, and media industries. The program emphasizes broad scholarship in the liberal arts. This type of
scholarship is essential for preparation in professional communications and media industries, which require journalists and communications practitioners to possess a wide range of knowledge.

Students graduating from this program will have developed and demonstrated:

- Expressive characteristics enabling them to visually realize their ideas and to create a body of work illustrating their creative analogical abilities.
- Conceptual characteristics enabling them to develop qualitative work that is consistent with their ideas, exhibits, original concepts, illustrates growth, and articulates concepts in creative ways.
- Formal characteristics enabling them to illustrate a technical mastery of the use of materials, a grasp of composition and formal elements and an appreciation for risk-taking in the context of formal considerations.
- Abilities to articulate ideas in relationship to orally based critical discourse in the classroom.

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: and
C. Complete JPC A492, JPC Senior Seminar, in the final spring term of study with an honor grade (A or B).

Note: Department Honors are awarded by the faculty in Journalism and Public Communications.

BACHELOR OF ARTS, JOURNALISM AND PUBLIC COMMUNICATIONS

ADMISSION REQUIREMENTS

Submit a Declared Major form for department approval. Students are accepted into JPC for a BA in Journalism; Strategic Communications; Telecommunications and Film; or Integrated Media, or into the BFA in Digital Graphics and Design in conjunction with the Department of Art.

GRADUATION REQUIREMENTS

A. GENERAL UNIVERSITY REQUIREMENTS

Complete the General University Requirements for Baccalaureate degrees found in the beginning of this chapter.

B. GENERAL EDUCATION REQUIREMENTS

Complete General Education Requirements for Baccalaureate degrees found at the beginning of this chapter.

C. COLLEGE OF ARTS AND SCIENCES REQUIREMENTS

Complete the College of Arts and Sciences Requirements for Bachelor of Arts degrees found at the beginning of this chapter. Note that 81 credits must be outside the major; 66 of those credits must be in the liberal arts as approved by JPC faculty (liberal arts courses are normally found in the College of Arts and Sciences); and 42 credits must be 300- and 400-level courses.

D. MAJOR REQUIREMENTS

Complete 126 credits for the degree: 45 credits must be JPC credits. 

Matriculation in Department of Journalism and Public Communications

1. Complete four (4) Journalism and Public Communications core courses with a C or better

   JPC A201 Reporting and Writing News (3)

   JPC A202 First Amendment and Media Ethics (3)

   JPC A203 Writing and Producing for Electronic Media (3)

   JPC A204 Information Gathering (3)

   Note: JPC A201 is required for Journalism and Strategic Communications majors. All majors must complete JPC A202 before taking JPC A203 and JPC A204, which may be taken simultaneously.

2. Complete one (1) 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 (1) 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 (1) of JPC 400-level elective courses: 3

   JPC A404 Global Media and International Communications Systems (3)

   JPC A405 Communications and Media Theories (3)

   JPC A413 Communications Law (3)

   JPC A454 Media Project Management (3)

5. Complete JPC research course

   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

   JPC A342 Photojournalism (3)

   JPC A343 Radio News Reporting (3)

   JPC A344 Television News Reporting (3)

   JPC A345 Web Design (3)

   JPC A346 Magazine Writing (3)

   JPC A442 Web Journalism (3)

   JPC A443 Advanced Reporting (3)

   JPC A444 Specialty Reporting (3)

   JPC A445 Design for Print I (3)

   JPC A446 Design for Print II (3)

   JPC A492 JPC Senior Seminar (3)

   JPC A495 JPC Practica and Internship (1-6)

   JPC A497 Independent Study (3)

   Strategic Communications Concentration

   JPC A362 Principles of Strategic Communications (3)

   JPC A363 Research Methods for Strategic Communications (3)

   JPC A366 Planning and Writing for Strategic Communications (3)

   JPC A368 Commercial Photography (3)

   JPC A369 Design for Publications (3)

   JPC A462 Corporate Communications (3)

   JPC A463 Crisis Communications (3)

   JPC A464 Development Communications (3)

   JPC A465 Strategic Communications Campaigns I (3)

   JPC A466 Strategic Communications Campaigns II (3)

   JPC A492 JPC Senior Seminar (3)

   JPC A495 JPC Practica and Internship (1-6)

   JPC A497 Independent Study (3)

   Telecommunications & Film Concentration

   JPC A382 Digital Audio Production (3)

   JPC A383 TV Studio Production (3)

   JPC A384 Digital Video Production (3)
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). 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). First-year courses begin building the foundations of language learning: listening, speaking, reading, and writing. Since language can only be understood within a cultural context, studying culture is included from the first semester. In courses beyond the first year, students expand and refine their language skills and further develop their cultural knowledge.

As an integral part of their education, the Department recommends that all students majoring in Languages study abroad in a country of their target language(s). UAA offers a variety of opportunities for Study Abroad. For a full description of Study Abroad opportunities through UAA, students should refer to International Student Services in Enrollment Services. Students wishing to apply Study Abroad credit toward a Languages degree must petition to satisfy major and/or minor requirements with study abroad experience. The Department may require post-program examinations. The Department highly recommends that students discuss their Study Abroad plans with their academic advisor prior to participation.

**HONORS IN LANGUAGES**

The Department of Languages recognizes exceptional undergraduate students by awarding them Departmental Honors in Languages and noting the award on their permanent university transcript. To graduate with Departmental Honors, students must be declared Languages Majors and meet the following requirements:

1. Meet the requirements for Graduation with Honors as listed in Chapter 7 of the UAA catalog;
2. Satisfy all requirements for a BA degree in Languages;
3. Maintain an overall UAA GPA of 3.50 with a 3.85 in the major;
4. Notify their Departmental Advisor in writing at least two semesters prior to graduation of intent to graduate with Departmental Honors;
5. Receive an honors score (90%) (based upon criteria established by the Department) on a comprehensive examination in the language(s) of focus; the comprehensive examination must be completed at least one semester prior to graduation.

**BACHELOR OF ARTS, LANGUAGES**

**ADMISSION REQUIREMENTS**

Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.

**ACADEMIC PROGRESS**

No course in which a grade below C has been received will count towards the 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 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 two courses: 3
      LING A101 The Nature of Language (3)
      or
      LSSS A111 Cultural Foundations of Human Behavior (3)
   c. Complete required courses in the emphasis language:
      A201-A202 Intermediate I and II (8)
      A301-A302 Advanced I and II (8)
   d. Complete 12 credits of approved upper division electives in or related to the emphasis language or culture, at least 9 of which must be taught in the emphasis language (see Department for list of approved courses taught in English).
   e. Complete an additional 6 credits of emphasis language approved electives in or related to the emphasis language or culture, but which must be upper division if taught in the emphasis language (see 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 or ASL.
   b. Complete one of the following two courses: 3
      LING A101 The Nature of Language (3)
      or
      LSSS A111 Cultural Foundations of Human Behavior (3)
   c. Complete required courses in the emphasis language:
      A201-A202 Intermediate I and II (8)
      A301-A302 Advanced I and II (8)
   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 (see Department for list of approved courses taught in English).
   e. Complete 8 credits (6 credits for ASL) 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. The degree program must be approved and signed by the Chair of the Department of Languages.
5. Students must take at least 6 upper division credits, in the respective emphasis language, in courses numbered higher than 302 in residence at UAA.
6. 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. 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 Enrollment Services 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 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

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LIBERAL STUDIES

Social Sciences Building (SSB), Room 343, (907) 786-1707
http://liberalstudies.uaa.alaska.edu

The Bachelor of Liberal Studies (BLS) degree is an Interdisciplinary program that provides both significant breadth across a variety of fields, meaningful depth in a single field, and the interconnections and integration among fields that allow a fuller comprehension of the modern world. It is intended for those students who prefer a broad liberal arts and sciences degree, rather than a Bachelor of Arts or Bachelor of Science degree in a single discipline. This may include students with particularly wide or still uncertain personal or career interests, or those who intend to become elementary education teachers, for whom the program has been designed specifically to incorporate the relevant State of Alaska standards and those of the National Council for Accreditation of Teacher Education (NCATE). Students wishing a career as elementary teachers should plan on pursuing the post-baccalaureate program in elementary teacher preparation following graduation with a BLS.

Other students selecting the BLS may, with proper advising, wish to pursue professional graduate education in Law or other fields. While with the proper Discipline Area Concentration a BLS graduate may pursue graduate study in a particular discipline area, students who plan to attend graduate school in a specific area are generally advised to take a disciplinary major. Many of the courses comprising the BLS are also included as the arts and sciences content component of the Bachelor of Arts in Elementary Education, offered by the College of Education for those students desiring an undergraduate route to certification as an elementary teacher.

BACHELOR OF LIBERAL STUDIES

ADMISSION REQUIREMENTS

Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.
**GRADUATION REQUIREMENTS**

Students must complete the following graduation requirements:

**A. GENERAL UNIVERSITY REQUIREMENTS**

Complete the General University Requirements for All Baccalaureate Degrees located at the beginning of this chapter.

**B. GENERAL EDUCATION REQUIREMENTS**

Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

**C. MAJOR REQUIREMENTS**

Courses marked with an asterisk (*) fulfill UAA General Education Requirements. Courses in **bold face** are also included in the Bachelor of Arts in Elementary Education, offered by the College of Education. Students must complete the following requirements and meet with a BLS or CAS advisor prior to entering their junior year and file an approved program of study form with the department. Forms and approved disciplinary areas can be found at [http://liberalstudies.uaa.alaska.edu](http://liberalstudies.uaa.alaska.edu), or by contacting the department at (907) 786-1707.

1. **Communications and Writing Skills**
   - **COMM A111** Fundamentals of Oral Communication 3
   - **ENGL A111** Methods of Written Communication 3
   - **ENGL A214** Persuasive Writing 3

2. **Liberal Studies Integrated Sciences (LSIS) Core**
   - **LSIS A101** Discoveries in Science 1
   - **LSIS A102** Origins: Earth-Solar System-Life 3
   - **LSIS A201** Life on Earth 5
   - **LSIS A202** Concepts and Processes: Natural Sciences 5

3. **Mathematical Skills**
   - **MATH A107 or MATH A108 or MATH A109** 3-6
   - **MATH A172 or MATH A200 or MATH A201**
   - **MATH A272**
   - **STAT A252** Elementary Statistics (3) 3-4
   - **STAT A253** Applied Statistics for the Sciences (4)

4. **Liberal Studies Social Sciences (LSSS) Core**
   - **AKNS/PS A411** Tribes, Nations and Peoples 3
   - **LSSS A111** Cultural Foundations of Human Behavior 3
   - **PSY** Complete one course in psychology (recommend PSY A111* General Psychology Or PSY A150* Life Span Development)
   - **ANTH A250** The Rise of Civilization 3
   - **HIST A355** Major Themes in US History 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).
   - **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

7. **Two Discipline Area Concentration**
   - a. 12 credits in one discipline, of which 9 credits must be at the upper division level (See approved list of disciplines at [http://liberalstudies.uaa.alaska.edu](http://liberalstudies.uaa.alaska.edu) and;
   - b. Nine (9) additional credits in a second discipline of which 3 credits must be at the upper division level (See approved list of disciplines at [http://liberalstudies.uaa.alaska.edu](http://liberalstudies.uaa.alaska.edu)). For example, 12 credits in Political Science and 9 credits in English.

8. **Electives**
   - 7

9. A total of 120-124 credits is required for the degree, of which 42 credits must be upper division.

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**MATHEMATICS**

**FACULTY**

Sarah Gerken, Assistant Professor, AFSGA@uaa.alaska.edu
Patricia Heiser, Assistant Professor, AFSAP@uaa.alaska.edu
Travis Rector, Assistant Professor, AFTAR@uaa.alaska.edu

The Department of Mathematical Sciences offers a Bachelor of Science degree and a Bachelor of Arts degree in mathematics. Each degree has two options - the Traditional Option and the Secondary Teaching Preparation Option.

The Traditional Option in the baccalaureate degree programs in mathematics offer an excellent foundation for any career involving theoretical or applied mathematics. Well-trained mathematicians are in demand in many sectors of society including business, finance, education, computing, and government. The Traditional Option also prepares a student for graduate study in the mathematical sciences. Both the Traditional Option (with appropriately chosen electives) and the Secondary Teaching Preparation Option satisfies NCATE standards, and prepares a student to teach mathematics at the high school level.

In addition, the Department of Mathematical Sciences offers courses and programs for those students who wish to:

- a. Obtain an Associate of Applied Science degree
- b. Obtain an Associate of Arts degree
- c. Obtain a variety of Certificates
- d. Study mathematics for use in another discipline
- e. Improve job-related mathematics skills
- f. Study mathematics for self-interest

**HONORS IN MATHEMATICS**

Students majoring in Mathematics are eligible to graduate with Departmental Honors if they satisfy the following requirements:

1. Meet the requirements for Graduation with Honors as listed in Chapter 7 of this UAA catalog.
2. Meet the requirements for a BA/BS degree in Mathematics.
3. Earn grade point average of 3.5 or above in the major requirements.
4. Complete a minimum of 12 upper division credits required for the major in residence.
BACHELOR OF ARTS, MATHEMATICS

ADMISSION REQUIREMENTS
Complete the Baccalaureate Degree Programs Admission Requirements listed at the beginning of this chapter.

GRADUATION REQUIREMENTS
Students must complete the following graduation requirements.

A. GENERAL UNIVERSITY REQUIREMENTS
Complete the General University Requirements for Baccalaureate degrees listed at the beginning of this chapter.

B. GENERAL EDUCATION REQUIREMENTS
Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

C. COLLEGE OF ARTS AND SCIENCES REQUIREMENTS
Complete the College of Arts and Sciences Requirements listed at the beginning of the CAS section.

D. MAJOR REQUIREMENTS
Students pursuing a Bachelor of Arts degree in Mathematics may choose from two options:

1. Complete the following core courses (27 Credits)
   - STAT A307 Probability 3
   - CS A109 Computer Programming (Languages vary) (3) or
   - CS A110 Java Programming (3) or
   - CS A111 Visual Basic.Net Programming (3) or
   - CS A201 Programming Concepts I (3)
   - MATH A200 Calculus I 4
   - MATH A201 Calculus II 4
   - MATH A202 Calculus III 4
   - MATH A215 Introduction to Mathematical Proofs 2
   - MATH A303 Introduction to Modern Algebra 3
   - MATH A314 Linear Algebra 3

2. Complete one of the following options:
   - Traditional Option (21 Credits)
     - MATH A302 Differential Equations 3
     - MATH A321 Analysis of Several Variables 3
     - MATH A334 Advanced Calculus 3
     - MATH A410 Introduction to Complex Analysis 3
     - MATH A422 Partial Differential Equations 3
     - Complete three additional courses from the following list: STAT A308, STAT A402, STAT A403, STAT A404, STAT A405, STAT A407, STAT A408, MATH A305, MATH A306, MATH A371, MATH A407, MATH A408, MATH A410, MATH A420, MATH A422, MATH A426.
   - 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
   - Complete two additional courses from the following list: STAT A308, STAT A402, STAT A403, STAT A404, STAT A405, STAT A407, STAT A408, MATH A302, MATH A321, MATH A324, MATH A371, MATH A407, MATH A408, MATH A410, MATH A422, MATH A426.
   - 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.
   - A total of 120 credits is required for the degree, of which 42 credits must be upper division.

BACHELOR OF SCIENCE, MATHEMATICS

ADMISSION REQUIREMENTS
Complete the Baccalaureate Degree Programs Admission Requirements listed at the beginning of this chapter.

GRADUATION REQUIREMENTS
Students must complete the following graduation requirements.

A. GENERAL UNIVERSITY REQUIREMENTS
Complete the General University Requirements for Baccalaureate degrees listed at the beginning of this chapter.

B. GENERAL EDUCATION REQUIREMENTS
Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

C. COLLEGE OF ARTS AND SCIENCES REQUIREMENTS
Complete the College of Arts and Sciences Requirements listed at the beginning of the CAS section.

D. MAJOR REQUIREMENTS
Students pursuing a Bachelor of Science degree in Mathematics may choose from two options:

1. Complete the following core courses (27 Credits)
   - STAT A307 Probability 3
   - CS A109 Computer Programming (Languages vary) (3) or
   - CS A110 Java Programming (3) or
   - CS A111 Visual Basic.Net Programming (3) or
   - CS A201 Programming Concepts I (3)
   - MATH A200 Calculus I 4
   - MATH A201 Calculus II 4
   - MATH A202 Calculus III 4
   - MATH A215 Introduction to Mathematical Proofs 2
   - MATH A303 Introduction to Modern Algebra 3
   - MATH A314 Linear Algebra 3

2. Complete one of the following options:
   - Traditional Option (21 Credits)
     - MATH A302 Differential Equations 3
     - MATH A321 Analysis of Several Variables 3
     - MATH A324 Advanced Calculus 3
     - MATH A410 Introduction to Complex Analysis 3
     - MATH A422 Partial Differential Equations 3
     - Complete three additional courses from the following list: STAT A308, STAT A402, STAT A403, STAT A404, STAT A405, STAT A407, STAT A408, MATH A305, MATH A306, MATH A371, MATH A407, MATH A408, MATH A410, MATH A420, MATH A422, MATH A426.
     - 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.
     - A total of 120 credits is required for the degree, of which 42 credits must be upper division.
   - Secondary Teaching 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
     - Complete two additional courses from the following list: STAT A308, STAT A402, STAT A403, STAT A404, STAT A405, STAT A407, STAT A408, MATH A302, MATH A321, MATH A324, MATH A371, MATH A407, MATH A408, MATH A410, MATH A422, MATH A426.
     - 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.
     - A total of 120 credits is required for the degree, of which 42 credits must be upper division.
MINOR, MATHEMATICS

Students majoring in another subject who wish to minor in Mathematics must complete the following requirements. A total of 18 credits is required for the minor, 6 of which must be approved upper division Mathematics credits.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<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>Approved upper division Mathematics electives</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

FACULTY

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John Mitchell, Associate Professor
Deborah Narang, Professor, AFDLN@uaa.alaska.edu
Kamal Narang, Professor, AFKN@uaa.alaska.edu

Gail Opalinski, Term Assistant Professor, AFGBB@uaa.alaska.edu
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Brian Wick, Professor, AFBDW@uaa.alaska.edu
Yelena Yagodina, Term Assistant Professor, AFYY@uaa.alaska.edu

MUSIC

Fine Arts Building (ARTS), Room 356, (907) 786-1595
http://music.uaa.alaska.edu

The Department of Music is dedicated to providing leadership in the musical arts for the state of Alaska. This is accomplished through teaching, performance, recordings, composition, publication, community outreach, and other creative and service-oriented endeavors related to the field of music. At the institutional level, the Department of Music, as a unit of the College of Arts and Sciences, provides a vital liberal arts link for the University of Alaska Anchorage.

The Department of Music exerts intellectual, pedagogic, and creative leadership at the college, pre-college, and community level. 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 support 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 degree 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 certification requirements for an initial teaching certificate in Music K-12. Contact the College of Education for more information: http://ed.uaa.alaska.edu/mat.

BACHELOR OF ARTS, MUSIC

BACHELOR OF MUSIC, PERFORMANCE

BACHELOR OF MUSIC, MUSIC EDUCATION EMPHASIS

ADMISSION REQUIREMENTS: ALL MAJORS

Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations. Students who declare a music major 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 are required to complete a performance evaluation. This assists faculty in determining each student’s readiness for entry into
juria private lessons, ensembles, and academic music classes. Students judged not ready for juried private lessons will be required to complete non-juried private lessons to build performance skills. To develop prerequisite understanding of music theory, those students not ready for Theory and Sightsinging/Eartraining courses will be required to complete Music Fundamentals. Upon completion of the performance evaluation, advisors will assist students in planning a first year of study best suited to their needs.

**ACADEMIC PROGRESS: ALL MAJORS**

Upon successful completion of one semester of juried private lessons (MUS A161), students file a Change of Degree form to move from pre-major to major status. At the end of the sophomore year, all music majors must demonstrate a satisfactory level of proficiency of performance on their applied instrument in order to advance to upper division courses. A student may elect to continue private instruction at the 200-level in attempting to pass requirements for admission to upper division study. Students must also have completed a music technical training workshop and must have demonstrated proficiency in all aspects of recital technical support.

**MUS A154A, Functional Piano I, and the piano proficiency exam by jury, must be passed prior to completion of 60 credits in the program. Music majors may not enroll in certain upper division music courses until this jury exam 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:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS A131</td>
<td>Music Theory I</td>
<td>3</td>
</tr>
<tr>
<td>MUS A132</td>
<td>Music Theory II</td>
<td>3</td>
</tr>
<tr>
<td>MUS A133</td>
<td>Sightsinging and Ear Training I</td>
<td>2</td>
</tr>
<tr>
<td>MUS A134</td>
<td>Sightsinging and Ear Training II</td>
<td>2</td>
</tr>
<tr>
<td>MUS A154</td>
<td>Functional Piano I</td>
<td>1</td>
</tr>
<tr>
<td>MUS A221</td>
<td>History of Music I</td>
<td>3</td>
</tr>
<tr>
<td>MUS A222</td>
<td>History of Music II</td>
<td>3</td>
</tr>
<tr>
<td>MUS A231</td>
<td>Music Theory III</td>
<td>3</td>
</tr>
<tr>
<td>MUS A232</td>
<td>Music Theory IV</td>
<td>3</td>
</tr>
<tr>
<td>MUS A233</td>
<td>Sightsinging and Ear Training III</td>
<td>2</td>
</tr>
<tr>
<td>MUS A234</td>
<td>Sightsinging and Ear Training IV</td>
<td>2</td>
</tr>
<tr>
<td>MUS A280</td>
<td>Basic Conducting</td>
<td>2</td>
</tr>
<tr>
<td>MUS A331</td>
<td>Form and Analysis</td>
<td>3</td>
</tr>
</tbody>
</table>

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, A422-A424, or A431-A432, for example) or in upper division private lessons (MUS A361) until they have passed the Piano Proficiency exam by jury.

**E. ADDITIONAL MAJOR REQUIREMENTS: BACHELOR OF ARTS, MUSIC**

1. **Private lessons** (on your major instrument, MUS A161-MUS A262) 4

2. **Ensemble**

   - Choose the class appropriate to your major instrument:
     - **Voice Majors:**
       - MUS A301B University Singers (2)
     - **Piano Majors:**
       - MUS A302B Chamber Music and Accompanying (2)
     - **Wind Majors:**
       - MUS A303B University Wind Ensemble (2)
     - **Percussion Majors:**
       - MUS A303B University Wind Ensemble (2)
     - **String Majors:**
       - MUS A307B University Sinfonia (2)
     - **Guitar Majors:**
       - MUS A409B University Guitar Ensemble (2)

3. **Master Class**

   - Four semesters of Master Class are required.
   - Choose the class appropriate to your major instrument:
     - **Wind and String Majors:**
       - MUS A466 String and Wind Master Class (1)
     - **Voice, Piano and Guitar Majors:**
       - MUS A467 Piano Master Class (2)
       - MUS A468 Voice Master Class (2)
       - MUS A469 Guitar Master Class (2)
     - **Percussion Majors:**
       - MUS A408B University Percussion Ensemble (2)

4. Sixty-seven (67) credits must be completed outside 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 lesson** - on your major instrument: MUS A161-A462 (1-2)

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 and
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 A365, MUS A302, MUS A313, MUS A407, MUS A408 or MUS A409.

Note: Credits completed will vary from 2 to 4, depending upon which courses are selected.

4. **Master Class** 8/16

Eight semesters of Master Class are required. Choose the class appropriate to your major instrument:

- **Wind and String Majors**
  - MUS A466 String and Wind Master Class (1)

- **Voice, Piano and Guitar Majors**
  - MUS A467 Piano Master Class (2) or MUS A468 Voice Master Class (2) or MUS A469 Guitar Master Class (2)

- **Percussion Majors**
  - MUS A408B University Percussion Ensemble (2)

5. **Conducting** 2

- MUS A38 Choral Conducting (2) or MUS A382 Instrumental Conducting (2)

6. **Upper division Elective Credits** 12

Select from these 3-credit courses:

- MUS A422-A424 History Seminars (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 (6 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 lesson** - on your major instrument: 16
   - MUS A161-A462 (1-2)

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 A307B University Wind Ensemble (2)
   - **String Majors:**

3. **Master Class** 8

   Eight semesters of Master Class are required. Choose the class appropriate to your major instrument:

   - **Wind and String Majors**
     - MUS A466 String and Wind Master Class (1)

   - **Voice, Piano and Guitar Majors**
     - MUS A467 Piano Master Class (2) or MUS A468 Voice Master Class (2) or MUS A469 Guitar Master Class (2)

   - **Percussion Majors**
     - MUS A408B University Percussion Ensemble (2)

5. **Conducting** 2

   - MUS A38 Choral Conducting (2) or MUS A382 Instrumental Conducting (2)

6. **Methods and Techniques** 12

   - MUS A371-A376 (2)

7. **Music History Elective** (select from):

   - MUS A420-A424 History Seminars (3)
   - MUS A432 Orchestration (3)

8. Students seeking a Bachelor of Music, Music Education Emphasis degree must complete a half recital their senior year. Students must demonstrate in this recital the ability to perform a program of artistic merit satisfactorily in public.

9. It is recommended that students select HIST A341 as a GER Social Science course.

10. A total of 128-130 credits is required for the degree, of which 42 credits must be upper division.

11. Students wanting certification in Music K-12 must complete a one-year, post-baccalaureate program. Admission to the program is limited.
13. UAA’s graduate application for admission into the post-baccalaureate program must be completed either by MARCH 1 for admission to the program the following Summer or by OCTOBER 1 for admission to the program the following Spring.

14. Students seeking music certification must have completed all requirements for the Bachelor of Music, Music Education Emphasis degree with a 3.0 GPA or better for admission to the post-baccalaureate program.

15. Students must take the GRE, PRAXIS I, and the PRAXIS II in music for admission to the post-baccalaureate program.

16. Students seeking certification should contact the College of Education for an application packet and a detailed description of the post-baccalaureate 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 A221 History of Music I (3) or MUS A222 History of Music II (3)

3. Private Lessons 2-4

To complete this requirement, students must successfully pass two jury exams, one at the end of each semester of study.

4. Master Class 2/4

Two semesters of master class are required; credits vary. Choose the class appropriate to your major instrument:

MUS A466 String and Wind Master Class (1)

MUS A467 Piano Master Class (2)

MUS A468 Voice Master Class (2)

MUS A469 Guitar Master Class (2)

MUS A408B University Percussion Ensemble (2)

5. Ensemble 4/6

Choose the ensemble appropriate to your major instrument:

MUS A301B University Singers (2)

MUS A302B Chamber Music and Accompanying (2)

MUS A303B University Wind Ensemble (2)

MUS A307B University Sinfonia (2)

MUS A409B University Guitar Ensemble (2)

NATURAL SCIENCES

Engineering Building (ENGR) Room 333, (907) 786-4770
http://biology.uaa.alaska.edu

Modern sciences do not stand alone. Most draw heavily upon the tenets of at least one other discipline. The Natural Sciences curriculum emphasizes the interrelationships among the sciences and allows students to obtain a strong background in two or more sciences while meeting the requirements of a single degree program. A minimum of 74 science credits is required for this major, as specified below. For individuals pursuing careers as secondary science educators, it is required by the College of Education that they complete 12 credits in each of the following sciences: Biology, Chemistry, Physics, and Earth and Space Science.

The Natural Sciences program is administered by the Department of Biological Sciences. For further information about the Natural Sciences program, contact the Chairperson of the Department of Biological Sciences. Upon acceptance into the major, an academic advisor from the Department of Biological Sciences will be assigned in accordance with the student’s declared area of emphasis.

BACHELOR OF SCIENCE, NATURAL SCIENCES

ADMISSION REQUIREMENTS

Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.

ACADEMIC PROGRESS

In order to graduate with a BS in Natural Sciences, all courses covered under Major Requirements for a BS in Natural Sciences must be completed with a grade of C or better. Students who audit a course intended to meet the Natural Sciences degree requirements or who are unable to earn a grade of C or better in the course may repeat the course. All prerequisites for courses used to meet the Natural Sciences degree requirements must be completed with a grade of C or better.

GRADUATION REQUIREMENTS

Students must complete the following graduation requirements:

A. GENERAL UNIVERSITY REQUIREMENTS

Complete the General University Requirements for All Baccalaureate Degrees located at the beginning of this chapter.

B. GENERAL EDUCATION REQUIREMENTS

Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

C. COLLEGE OF ARTS AND SCIENCES REQUIREMENTS

Complete the College of Arts and Sciences Requirements listed at the beginning of the CAS section. It is recommended that MATH A200 or MATH A272, STAT A253 or STAT A307, and the Computer Programming requirements be completed in the first two years of study.

Note: Major requirements may also be used to satisfy the College of Arts and Sciences Requirements.

D. MAJOR REQUIREMENTS

Students must complete the following major requirements:

1. Complete three of the following course sequences:

   BIOL A115 Fundamentals of Biology I (4)
   BIOL A116 Fundamentals of Biology II (4)
   CHEM A105/L General Chemistry I (4)
   CHEM A106/L General Chemistry II (4)
   GEOG A111 Physical Geology (4)
   GEOG A221 Historical Geology (4)
   PHYS A123/L Basic Physics I (4)
   PHYS A124/L Basic Physics II (4)
Note: It is recommended that the three science course sequences be completed in the first two years of study. For students whose emphasis lies in the area of the biological sciences, it is recommended that BIOL A242 and A252 also be completed within the first two years of study, as it is a prerequisite for several upper division biology courses.

2. Complete an additional 50 science credits, of which at least 35-38 credits must be upper division. UAA science courses approved for the Natural Sciences degree are listed below:

| Anthropology |  | Geologic Information |
| Astronomy |  | Systems |
| Biology |  | Geometrics |
| Chemistry |  | Health Sciences |
| Computer Science |  | Honors Program |
| Environmental Studies |  | Mathematics |
| Geophysics |  | Psychology |
| Geology |  | Statistics |
|  |  | UAF Palmer Research Center |

Other courses may be considered by petition. Acceptable credits from other accredited institutions include but are not limited to credits earned in the following disciplines:

| Statistics |  | Natural Resource Management |
| Environmental Sciences |  | Wildlife Management |
| Engineering |  | Oceanography |

Note: Credit for laboratory, internship, or clinical practicum courses will be awarded on an individual basis with the general rule of one credit for three lab hours applying in most cases.

3. Courses taken to meet the 50 credit Natural Science major degree requirement must be chosen with the approval of your advisor.

4. Submit a Program of Study signed by your advisor to Enrollment Services Office during the semester prior to the semester in which you plan to graduate. All courses listed in the Program of Study must be approved by the formal advisor before submission to the Enrollment Services Office.

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

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PHILOSOPHY

Administration/ Humanities Building (ADM), Room 254, (907) 786-4455
http://philosophy.uaa.alaska.edu

Philosophy is the creative and critical reflection on enduring questions concerning the nature of the world and our place in it. For example, Philosophy asks metaphysical questions about what exists, epistemic questions about what we can claim to know, and ethical questions about the nature of the good life and right action. In addition, philosophy involves the study and practice of good reasoning and clear thinking, skills that are essential to any discipline or profession.

The Philosophy Department offers a variety of courses in the central areas of philosophy that acquaint students with the rich, living traditions of the world and explore historical and contemporary issues. Departmental faculty have a wide range of philosophical interests and expertise, with a particular strength in theoretical and applied ethics.

The Philosophy Department offers several options for students interested in the study of philosophy: (1) a Bachelor of Arts in Philosophy, with a philosophy track, a law track, or an applied ethics track; (2) a Certificate of Applied Ethics; (3) a Minor in Philosophy, with a philosophy track or law track. Please read the introduction to each program below to determine which one of these options may be suitable for your particular needs.

The 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 non profit sector, public administration, helping professions, or government service; and (4) those interested in the study of practical ethics.

The Certificate in Applied Ethics is designed for students whose intended careers will be complemented by emphasis in ethics education: for example, business majors who may plan also to be ethics officers; those who intend to become professionals, such as lawyers, nurses, social workers, or engineers; or those in public administration, the helping professions, government service, and nonprofits. It will also be applicable to persons presently in the workforce such as corporate ethics officers, executives, and professionals who are seeking career advancement or simply want to acquire skills and knowledge in ethical decision-making.

The Minor in Philosophy is designed for students who are interested in philosophy but pursuing another degree and for students majoring in a discipline that is complemented by the study of philosophy; such as History, Justice, English, Psychology, Anthropology, Sociology.
Mathematics, or the natural sciences. The Law Track is intended for students who plan to attend law school but may be majoring in another degree. This is an appropriate minor for Justice majors.

**Philosophy Department Honors**

The Department of Philosophy recognizes exceptional undergraduate students by awarding them Departmental Honors in Philosophy and noting the award on their permanent university transcript. 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 of this UAA catalog.
3. Maintain a grade point average of 3.75 or above in courses specific to the philosophy major.
4. Complete the Senior Research Project, PHIL A498, 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 the date on which the Application for Graduation with the Enrollment Services Office is filed, of the intention to graduate with Departmental Honors.

**Bachelor of Arts, Philosophy**

**Admission Requirements**

Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.

**Graduation Requirements**

Students must complete the following graduation requirements:

A. **General University Requirements**

Complete the General University Requirements for All Baccalaureate Degrees located at the beginning of this chapter.

B. **General Education Requirements**

Complete the General Education Requirements for Baccalaureate Degrees located at the beginning of this chapter.

C. **College of Arts and Sciences Requirements**

Complete the College of Arts and Sciences Requirements for the Bachelor of Arts listed at the beginning of the CAS section.

D. **Major Requirements**

1. Complete the following core courses:

   **Logical Reasoning and Argumentation:**
   - PHIL A101 Introduction to Logic 3

   **Foundations of Philosophy:**
   - PHIL A201 Introduction to Philosophy 3
   - PHIL A211 History of Philosophy I 3
   - PHIL A212 History of Philosophy II 3

   **Ethical Theory and Value studies:**
   - PHIL A301 Ethics 3

2. Choose one of the following tracks:

   **Philosophy Track** (21 credits)
   - Complete the following courses: 6
     - PHIL A302 Biomedical Ethics (3)
     - PHIL/ENVI A303 Environmental Ethics (3)
     - PHIL A304 Business Ethics (3)
     - PHIL A405 Professional Ethics (3)
     - PHIL A309 Philosophy of Mind (3)

   **Applied Ethics Track** (18 credits)
   - Complete the following courses: 6
     - PHIL A302 Biomedical Ethics (3)
     - PHIL/ENVI A303 Environmental Ethics (3)
     - PHIL A304 Business Ethics (3)
     - PHIL A405 Professional Ethics (3)
     - PHIL A406 Philosophy of Law (3)
     - PHIL A415 Feminist Philosophy (3)

   **Law Track** (21 credits)
   - Complete the following courses: 6
     - PHIL A302 Biomedical Ethics (3)
     - PHIL/ENVI A303 Environmental Ethics (3)
     - PHIL A304 Business Ethics (3)
     - PHIL A405 Professional Ethics (3)
     - PHIL A406 Philosophy of Law (3)
     - PHIL A407 Topics in Contemporary Philosophy (3)
     - PHIL A492 Seminar on an Enduring Philosopher (3)
     - PHIL A498 Senior Research Project (3)

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

**Undergraduate Certificate, Applied Ethics**

**Admission Requirements**

A student must satisfy the Admission to Certificate Requirements in Chapter 7, Academic Standards and Regulations.

**Graduation Requirements**

1. Complete the following requirements:

   **Written Communication Skills**
   - Complete two courses from the GER requirements for written communication skills (6 credits).

   **Oral Communication Skills**
   - Complete one course from the GER requirements for oral communication skills (3 credits).
Quantitative Skills
Complete one course from the GER requirements for quantitative skills (3 credits).

Critical Reasoning Skills
Complete the following course:
PHIL A101 Introduction to Logic 3

Ethical Theory
Complete the following course:
PHIL A201 Ethics 3

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:
PHIL A405 Professional Ethics (3)
BA A488 The Environment of Business (3)
PADM A618 Public Accountability, Ethics and Law (3)
PSY A611 Ethics and Professional Practice (3)

Note: Graduate courses taken to satisfy this requirement cannot also be counted towards a graduate degree in that program.

Service Learning: Complete the following course:
PHIL A495 Service Learning in Applied Ethics 3

A total of 30 credits is required for the certificate.

MINOR, PHILOSOPHY

Students majoring in another subject who wish to minor in Philosophy must complete the following requirements. A total of 18 credits is required for the minor, 6 of which must be upper division.

Choose one of the following tracks (18 credits):
(Courses selected may not be used in more than one track.)

**Philosophy Track**

Complete the following courses:

**Logical Reasoning and Argumentation:**
PHIL A101 Introduction to Logic 3

**Foundations of Philosophy:**
PHIL A201 Introduction to Philosophy 3
PHIL A211 History of Philosophy I 3
PHIL A212 History of Philosophy II 3

Complete two courses from the following:
PHIL A301 Ethics (3)
PHIL A302 Biomedical Ethics (3)
PHIL/ENVI A303 Environmental Ethics (3)
PHIL A304 Business Ethics (3)

**Law Track**

Complete the following courses:

**Logical Reasoning and Argumentation:**
PHIL A101 Introduction to Logic 3

**Foundations of Philosophy:**
PHIL A201 Introduction to Philosophy 3
PHIL A211 History of Philosophy I 3
PHIL A212 History of Philosophy II 3

**Ethics and Values:**
PHIL A301 Ethics 3
PHIL A406 Philosophy of Law 3

**Philosophical Foundations of the Law:**
PHIL A406 Philosophy of Law 3

**FACULTY**

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**PHYSICS**

Engineering Building (ENGR), Room 333D, (907) 786-1238
http://salt.uaa.alaska.edu

Physics is the universal science. It is the rational development of experiments, observations, and theories to explain the fundamental structure of the universe. Physicists study everything from the smallest subatomic particle to the entire Universe.

The laws that physicists have discovered form the basis for understanding the world and also for making the devices and machines that we see and use every day.

The Physics Minor will provide a valuable option especially to Engineering, Math/Computer Science, Chemistry, Biology, or Geology majors. It is widely known that a strong physics background increases a graduate's employability.

**MINOR, PHYSICS**

Students majoring in another subject who wish to minor in Physics must complete for following requirements. A total of 18 credits is required.

**FACULTY**

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Katherine Rawlins, Assistant Professor, AFKR@uaa.alaska.edu
Travis Rector, Assistant Professor, AFTAR@uaa.alaska.edu

**POLITICAL SCIENCE**

Social Sciences Building (SSB), Room 367, (907) 786-4897
http://polsci.uaa.alaska.edu

In its oldest definition, political science was called the master science. More modern definitions are less comprehensive, but of the social sciences, political science has perhaps the least definite boundaries and the widest concerns. Consequently, political science covers many different subjects, uses several diverse methods, and appeals to a variety of students.
Students come to political science because they are interested in politics: some of them with an eye to a political career, some with a scholarly intent, and many wishing to know more about this central, inescapable human concern. The Department of Political Science aims to make all students aware and critical of their first opinions (since human beings are at their most opinionated in politics); to open up the possibilities of politics; to reveal the permanent political problems; to impart an intellectual discipline; and to supply a guide for choice.

Political Science is divided into five areas: Comparative Politics, International Relations, Political Philosophy, American Politics, and Political Behavior. Majors in Political Science are required to take at least one course in each of these areas, to specialize in one of them, and to complete introductory courses in political science.

The Department also offers minors in Political Science and Public Administration. Students selecting the Political Science minor take two introductory courses and four additional, upper division Political Science electives. Students selecting the Public Administration minor take two introductory courses; courses in public administration, public policy, and organization theory; and one additional starred course in Political Science.

The Department welcomes all students who want to learn more about politics. It reserves its honors for majors who earn qualifying marks both in a senior seminar and on a comprehensive examination.

**HONORS IN POLITICAL SCIENCE**

Students majoring in Political Science are eligible to graduate with Departmental Honors if they satisfy all of the following requirements:

1. Meet the requirements for a BA degree in Political Science.
2. Maintain a grade point average of 3.50 or above in courses applicable to the degree requirements.
3. Complete PS A492 Senior Seminar in Politics in the final spring term of study with an honor grade (A or B).
4. Receive an honors score (based upon criteria established by the Department) on a comprehensive examination for majors.

*Note: Departmental Honors are awarded by the faculty in Political Science.*

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**BACHELOR OF ARTS, POLITICAL SCIENCE**

**ADMISSION REQUIREMENTS**

Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.

**GRADUATION REQUIREMENTS**

Students must complete the following graduation requirements:

<table>
<thead>
<tr>
<th>A. GENERAL UNIVERSITY REQUIREMENTS</th>
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<tbody>
<tr>
<td>Complete the General University Requirements for All Baccalaureate Degrees located at the beginning of this chapter.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>B. GENERAL EDUCATION REQUIREMENTS</th>
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</thead>
<tbody>
<tr>
<td>Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.</td>
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<table>
<thead>
<tr>
<th>C. COLLEGE OF ARTS AND SCIENCES REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete the College of Arts and Sciences Requirements listed at the beginning of the CAS section.</td>
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<table>
<thead>
<tr>
<th>D. MAJOR REQUIREMENTS</th>
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</thead>
<tbody>
<tr>
<td>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 an section mark ($) after their titles.</td>
</tr>
<tr>
<td>1. Complete the following core courses:</td>
</tr>
<tr>
<td>PS A101 Introduction to American Government § 3</td>
</tr>
<tr>
<td>PS A102 Introduction to Political Science § 3</td>
</tr>
<tr>
<td>PS A301 Comparative Political Economy 3</td>
</tr>
</tbody>
</table>

2. Complete one starred (*) course from each of the five areas below:

<table>
<thead>
<tr>
<th>Comparative Politics</th>
</tr>
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<tbody>
<tr>
<td>*PS A311 Comparative Politics § (3)</td>
</tr>
<tr>
<td>PS A312 Comparative Politics: Case Studies (3)</td>
</tr>
<tr>
<td>PS/AKNS A411 Tribes, Nations, and Peoples (3)</td>
</tr>
<tr>
<td>PS A490 Studies in Politics (1-3)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>International Relations</th>
</tr>
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<tbody>
<tr>
<td>*PS A321 International Relations § (3)</td>
</tr>
<tr>
<td>*PS A322 United States Foreign Policy (3)</td>
</tr>
<tr>
<td>PS A324 Model United Nations (1/3)</td>
</tr>
<tr>
<td>PS A424 International Law and Organization (3)</td>
</tr>
<tr>
<td>PS A490 Studies in Politics (1-3)</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Political Philosophy</th>
</tr>
</thead>
<tbody>
<tr>
<td>*PS A331 Political Philosophy § (3)</td>
</tr>
<tr>
<td>*PS A332 History of Political Philosophy I: Classical § (3)</td>
</tr>
<tr>
<td>*PS A333 History of Political Philosophy II: Modern § (3)</td>
</tr>
<tr>
<td>PS A432 Contemporary Political Theory (3)</td>
</tr>
<tr>
<td>PS A490 Studies in Politics (1-3)</td>
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<thead>
<tr>
<th>American Politics</th>
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<tbody>
<tr>
<td>*PS A341 Congress (3)</td>
</tr>
<tr>
<td>*PS A342 The American Presidency (3)</td>
</tr>
<tr>
<td>PS/JUST A343 Constitutional Law (3)</td>
</tr>
<tr>
<td>PS A344 State and Local Politics (3)</td>
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<tr>
<td>PS A345 Alaska Government and Politics (3)</td>
</tr>
<tr>
<td>PS/AKNS A346 Alaska Native Politics (3)</td>
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<tr>
<td>PS A347 Public Administration (3)</td>
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<tr>
<td>PS A348 Public Policy (3)</td>
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<tr>
<td>PS A490 Studies in Politics (1-3)</td>
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<table>
<thead>
<tr>
<th>Political Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>*PS/SOC A351 Political Sociology § (3)</td>
</tr>
<tr>
<td>*PS A353 Political Behavior, Participation, and Democracy (3)</td>
</tr>
<tr>
<td>PS A453 Organization Theory (3)</td>
</tr>
<tr>
<td>PS A490 Studies in Politics (1-3)</td>
</tr>
<tr>
<td>PS A495 Internship in Political Science (1-3)</td>
</tr>
</tbody>
</table>

3. Complete 6 credits in additional upper division Political Science courses from one of the five areas listed above. PS A490 may be repeated with different subtitle.

4. A total of 120 credits is required for the degree, of which 42 credits must be upper division, and a minimum of 39 Political Science credits.

**MINORS**

The Department of Political Science offers two minors, one in Political Science and one in Public Administration. A minor requires 18 credits earned according to the following rules.

*Note: Courses required for Political Science minors which may be used to meet General Education Requirements and/or College of Arts and Sciences BA requirements are designated by an section mark ($) after their titles.*

**POLITICAL SCIENCE MINOR**

<table>
<thead>
<tr>
<th>Introductory courses:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PS A101 Introduction to American Government § 3</td>
</tr>
<tr>
<td>PS A102 Introduction to Political Science § 3</td>
</tr>
</tbody>
</table>

Upper division Political Science courses 12
PUBLIC ADMINISTRATION MINOR

Introductory courses:
- PS A101 Introduction to American Government § 3
- PS A102 Introduction to Political Science § 3

Additional courses, as follows:
- PS A347 Public Administration 3
- PS A348 Public Policy 3
- PS A453 Organization Theory 3

One additional starred (*) course from one of the areas listed in item 2 above under major requirements. 3

Note: Political Science majors who earn a minor in Public Administration may not count upper division courses required for the minor (i.e., PS A347, PS A348, or PS A453) toward the major requirements in item 3 above for additional upper division credits in Political Science.

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PSYCHOLOGY

Social Sciences Building (SSB), Room 214, (907) 786-1711
http://psych.uaa.alaska.edu

The Undergraduate Psychology Program offers mentorship and high-quality training in the science of behavior and mental processes and, in so doing, enriches the lives of our students, citizens of Alaska, and the field of psychology. In service of this mission, the faculty provides effective instruction, academic and career advising, research training, professional skill development, service opportunities, preparation for graduate school, and employment in the human service field.

The psychology major requirements are flexible and are designed to serve a variety of career goals. Both the Bachelor of Arts and the Bachelor of Science degrees are available. The student majoring in psychology pursuing a general interest in human nature will probably take a different sequence of psychology courses than a student who is preparing for advanced work in psychology. All students are encouraged to plan undergraduate work carefully. Early and frequent consultation with an advisor is helpful in selecting courses which will provide a solid foundation in psychology and a good general education.

OCCUPATIONAL ENDORSEMENT CERTIFICATE, COMMUNITY MENTAL-HEALTH SERVICES

Students can earn on their transcript an Occupational Endorsement Certificate in Community Mental-Health Services. This transcripted certificate is available to any student – not just Psychology Majors – who receive grades of C or higher in the following five courses designed to provide some of the knowledge and skills appropriate for a variety of entry-level jobs in community mental-health settings. Taken together, the five courses (and their two prerequisites) introduce students to mental-health problems, communication skills, consumer empowerment, assessment, professional networking, service facilitation, behavior change processes, advocacy, crisis intervention, organizational settings, documentation, ethics, and professional behavior. Mental-health problems common to Alaska receive special emphasis. Two semesters of community placement allow skills to be practiced in mental health settings.

OCCUPATIONAL ENDORSEMENT CERTIFICATE REQUIREMENTS

ADMISSION

Complete admission requirements for Occupational Endorsement Certificates found in Chapter 7 of this catalog.

1. Satisfy General University Requirements for Occupational Endorsement Certificates found in the beginning of this chapter.
2. Complete the each of the following courses with a grade of C or higher:
   - PSY A327 Field Experience in Psychology* 3
   - PSY A372 Community Psychology* 3
   - PSY A427 Advanced 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

HONORS IN PSYCHOLOGY

The Department of Psychology recognizes exceptional undergraduate students by awarding them Departmental Honors in Psychology and noting the award on their permanent university transcript. 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 Enrollment Services Office.

BACHELOR OF ARTS, PSYCHOLOGY

BACHELOR OF SCIENCE, PSYCHOLOGY

ADMISSION REQUIREMENTS

Complete the admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.

GRADUATION REQUIREMENTS

Students must complete the following graduation requirements:

A. GENERAL UNIVERSITY REQUIREMENTS

Complete the General University Requirements for All Baccalaureate Degrees listed at the beginning of this chapter.

B. GENERAL EDUCATION REQUIREMENTS

Complete the General Education Requirements listed at the beginning of this chapter.

C. COLLEGE OF ARTS AND SCIENCES REQUIREMENTS

Complete the College of Arts and Sciences Requirements listed at the beginning of this chapter.
D. MAJOR REQUIREMENTS

1. Psychology Core Requirements (30 Credits)
   - PSY A111 General Psychology 3
   - PSY A150 Life Span 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 A368 Personality 3
   - PSY A370 Biological Psychology 3
   - PSY A375 Social Psychology 3

2. Psychology Capstone Requirement (3 Credits)
   A capstone course is required of all psychology majors (BA or BS). This course is designed to synthesize and apply material from the psychology major. Choice of a capstone should be based, at least in part, on the student’s future career plans. Students planning to work in human service jobs following their baccalaureate degree should consider taking PSY A427. Students planning on graduate work in Psychology should consider taking PSY A412, PSYA420 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 Advanced Field Experience in Psychology (3) or
   - PSY A499 Senior Thesis (3)

3. Psychology Electives (9 Credits)
   Take an additional 9 credits of psychology, 6 of which must be upper division.

4. Psychology Exit Exam
   All psychology majors are required to take the exit exam, a standardized test of knowledge of psychology approved by the Psychology Department. There is no minimum score required for graduation.

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

MINOR, PSYCHOLOGY

Students majoring in another subject who wish to minor in Psychology must complete a total of 18 credits of Psychology, of which 6 must be upper division.

Requirements include the following:
1. PSY A111 General Psychology
2. Three additional courses required in the core above (see list D.1).
3. Two additional Psychology courses

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SOCIOLOGY

Social Sciences Building (SSB), Room 372, (907) 786-1714
http://sociology.uaa.alaska.edu

Sociology is the study of social systems-the way they are formed, sustained, and changed. It is concerned with processes which shape individual communication, world views and behavior. The curriculum in sociology is meant to provide the student with the following: a contribution to a liberal arts education, preparation for graduate training in sociology, or preparation for applied sociology in the world of work. Within the major, students can select a specialization in Family and Life Cycles, Community and Change, or General Sociology with a focus on liberal arts. Within the Family and Community specializations, majors must select either an academic or applied focus.

HONORS IN SOCIOLOGY

Students majoring in Sociology are eligible to graduate with Departmental Honors if they satisfy all of the following:

1. Meet all the requirements for a BA or BS degree in Sociology.
2. Maintain a grade point average of 3.50 or above in all Sociology courses.
3. Attain a score at or above the 90th percentile on the ETS Major Field Test.

BACHELOR OF ARTS, SOCIOLOGY
BACHELOR OF SCIENCE, SOCIOLOGY

ADMISSION REQUIREMENTS

Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.

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:
   - SOC A101 Introduction to Sociology 3
   - SOC/PS A361 Social Science Research Methods 3
   - SOC A375 Social Psychology 3
   - SOC A402 Theories of Sociology 3
   - SOC/PSY A453 Application of Statistics to the Social Sciences 4
   - SOC A488 Capstone Seminar 3

2. Complete one of the following options:
Note: Courses may not be applied to both categories A & B within an option.

**Option I: Family and Life Cycles** (18 credits)
For majors specializing in small groups and family systems:

A. Complete three courses from the following list:
   SOC A101 Introduction to Gerontology (3)
   SOC A201 Social Problems and Solutions (3)
   SOC A202 The Social Organization of Society (3)
   SOC A307 Demography (3)
   SOC A373 Strategies of Community Change (3)
   SOC A487 Sociology Practicum (3)
   (may be repeated up to 6 credits)

B. Select either: 3
   a) Select one course from the following list:
      SOC A352 Women and Social Action (3)
      SOC A377 Men, Women and Change (3)
      SOC A387 Gay and Lesbian Lifestyles (3)
      SOC A452 Violence in Intimate Relationships (3)
      SOC A490 Selected Topics in Contemporary Issues (3)
      (may be repeated for up to 6 credits)
   b) Select 6 credits from the following list:
      SOC A242 An Introduction to Marriage, Family, and Intimate Relationships (3)
      SOC A342 Sexual, Marital and Family Lifestyles (3)
      SOC A351 Political Sociology (3)
      SOC A363 Social Stratification (3)
      SOC A370 Medical Sociology (3)
      SOC A380 Seminar in Contemporary Issues (3)
      SOC A407 Formal Organizations (3)
      SOC A408 Sociology of Race and Ethnicity (3)
      SOC A490 Selected Topics/Contemporary Issues (3)

2) For the applied emphasis complete 12 credits
   Complete the following:
   a) For the remaining 9 credits, you may select all nine (9) credits from the following list:
      SOC A352 Women and Social Action (3)
      SOC A373 Strategies of Community Change (3)
      SOC A487 Sociology Practicum (3)
      (may be repeated up to 6 credits)
   b) Select 6 credits from the courses listed in Option II, b.2.a (above) and an additional course from the list in Option II, b.1.

**Option II: Community and Change** (18 credits)
For majors specializing in community and social change:

A. Complete six credits from the following list:
   SOC A222 Small and Rural Communities (3)
   SOC A280 Seminar in Contemporary Issues (3)
   SOC A309 Urban Sociology (3)

B. Select either: 3
   a) Select either:
      SOC A201 Social Problems and Solutions (3)
      SOC A202 The Social Organization of Society (3)
   b) Select one course from the following list:
      SOC A307 Demography (3)
      SOC A351 Political Sociology (3)
      SOC A363 Social Stratification (3)

3. 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/PSS A361 Social Science Research Methods (3)
SOC A402 Theories of Sociology (3)
Upper division Sociology electives 6
Sociology electives, any level 6

**FACULTY**
Sharon Araji, Professor/Chair, AFNKA@uaa.alaska.edu
Nancy Andes, Professor, AFNKA@uaa.alaska.edu
Chris Cromer, Adjunct, cromercm@hotmail.com
3. A total of 23 credits is required in the minor.

2. Complete a minimum of 9 credits from the following:

Theatrical endeavor, including acting, voice, dialects, movement for the approach in its curriculum. Theatre courses cover all the basic areas of

http://theatre.uaa.alaska.edu

Fine Arts Building (ARTS), Room 302, (907) 786-1792

Kanapathi Thiru, Professor/Chair, AFKT@uaa.alaska.edu

FACULTY

Kanapathi Thiru, Professor/Chair, AFKT@uaa.alaska.edu

THEATRE

Fine Arts Building (ARTS), Room 302, (907) 786-1792

http://theatre.uaa.alaska.edu

The Department of Theatre and Dance offers a well-rounded liberal arts approach in its curriculum. Theatre courses cover all the basic areas of theatrical endeavor, including acting, voice, dialects, movement for the actor, directing, stagecraft, scene design, lighting, costuming, makeup, dramatic literature, theatre history, dramatic theory and criticism, and play writing. The dance program offers courses in dance techniques, choreography, improvisation, dance history and dance research methods.

Theatre is the art of giving life in performance to dramatic literature. Production is at the very center of our award-winning theatre and dance program. Each season UAA Theatre and Dance produces three to four plays on its “modified thrust” Mainstage, and as many as twenty one-act or full-length plays in the student-directed Second Stage program. Some years, one of our productions tours rural Alaska. Other years, the department is invited to present a production at the American College Theatre Festival. The plays are cast at open auditions and more than 100 majors, non-majors and members of the community are involved in our season 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 in the Jerry Harper Studio Theatre inclusive of the Dance Ensemble's annual “Voices” concert and our “Expanding the Stage” offering. “Expanding the Stage” is dedicated to the blurring of the boundaries between dance, theatre, and the visual arts. Guest artist residencies are a staple of the program, and other frequent performances include the UAA Jazz Week. All dance minors, or theatre majors choosing the dance emphasis, are required to participate in “Voices” 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 Individual Research (THR A498) 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 Enrollment Services.

BACHELOR OF ARTS, THEATRE

ADMISSION REQUIREMENTS: ALL MAJORS

Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.

GRADUATION REQUIREMENTS

Students must complete the following graduation requirements:

A. GENERAL UNIVERSITY REQUIREMENTS

Complete the General University Requirements for All Baccalaureate Degrees listed at the beginning of this chapter.

B. GENERAL EDUCATION REQUIREMENTS

Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

C. COLLEGE OF ARTS AND SCIENCES REQUIREMENTS

Complete the College of Arts and Sciences Requirements listed at the beginning of the CAS section.

D. MAJOR REQUIREMENTS

1. Complete the following required core courses:

STATISTICS

Social Sciences Building (SSB), Room 154, (907) 786-1744

http://math.uaa.alaska.edu

Statistics courses are offered in the Department of Mathematical Sciences.

During the past several decades, the social and economic structure of the United States has shifted from an industrialized basis to an information and service base. Rapid development of computer technology has led to an increase in the use of statistics as a tool for analyzing data across all disciplines. Increasing demand exists for individuals with training in statistical analysis. The unprecedented growth of research institutes nationwide confirms the importance of sampling and statistical analysis.

Statistics is now widely used in a broad spectrum of disciplines. There is, and will continue to be, substantial demand among students and various entities within the community for this program.

MINOR, STATISTICS

Students majoring in another subject who wish to minor in Statistics must complete the following requirements:

1. Complete these required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT A307</td>
<td>Probability</td>
<td>3</td>
</tr>
<tr>
<td>STAT A308</td>
<td>Intermediate Statistics for the Sciences</td>
<td>3</td>
</tr>
<tr>
<td>MATH A200</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH A201</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>STAT A402</td>
<td>Scientific Sampling</td>
<td>3</td>
</tr>
<tr>
<td>STAT A403</td>
<td>Regression Analysis</td>
<td>3</td>
</tr>
<tr>
<td>STAT A404</td>
<td>Analysis of Variance</td>
<td>3</td>
</tr>
<tr>
<td>STAT A405</td>
<td>Nonparametric Statistics</td>
<td>3</td>
</tr>
<tr>
<td>STAT A407</td>
<td>Time Series Analysis</td>
<td>3</td>
</tr>
<tr>
<td>STAT A408</td>
<td>Multivariate Statistics</td>
<td>3</td>
</tr>
<tr>
<td>STAT A490</td>
<td>Selected Topics in Statistics (1-3)</td>
<td>3</td>
</tr>
<tr>
<td>MATH A371</td>
<td>Stochastic Processes</td>
<td>3</td>
</tr>
<tr>
<td>MATH A407</td>
<td>Mathematical Statistics I (3)</td>
<td>3</td>
</tr>
<tr>
<td>MATH A408</td>
<td>Mathematical Statistics II (3)</td>
<td>3</td>
</tr>
</tbody>
</table>

2. A total of 23 credits is required in the minor.

FACULTY

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THR A121 Acting I 3
THR A131 Theatrical Production Techniques 3
THR A221 Acting II: Movement for Actors 3
THR A295 Theatre Practicum: Technical 2
THR A257 Costume Design and Construction I 3
THR A331 Directing I 3
THR A411 History of the Theatre I 3
THR A412 History of the Theatre II 3
THR A495 Advanced Practicum: Technical 2

2. Complete one of the following Design Area courses: 3
THR A347 Lighting Design (3)
THR A357 Costume Design and Construction II (3)

3. Complete one of the following Options:

**Theatre Option:** (18 credits)
Complete the following required courses:
THR A111 Introduction to Theatre 3
THR A141 Stagecraft I 3
THR A243 Scene Design 3
THR A311 Representative Plays I (3) 3

or
THR A312 Representative Plays II (3)

Complete two of the following Performance Area courses: 6
THR A315 Playwriting Workshop (3)
THR A321 Acting III: Scene Study (3)
THR A324 Voice of the Actor (3)
THR A325 Theatre Speech (3)
THR A328 Acting Shakespeare (3)
THR A329 Combat for the Stage I (3)
THR A413 Dramatic Theory and Criticism (3)
THR A435 Directing II (3)

**Dance Option:** (20 credits)
Complete the following required courses:
Any DNCE A100-Level Technique Class 2
DNCE A170 Dance Appreciation 3
DNCE A185 Design for Dance 3
DNCE A262 Theory and Improvisation 2
DNCE A361 Approaches to Dance Composition 3

Complete 7 credits from the following Performance Area Courses: 7
DNCE A101 Fundamentals of Ballet I (2)
DNCE A121 Fundamentals of Modern Dance I (2)
DNCE A124 Dance for Musical Theatre I (2)
DNCE A131 Fundamentals of Jazz I (2)
DNCE A145 Dances of the West African Diaspora I (2)
DNCE A146 Introduction to Alaska Native Dance (1-2)
DNCE A151 Beginning Tap Dance 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 Fund of Jazz II (2)
DNCE A245 Dances of the West African Diaspora II (2)
DNCE A321 Intermediate Modern I (2)
DNCE A322 Intermediate Modern II (2)
DNCE A360 Contemporary Techniques, Composition, and Repertory (1)
DNCE A365 Dance Repertory and Performance (2)
DNCE A465 Advanced Performance and Choreographic Workshop (3)

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

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**MINOR, THEATRE**

Students majoring in another subject who wish to minor in Theatre must complete the following requirements. A total of 18 credits is required for the minor.

THR A111 Introduction to the Theatre 3
THR A121 Acting I 3
THR A141 Stagecraft I 3
THR A311 Representative Plays I (3) 3

or
THR A312 Representative Plays II (3)

THR A411 History of the Theatre I (3) 3

or
THR A412 History of the Theatre II (3) Theatre electives 3

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**MINOR, DANCE**

Students majoring in another subject who wish to minor in Dance must complete the following requirements. A total of 18 credits is required for the minor.

DNCE A170 Dance Appreciation 3
DNCE A262 Theory and Improvisation 2
DNCE A361 Approaches to Dance Composition 3
DNCE A370 Interdisciplinary Dance Studies: Issues and Methods 3

And choose 7 more credits from the following courses: 7
DNCE A101 Fundamentals of Ballet I (2)
DNCE A121 Fundamentals of Modern Dance I (2)
DNCE A124 Dance for Musical Theatre I (2)
DNCE A131 Fundamentals of Jazz I (2)
DNCE A145 Dances of the West African Diaspora I (2)
DNCE A146 Introduction to Alaska Native Dance (1-2)
DNCE A151 Beginning Tap Dance 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 Fund of Jazz II (2)
DNCE A245 Dances of the West African Diaspora II (2)
DNCE A321 Intermediate Modern I (2)
DNCE A322 Intermediate Modern II (2)
DNCE A360 Contemporary Techniques, Composition, and Repertory (1)
DNCE A365 Dance Repertory and Performance (2)
DNCE A465 Advanced Performance and Choreographic Workshop (3)

---

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**WOMEN’S STUDIES**

Social Sciences Building (SSB), Room 372 (907) 786-1714
http://womens.uaa.alaska.edu

The interdisciplinary Women’s Studies minor offers students the opportunity to select courses from a variety of academic disciplines. Women’s Studies courses are planned to foster open, vigorous inquiry.
about women, to challenge curricula in which women are absent or peripheral, to question cultural assumptions in light of new information, and to create a supportive environment for those interested in studying women.

MINOR, WOMEN’S STUDIES

Students majoring in another subject who wish to minor in Women’s Studies must complete the following requirements. A total of 18 credits is required for the minor, of which 9 must be upper division.

1. Complete these required courses:
   - WS A200 Introduction to Women’s Studies 3
   - WS A400 Feminist Theory 3
   - WS A401 Seminar in Women’s Studies (1-3)* 3

2. Complete 9 credits of pre-approved electives. You must select electives from at least two different disciplines (as defined by prefix). At least one elective must be upper division (300-level or higher). Relevant courses not listed as approved electives may apply with the approval of Women’s Studies Chair.
   - ANTH A270 Cross-Cultural Perspectives on Women (3)
   - CWLA A260G Women’s Writing Workshop (3)
   - CWLA A461 Writing and Gender (3)
   - ENGL A403 Topics in Autobiography (3)**
   - ENGL A404 Topics in Women’s Literature (3)
   - HIST A381 American Women’s History to 1870 (3)
   - HIST A382 American Women’s History Since 1870 (3)
   - HIST/
   - RUSS A384 Russian Women (3)
   - HUMS A350 Men and Masculinity (3)
   - PSY A313 Psychology of Women (3)
   - SOC A242 An Introduction to Marriage, Family and Intimate Relationships (3)
   - SOC A342 Sexual, Marital and Family Lifestyles (3)
   - SOC A377 Men, Women and Change (3)
   - SOC A352 Women and Social Action (3)
   - SOC A452 Violence in Intimate Relationships (3)
   - WS A401 Seminar in Women’s Studies (1-3)*

*WS A401 must be taken as a 3 credit course to fulfill the core. It may be taken a second time with a change of subtitle as an elective.

**Counts for Women’s Studies Minor only when focus is on Women’s Autobiography. Taught every other year with this focus.

Note: Other courses may apply to the minor with approval of Women’s Studies Chair.

FACULTY

Kimberly Pace, Director, AJKJP@uaa.alaska.edu

COLLEGE OF BUSINESS AND PUBLIC POLICY

The College of Business and Public Policy serves Alaska and global communities primarily by training and educating the work force and also promoting excellence in public, private, and non-profit management and related business disciplines; providing professional assistance to public, private and non-profit organizations; and conducting basic applied and pedagogical research.

The College of Business and Public Policy has six departments: (1) Accounting, (2) Business Administration, (3) Computer Information Systems, (4) Economics, (5) Logistics and (6) Public Administration. A Certificate, an Associate of Applied Science, a Bachelor of Business Administration, a Bachelor of Arts in Economics, a Master of Business Administration, a Master of Public Administration, and a Master of Science in Global Supply Chain Management are offered by the College. The College operates the Small Business Development Center, Center for Economic Development, Center for Economic Education, Business Enterprise Institute, American Russian Center, and the Institute of Social and Economic Research. The Dean’s Executive Advisory Council includes over 10 top executives representing the leading employers in the state. Many local firms offer scholarships, internships, and job opportunities for College of Business and Public Policy students. The College has over forty full-time faculty with graduate degrees from many of the best universities in the country and extensive business experience. The College maintains a small school atmosphere with high academic standards. The Baccalaureate, Master of Business Administration, and Master of Science in Global Supply Chain Management degree programs are accredited by the Association to Advance Collegiate Schools of Business (AACSBI International). The College of Business and Public Policy offers degree planning sheets that provide a suggested sequence for taking courses within the degree(s), and are not intended to take the place of the degree requirements listed in this catalog. These sheets are available in the CBPP Student Information Office (RH 309).

The College of Business and Public Policy embraces the University’s mission to serve Alaska and global communities (with specific focus on the North Pacific Rim) by providing community college business education; baccalaureate and graduate business education; and research/outreach services. The College maintains an environment that values, promotes, develops, and fosters equal treatment of cultural and ethnic groups. Students are trained to meet the ethical, environmental, and moral challenges facing future business leaders. The programs are designed to advance critical thinking, and behavioral and communication skills. The faculty strives to stay abreast of advances in modern information technology for educating business students and we are committed to maintaining state-of-the-art computer laboratory facilities. We serve a student body that is diverse in terms of social and educational background, business experience, learning motives, and career ambitions. The College seeks to meet the needs of our constituents by staying current with emerging trends, by training and educating a competent work force in management and business related disciplines, and by providing pedagogical, basic and applied research, training and technical assistance.

ACCOUNTING

Edward & Cathryn Rasmuson Hall (RH), Room 309, (907) 786-4100 www.cbpp.uaa.alaska.edu

The Department of Accounting offers two programs: an Associate of Applied Science (AAS) degree with a major in Accounting and the Bachelor of Business Administration (BBA) degree with a major in Accounting. The programs are designed to prepare students for a career
ASSOCIATE OF APPLIED SCIENCE, ACCOUNTING

ADMISSION REQUIREMENTS
Satisfy the Admission to Certificate and Associate Degree Programs Requirements in Chapter 7, Academic Standards and Regulations.

GENERAL UNIVERSITY REQUIREMENTS
1. Complete the General University Requirements for Associate Degrees located at the beginning of this chapter.
2. Complete the Associate of Applied Science General Degree Requirements (15 credits) located at the beginning of this chapter.

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 Computerized Accounting 3
   - ACCT A225 Payroll Accounting 3
   - ACCT A230 Workpaper Preparation and Presentation 3
   - BA A151 Introduction to Business 3
   - BA/JUST A241 Business Law I 3
   - CIS A110 Computer Concepts in Business 3
   - ECON A201 Principles of Macroeconomics 3
   - MATH A105 Intermediate Algebra 3
2. Complete 9 credits of electives. Students may choose any 9 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. A total of 60 credits is required for the degree.

BACHELOR OF BUSINESS ADMINISTRATION, ACCOUNTING

ADMISSION REQUIREMENTS
Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.

ADMISSION REQUIREMENTS TO UPPER-DIVISION COURSES
1. Completion of at least 39-40 credits with a cumulative GPA of 2.25 or higher.
2. Completion of each of the following courses with a grade of C or better:
   - ACCT A201 Principles of Financial Accounting 3
   - ACCT A202 Principles of Managerial Accounting 3
   - BA A273 Introduction to Statistics for Business and Economics 3

3. Completion of any combination of at least 9 credits in the following General Education Disciplinary Areas:
   - Fine Arts
   - Humanities
   - Natural Sciences

Admission to Upper division Status
BBA students in Accounting who do not meet the above standards may not take upper division courses in ACCT, BA, CIS, or LOG.

Other students who meet course prerequisites may take up to 15 upper division ACCT, BA, CIS and LOG courses without being formally admitted to a BBA program. All students must apply for admission to a BBA program before accumulating more than 15 such credits. Please contact the Student Information Office for assistance in applying for admission to upper division standing within the College of Business and Public Policy.

Conditional Admission to Upper division Status
A student classified as being conditionally admitted to upper division status may take upper division ACCT, BA, CIS, and LOG courses for one semester only, while completing lower division deficiencies.

GRADUATION REQUIREMENTS
Students must complete the following graduation requirements:

A. GENERAL UNIVERSITY REQUIREMENTS
   Complete the General University Requirements for All Baccalaureate Degrees listed at the beginning of this chapter.

B. GENERAL EDUCATION REQUIREMENTS
   Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

C. COLLEGE OF BUSINESS AND PUBLIC POLICY
   REQUIREMENTS FOR ACCOUNTING MAJORS
Students earning a BBA degree must complete at least 50% 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 C or better:
     - ACCT A201 Principles of Financial Accounting 3
     - ACCT A202 Principles of Managerial Accounting 3
     - BA A273 Introduction to Statistics for Business and Economics 3
     - CIS A110 Computer Concepts in Business 3
     - ECON A201 Principles of Macroeconomics 3
     - ECON A202 Principles of Microeconomics 3
     - ENGL A212 Technical Writing 3
     - MATH A107 College Algebra (4)
     - MATH A172 Applied Finite Mathematics (3)
     - MATH A200 Calculus I (4)
     - MATH A272 Applied Calculus (3)
   *The ACCT A101 and A102 sequence may be used to satisfy the ACCT A201 requirement for this degree.
Note: Students who plan to attend graduate school are encouraged to take MATH A107 (College Algebra) and MATH A200-A201-A202 (Calculus) instead of MATH A172 and MATH A272.

2. Complete these upper division core courses with a 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
   - CIS A305 Managerial Presentations 3
   - BA A488 The Environment of Business 3

D. MAJOR REQUIREMENTS

1. Complete the following requirements with a C or better:
   - ACCT A216 Accounting Information Systems I 3
   - ACCT A303 Intermediate Accounting I 3
   - ACCT A302 Intermediate Accounting II 3
   - ACCT A310 Income Tax 3
   - ACCT A342 Managerial Cost Accounting 3
   - ACCT A342 Auditing 3
   - BA/JUST A241 Business Law I 3
   - Accounting electives* 6
   - Upper division ECON elective or BA A375 3

*Approved Accounting electives (6 credits) must be selected from the following courses and passed with a C or better:
   - ACCT A401 Advanced Accounting I (3)
   - ACCT A410 Advanced Income Tax (3)
   - ACCT A420 Fraud Examination (3)
   - ACCT A430 Governmental and Non-Profit Accounting (3)
   - ACCT A453 Internal Auditing (3)

2. A total of 120 credits is required for the degree, of which 45 credits must be upper division.

MINOR, ACCOUNTING*

Students who wish to minor in Accounting, must complete the following requirements. A total of 18 credits is required for the minor.

   - ACCT A201 Principles of Financial Accounting 3
   - ACCT A202 Principles of Managerial Accounting 3
   - Upper division Accounting electives 12

*Not available to BBA Accounting majors.

FACULTY

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J. David Mason, Associate Professor

BUSINESS ADMINISTRATION

Edward & Cathryn Rasmussen Hall (RH), Room 309, (907) 786-4100
www.cbpp.uaa.alaska.edu

The Department of Business Administration offers a Certificate in Small Business Management at the Kenai campus; an AAS degree in General Business at the Kenai and Kodiak campuses; an AAS degree in Small Business Administration at the Anchorage, Kenai, and Mat-Su campuses; as well as a BBA degree in Economics, Finance, Global Logistics Management, Management, and Marketing on the Anchorage campus. A Business Administration minor is also available on the Anchorage campus. These are professional programs designed to meet

the challenges of a dynamic and changing business environment. Graduates in business find job opportunities in Alaska, throughout the United States and in many foreign countries.

The BBA in Finance prepares students for entry-level financial management jobs in corporations, nonprofit organizations and financial institutions; financial analyst with brokerage and money management firms; financial planning services; real estate professional, and financial consultants to small business. Furthermore, it prepares a student for graduate studies in finance.

Students will gain knowledge in the concepts of financial planning, analysis and management in a global context; the functions, structures, delivery systems, efficiency and performance of financial markets and institutions; the concepts, techniques and strategies of investment in financial and real assets; the creation of values for the stockbrokers, stakeholders and society; and the value of financial securities and the enterprise.

The BBA in Management prepares students for entry-level general management jobs in corporations, nonprofit organizations and government; personnel and benefits management; recruitment and career planning services; conflict resolution and arbitration; and management consulting to small business. Furthermore, it prepares a student for graduate studies in management.

Students will gain knowledge in the concepts of organizational theory, design and development in a global context; the study of human behaviors and interactions within an organization; the management of human resources of an organization; the negotiations, conflict resolutions and arbitrations; the formulation of strategies for the management of total organization in an ever-changing environment; and the value of ethics and social responsibility.

Students will gain knowledge in the principles of marketing and its essential role in business and society; the process of planning and executing the conception, pricing, promotion, and distribution of ideas, goods, and services in local, national and global markets; and designing, executing and analyzing marketing research for sales forecasting; through focused studies in Consumer Behavior, International Marketing, Retail, Promotional and Marketing Management.

UNDERGRADUATE CERTIFICATE, SMALL BUSINESS MANAGEMENT CERTIFICATE

Kenai Peninsula College (KPC)
3420 College Dr. Soldotna, Alaska, 99669, (907) 262-0300,
www.kpc.alaska.edu

The Small Business Management Certificate program is offered only at Kenai Peninsula College.

The graduates of the UAA Small Business Management program will have the ability to:
1. Explain basic accounting reports, cash flow, and budgets;
2. Demonstrate basic supervision skills and identify important human behavioral traits;
3. Describe fundamental marketing functions and strategy, basic selling principles, and necessary interpersonal skills for customer relations;
4. List and explain economics terms and concepts from a macro and micro perspective;
5. Use computers for word processing and spreadsheets for data analysis;
management, marketing, finance, economics, and business law to graduates to apply principles and skills relating to accounting, foundation and preparation for career advancement. It prepares

**GENERAL UNIVERSITY REQUIREMENTS**

Complete the General University requirements for certificates located at the beginning of this chapter.

1. Complete the following major requirements:
   - **ENGL A111** Methods of Written Communication (Required) 3
   - Select 3 credits from the following: 3
   - *ENGL A212* Technical Writing (Recommended) (3)
   - **ENGL A211** Academic Writing About Literature (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 4 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) or
   - **ACCT A120** Bookkeeping for Business I (Not offered at KPC) (3)
   - **ACCT A201** Principles of Financial Accounting (Not offered at KPC) (3)
   - **ACCT A202** Principles of Financial Accounting II (3) or
   - **ACCT A222** Introduction to Computerized Accounting (3)
   - **MUSIC A101 & ACCT A102 cannot use ACCT A201** for credit towards certificate.

3. Complete 9 credits from the following departments:
   - **ACCT, BA, CIOS, CIS, ECON**
   - **ECON A201** Principles of Macroeconomics (3) (Recommended)
   - **ECON A202** Principles of Microeconomics (3) (Recommended)
   - **CIOS A101** (A, B or C) Keyboarding (Recommended) (1-3)

4. Complete 3 elective credits. 3

5. A total of 30 credits is required for the certificate.

**FACULTY**

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-Steve Gillon, Assistant Professor Business Administration, ifsjg@uaa.alaska.edu
-Ray Zagorski, Associate Professor Business Administration, ifrc@uaa.alaska.edu

**ASSOCIATE OF APPLIED SCIENCE, GENERAL BUSINESS**

Kenai Peninsula College (KPC)
34820 College Dr. Soldotna, Alaska, 99669, (907) 262-0300, www.kpc.alaska.edu

This is a flexible two-year degree program providing a solid business foundation and preparation for career advancement. It prepares graduates to apply principles and skills relating to accounting, management, marketing, finance, economics, and business law to businesses of all sizes. Graduates will be able to practice relevant business skills, meet the diverse needs of a business to achieve organizational goals, start and manage their own small business, and communicate effectively and manage their business affairs with professionalism, integrity, and a spirit of inquiry.

**ADMISSION REQUIREMENTS**

Complete university admissions requirements for certificates found in Chapter 7 of this catalog.

**GENERAL UNIVERSITY REQUIREMENTS**

Complete university admissions requirements for associate degrees found in Chapter 7 of this catalog.

**COMMUNICATION AND GENERAL REQUIREMENTS**

**Oral Communications Courses**
Select 3 credits from the following:
- **COMM A111** Fundamentals of Oral Communication 3
- **COMM A235** Interpersonal Communication 3
- **COMM A241** Public Speaking 3

**Written Communication Courses**
Select 6 credits from the following:
- **ENGL A111** Methods of Written Communication (Required) 3
- **ENGL A212** Technical Writing 3
- **ENGL A211** Academic Writing About Literature 3
- **ENGL A213** Writing in the Academic Disciplines 3
- **CIOS A260A** Business Communications 3

**Humanities* Social Sciences, Mathematics, Natural Sciences**
Select 6 credits from approved general requirement courses:
- **MATH A105** Intermediate Algebra or higher level (required) 3
- and 3 more credits from an approved course

*Note: Any English courses used to satisfy Humanities general requirements must be different from the written communications requirement and have a course number higher than ENGL A111.
MAJOR REQUIREMENT COURSES

1. Complete the following required courses:
   - ACCT A101: Principles of Financial Accounting I (3)
   - ACCT A102: Principles of Financial Accounting II (3)
   - ACCT A202: Principles of Managerial Accounting (3)
   - BA A151: Introduction to Business (3)
   - BA A231: Fundamentals of Supervision (3)
   - BA/JUST A241: Business Law I (3)
   - BA A260: Marketing Practices (3)
   - BA A264: Personal Selling (3)
   - CIS A110: Computer Concepts in Business (3)
   - ECON A201: Principles of Macroeconomics (3)

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.

ASSOCIATE OF APPLIED SCIENCE, SMALL BUSINESS ADMINISTRATION

ADMISSION REQUIREMENTS
Satisfy the Admission to Certificate and Associate Degree Programs Requirements in Chapter 7, Academic Standards and Regulations.

GENERAL UNIVERSITY REQUIREMENTS

1. Complete the General University Requirements for Associate Degrees located at the beginning of this chapter.
2. Complete the Associate of Applied Science General Degree Requirements (15 credits) located at the beginning of this chapter. To provide maximum transferability, 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 requirements.

MAJOR REQUIREMENTS

1. Complete the required support courses:
   - ACCT A101: Principles of Financial Accounting I (3)
   - ACCT A102: Principles of Financial Accounting II (3)
   - ACCT A202: Principles of Managerial Accounting (3)
   - CIS A110: Computer Concepts in Business (3)
   - MATH A107: College Algebra (4)
   - MATH A108: Intermediate Algebra (3)
   - 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 A132: Fundamentals of Organizational Management (3)
   - BA/JUST A242: Business Law II (3)
   - BA A273: Introduction to Statistics for Business and Economics (3)
   - LGOP A110: Logistics, Information, and Customer Service (3)
   - LGOP A120: Warehouse and Inventory Control Operations (3)
   - LGOP A160: Purchasing and Supply Management (3)

Note: 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. A total of 60 credits is required for the degree.

BACHELOR OF BUSINESS ADMINISTRATION

Major areas: Economics

Finance

Global Logistics Management

Management

Marketing

The Bachelor of Business Administration (BBA) is a professional degree offered through the College of Business and Public Policy. It is designed to prepare students to pursue meaningful and rewarding careers in management. The curriculum for the BBA degree is management oriented rather than highly specialized. Concepts that are relevant to both small and large firms and both the public and private sectors are emphasized.

The five majors — Economics, Finance, Global Logistics Management, Management, and Marketing are designed to prepare students to pursue meaningful and rewarding careers in the private and public sectors. Local, state, national, and international firms, and not-for-profit organizations provide a ready market for graduates in each of these five major areas of concentration.

ADMISSION REQUIREMENTS

Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.

ADMISSION REQUIREMENTS TO UPPER DIVISION COURSES

1. Completion of at least 39-40 credits with a cumulative GPA of 2.25 or higher.
2. Completion of each of the following courses with a grade of C or better:
   - ACCT A201: Principles of Financial Accounting (3)
   - ACCT A202: Principles of Managerial Accounting (3)
   - BA A273: Introduction to Statistics for Business and Economics (3)
   - CIS A110: Computer Concepts in Business (3)
   - ECON A201: Principles of Microeconomics (3)
   - ENGL A111: Methods of Written Communication (3)
   - ENGL A212: Technical Writing (3)
   - MATH A107: College Algebra (3)
   - MATH A172: Applied Finite Mathematics (3)
   - Oral Communication Skills GER (3)

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www.uaa.alaska.edu
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 Management, Management, and Marketing who do not meet the above standards may not take upper division courses in ACCT, BA, CIS, or LOG.

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 Management and Marketing Majors

Students earning a BBA degree must complete at least 50% of their required business credits at the University of Alaska Anchorage. All ACCT, BA, CIS, ECON, LGOP and LOG courses are considered business credits for the purpose of this requirement.

1. Complete the Business core requirements. The following courses must be completed with a C or better:
   ACCT A201* Principles of Financial Accounting 3
   ACCT A202 Principles of Managerial Accounting 3
   BA/JUST A241 Business Law I 3
   BA A273 Introduction to Statistics for Business and Economics 3
   CIS A110 Computer Concepts in Business 3
   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 A200 Calculus I (4) 3-4
   or
   MATH A272 Applied Calculus (3)

   *The ACCT A101 and A102 sequence may be used to satisfy the ACCT A201 requirement for this degree.

   Note: Students who plan to attend graduate school are encouraged to take MATH A107 (College Algebra) and MATH A200 (Calculus) instead of MATH A172 and MATH A272.

2. Complete the following 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 A488 The Environment of Business 3
   CIS A305 Managerial Presentations 3
   CIS A376 Management Information Systems 3

D. Major Requirements

Economics Major

1. Complete the following requirements. The following courses must be completed with a C or better prior to graduating:
   ECON A321 Intermediate Microeconomics 3
   ECON A324 Intermediate Macroeconomics 3
   ECON A350 Money and Banking 3
   ECON A429 Business Forecasting 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 48 credits must be upper division.

Finance Major

All courses must be completed with a C or better prior to graduating.

1. Investment Concentration (30 credits)
   A. Complete the following:
      BA A242 Business Law II 3
      BA A375 Statistics for Business and Economics (3)
      or
      ECON A429 Business Forecasting (3) 3
      BA A385 Advanced Corporate Finance 3
      BA A380 Investment Management 3
   B. Complete at least 9 credits from the following: 9-18
      BA A320 Real Estate Finance (3)
      BA A426 Financial Institutions (3)
      BA A427 International Finance (3)
      BA A451 Security Analysis and Portfolio Theory (3)
      BA A452 Financial Derivatives (3)
      BA A453 Bond Market Analysis (3)
   C. Complete 0-9 credits of upper division business electives

2. Real Estate and Property Management Concentration (30 credits)
   A. Complete the following:
      BA A131 Personal Finance 3
      BA A242 Business Law II 3
      BA A306 Real Estate Principles 3
      BA A320 Real Estate Finance 3
   B. Complete at least 9 credits from the following: 9-18
      BA A315 Property Management and Marketing (3)
      BA A395 Internship in Property Management (3)
      BA A426 Financial Institutions (3)
      BA A431 Real Estate Appraisal (3)
      BA A432 Real Estate Law (3)
1. Complete the following requirements. The following courses must be completed with a grade of C or better prior to graduating:

**LOG A378** Management of Global Logistics
- Supply Chains 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 Management* 3

*The internship is intended to be in logistics. This requirement may be waived if the major advisor determines that the student already has significant logistics work experience. If waived, student may need to select 3 additional upper division credits to total 48.

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:

- **ACCT A342** Managerial Cost Accounting (3)
- **AT A332** Transport Aircraft Systems (3)
- **AT A420** Air Transportation System (3)
- **BA A420** Marketing Research (3)
- **BA A373** Statistics for Business and Economics (3)
- **BA A447** International Marketing (3)
- **BA A490** International Comparative 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 A429** Business Forecasting (3)
- **ECON A463** International Economics (3)

4. A total of 120 credits is required for the degree, of which a minimum of 48 credits must be upper division.

**GLOBAL LOGISTICS MANAGEMENT MAJOR**

1. Complete the following requirements. The following courses must be completed with a grade of C or better prior to graduating:

- **BA A420** Marketing Research (3)
- **BA A381** Consumer Behavior (3)
- **BA A420** Marketing Research (3)

2. A total of 120 credits is required for the degree, of which a minimum of 48 credits must be upper division.

**MINOR, BUSINESS ADMINISTRATION**

Students majoring in another subject who wish to minor in Business Administration must complete the following requirements. A total of 21 credits is required for the minor. Prerequisites for these courses must also be satisfied.

- **ACCT A201** Principles of Financial Accounting 3
- **ACCT A202** Principles of Managerial Accounting 3
- **ECON A201** Principles of Macroeconomics 3
- **ECON A202** Principles of Microeconomics 3
- **Upper division Business electives** 9

*Not available to BBA majors.

**MINOR, REAL ESTATE**

Students majoring in another subject who wish to minor in Real Estate must complete the following requirements. All courses must be completed with a grade of C or better. Students pursing a baccalaureate degree outside the College of Business and Public Policy should see the departmental advisor.

A. Complete the following:

- **BA A131** Personal Finance 3
- **BA /JUST A241** Business Law I 3
- **BA /JUST A242** Business Law II 3
- **BA A306** Real Estate Principles 3
- **BA A320** Real Estate Finance 3

B. Complete 6 credits from the following:

- **BA A315** Property Management and Marketing (3)
- **BA A395** Internship in Property Management (3)
- **BA A431** Real Estate Appraisal (3)
- **BA A432** Real Estate Law (3)
- **ECON A415** Urban and Regional Economics (3)

*Not available to BBA Finance majors.

**FACULTY**

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Leyaan You, Assistant Professor

Bhatthacharya Nalinaksha, Associate Professor

Upadhyay Arun, Assistant Professor
COMPUTER INFORMATION SYSTEMS

Edward & Cathryn Rasmuson Hall (RH), Room 309, (907) 786-4100 www.cbpp.uaa.alaska.edu

The Computer Information Systems department provides educational opportunities in computer information systems through degree programs, courses for all students, and career-enrichment opportunities.

Courses involving computer instruction, as well as many other business school courses, are supported by seven computerized classrooms and state-of-the-art open laboratory facilities. These computer classrooms and labs provide students with hands-on learning experiences using the latest Intel workstations supported by IBM, Microsoft, and Linux network servers. Our computer environment features several state-of-the-art computer languages, including 4GL, query, and object oriented languages.

College of Business and Public Policy students have the opportunity to use the computer facilities to help them with their course work. Laboratories include special business presentation facilities and an experimental multimedia and a decision-support room.

Computer courses are taught using both structured instructor-led and self-guided tutorial approaches in the traditional classroom as well as online discussions.

COMPUTER INFORMATION SYSTEMS
(BUSINESS COMPUTER INFORMATION SYSTEMS, MANAGEMENT INFORMATION SYSTEMS)
The College of Business and Public Policy prepares students for computer careers in computer programming and systems design, network administration and database administration through our Associate of Applied Science degree in Business Computer Information Systems (BCIS). Students are prepared for computer careers in systems analysis and design, web design, end-user computing, managing information systems, databases and networks, and associated occupations through the Management Information Systems (MIS) major in the Bachelor of Business Administration. Both degrees are based on the Association of Information Technology Professionals (AITP) model curriculum and are linked so that the diligent student can move from the two-year to four-year degree without losing credits.

Both degrees emphasize using computers within business and public sector settings through hands-on teaching methods. The student is prepared for the technical aspects of the computer environment as well as the techniques and issues of managing information resources through the introduction of the theories followed by hands-on experience with the associated application.

Computer career education in the College of Business and Public Policy is enhanced by work and internship opportunities both within our own laboratories and with business and government facilities.

ASSOCIATE OF APPLIED SCIENCE, BUSINESS COMPUTER INFORMATION SYSTEMS

ADMISSION REQUIREMENTS
Satisfy the Admission to Certificate and Associate Degree Program Requirements in Chapter 7, Academic Standards and Regulations. English and Math Placement Tests are given by the Advising and Testing Center. Your faculty advisor will assist you by recommending the proper levels of entry and appropriate CIS course plan. Students who are not proficient in typing (a minimum of 30 wpm) should enroll in CIOS A100A Keyboarding IA. Students must be able to read and comprehend technical manuals and texts.

ACADEMIC PROGRESS
A grade of C or higher 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 Degree Requirements (15 credits) located at the beginning of this chapter. ENGL A212 is recommended. For the general requirements, it is strongly recommended that students select 6 credits from Humanities, Math and Natural Sciences or Social Sciences that meet both the AAS and the Baccalaureate General Education Requirements.

MAJOR REQUIREMENTS
1. Complete the breadth requirements:
ACCT A201* Principles of Financial Accounting 3
ACCT A202 Principles of Managerial Accounting 3
CIS A110 Computer Concepts in Business 3
ECON A201 Principles of Macroeconomics 3
ECON A202 Principles of Microeconomics 3
MATH A107 College Algebra (4) or
MATH A172 Applied Finite Mathematics (3) 3-4
General Education Requirement Elective** 3

*The ACCT A101 and A102 sequence may be used to satisfy the ACCT A201 requirement for this degree.

**Choose Humanities or Natural Sciences course that meets both AAS and General Education Requirements for Baccalaureate Degrees.

2. Complete the Business core requirement:
BA A273 Introduction to Statistics for Business and Economics 3

3. Complete CIS required courses:
CIS A185 Introduction to Programming Business Applications 3
CIS A201 Programming Business Applications 4
CIS A310 Analysis of Business Systems 3
CIS A330 Database Management Systems 3
CIS A345 Managing Data Communications and Computer Networks 3

4. Complete elective credits approved by a CIS Department advisor. 6

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 61-62 credits is required for the degree.

BACHELOR OF BUSINESS ADMINISTRATION, MANAGEMENT INFORMATION SYSTEMS

ADMISSION REQUIREMENTS
Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.

ADMISSION REQUIREMENTS TO UPPER DIVISION COURSES
1. Completion of at least 39-40 credits with a cumulative GPA of 2.25 or higher.
2. Completion of each of the following courses with a grade of C or better:
ACCT A201 Principles of Financial Accounting 3
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 Information Office for assistance in applying for admission to upper division standing within the College of Business and Public Policy.

Conditional Admission to Upper division Status
A student classified as being conditionally admitted to upper division status may take upper division ACCT, BA, CIS and LOG courses for one semester only, while completing lower division deficiencies.

GRADUATION REQUIREMENTS
Students must complete the following graduation requirements:

A. GENERAL UNIVERSITY REQUIREMENTS
Complete the General University Requirements for All Baccalaureate Degrees listed at the beginning of this chapter.

B. GENERAL EDUCATION REQUIREMENTS
Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

C. COLLEGE OF BUSINESS AND PUBLIC POLICY

REQUIREMENTS: MANAGEMENT INFORMATION SYSTEMS MAJOR
Students earning a BBA degree must complete at least 50% of their required business credits at the University of Alaska Anchorage. All ACCT, BA, CIS, ECON, LGOP, and LOG courses are considered business credits for the purpose of this requirement.

1. Complete the Business Core requirements with a grade of C or better:
   - ACCT A201 Principles of Managerial Accounting 3
   - ACCT A202 Principles of Managerial Accounting 3
   - BA A273 Introduction to Statistics for Business and Economics 3
   - CIS A110 Computer Concepts in Business 3
   - ECON A201 Principles of Macroeconomics 3
   - ECON A202 Principles of Microeconomics 3
   - ENGL A111 Methods of Written Communication 3
   - ENGL A212 Technical Writing 3
   - MATH A107 College Algebra 4
   - MATH A172 Applied Finite Mathematics 3
   - MATH A200 Calculus I (4) 3

   2. Complete the following required courses with a grade of C or better:
   - MATH A272 Applied Calculus (3)

   *The ACCT A101 and A102 sequence may be used to satisfy the ACCT A201 requirement for this degree.

   Note: Students who plan to attend graduate school are encouraged to take MATH A107 (College Algebra) and MATH A200, A201, A202 (Calculus) instead of MATH A172 and MATH A272.

2. Complete the following requirements. The following courses must be completed with a grade of C or better prior to graduating:
   - BA A300 Organizational Theory and Behavior 3
   - BA A325 Corporate Finance 3
   - BA A343 Principles of Marketing 3
   - BA A377 Operations Management 3
   - BA A488 The Environment of Business 3
   - CIS A305 Managerial Presentations 3
   - CIS A376 Management Information Systems 3

D. MAJOR REQUIREMENTS

1. Complete the following required courses with a grade of C or better:
   - CIS A185 Introduction to Programming Business Applications 3
   - CIS A201 Programming Business Applications 4
   - CIS A310 Analysis of Business Systems 3
   - CIS A330 Database Management Systems 3
   - CIS A345 Managing Data Communication and Computer Networks 3
   - CIS A410 Project Management 3
   - CIS A489 Systems Design, Development and Implementation 3

2. Complete 12 credits of upper division program electives approved by the department with a grade of C or better. These may include, but are not limited to:
   - CIS A360 Object Oriented Programming in .Net (3)
   - CIS A361 Advanced C Programming and UNIX Environments (3)
   - CIS A365 Object Oriented Programming (3)
   - CIS A390 Selected Topics in Management Information Systems (1-6)
   - CIS A395 Programmer/Analyst Internship (1-3)
   - CIS A420 Consulting and Training End Users (3)
   - CIS A421 Multimedia Authoring (3)
   - CIS A423 Specialized Business Information Systems (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 (1-3)
   - CIS A498 Individual Research Project (1-6)
   - ECON A429 Business Forecasting (3)

3. A minimum of CIS A489 and 9 credits from Major Requirements, items 1 and 2, must be earned at the University of Alaska Anchorage.

4. A total of 120 credits is required for the degree, of which a minimum of 48 credits must be upper division.

MINOR, COMPUTER INFORMATION SYSTEMS*

Students majoring in another subject who wish to minor in Computer Information Systems (CIS) must complete the following requirements. A total of 18 credits is required for the minor, 12 of which must be upper division.

   - CIS A110 Computer Concepts in Business 3

   - *The ACCT A101 and A102 sequence may be used to satisfy the ACCT A201 requirement for this degree.
HONORS IN ECONOMICS

BACHELOR OF ARTS, ECONOMICS

MINOR, ECONOMICS*

FACULTY
LOGISTICS

Edward & Cathryn Rasmuson Hall (RH) Room 309, (907) 786-4100 www.cbpp.uaa.alaska.edu

The Logistics Department offers four undergraduate programs: the Occupational Endorsement Certificate in Logistics Operations, the Undergraduate Certificate in Logistics, the Associate of Applied Science in Logistics Operations, and a major in Global Logistics Management for the Bachelor of Business Administration. Logistics refers to the complex systems of the movement of materials, component parts, and information within a business firm; and the distribution of final products to customers. Logistics is an essential function that adds value to the final product. The goal of logistics 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 performance. Firms with a virtual world-wide logistics system view that carries out dynamic and continuous distribution are gaining the competitive edge.

Every organization is engaged in logistics if it has a purchasing function and/or a delivery process. Prospective employers include business firms, nonprofit organizations, and government agencies.

Anchorage and Alaska are strategically located relative to the great markets of Europe, Asia, and the mainland United States. More freight in tonnage passes through the Ted Stevens Anchorage International Airport on a daily basis than in 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

The Occupational Endorsement Certificate in Logistics 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 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 the Associate of Applied Science degree in Logistics Operations.

At the completion of a Logistics Operations Occupational Endorsement Certificate, students are able to demonstrate:

1. Proficiency in adapting to a variety of logistics employment settings with an understanding of the common terminology, equipment, regulations, and information systems used.
2. Entry-level employability skills in the following areas: logistics operations, logistics customer service, purchasing, supply management, warehouse operations, inventory control, transportation services, and transport operations management.

ADMISSION REQUIREMENTS

See Occupational Endorsement Certificate admissions in Chapter 7 of this catalog.

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 System 3
   - LGOP A125 Transportation Services 3
   - LGOP A160 Purchasing and Supply Management 3
   - LGOP A235 Transport Operations Management 3

UNDERGRADUATE CERTIFICATE, LOGISTICS

The Certificate in Logistics program enables students to enhance and develop their understanding and skills in the fields of logistics and supply chain management. It is designed to provide continuing education opportunities to professionals in the business community.

ADMISSION REQUIREMENTS

Satisfy the Admission to Certificate and Associates Degree Program Requirements in Chapter 7, Academic Standards and Regulations.

GRADUATION REQUIREMENTS

Students must achieve a grade of C or better in all courses required for the certificate.

MAJOR REQUIREMENTS

1. Complete the following courses:
   - BA A151 Introduction to Business 3
   - BA A231 Fundamentals of Supervision 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
   - CIS A105 Introduction to Personal Computers and Application Software (3) 3
   - or
   - CIS A110 Computer Concepts in Business (3) 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 Associate degree in Logistics 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 OPERATIONS

The Logistics Operations 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 operations: information management and customer service, warehousing and inventory control, purchasing and supply management operations, transportation services, transportation rates, tariffs, and carrier liability. The Logistics Operations AAS degree is designed to prepare graduates for employment in all the operational and technical aspects of global logistics careers and fields. Students who complete the AAS and wish to
continue their formal education in Global Logistics Management can apply up to 48 credits to the CBPP baccalaureate degree in Global Logistics Management. 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 LOC courses in those four-year programs must be completed with a grade of C or better.

ADMISSION REQUIREMENTS
Satisfy the Admission to Certificate and Associate Degree Programs Requirements in Chapter 7, Academic Standards and Regulations.

GENERAL UNIVERSITY REQUIREMENTS
1. Complete the General University Requirements for Associate Degrees located at the beginning of this chapter.
2. Complete the Associate of Applied Science General Degree Requirements (15 credits) located at the beginning of this chapter.

To provide maximum transferability, 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 Requirements.

MAJOR REQUIREMENTS
1. Complete the following courses:
   - BA A151 Introduction to Business (3)
   - BA A231 Fundamentals of Supervision (3)
   - BA/JUST A241 Business Law I (3)
   - CIS A110 Computer Concepts in Business (3)
   - ECON A201 Principles of Macroeconomics (3)
   - LGOP A110 Logistics Information Systems and Customer Service (3)
   - LGOP A120 Warehouse and Inventory Control Operations (3)
   - LGOP A160 Purchasing and Supply Management (3)
   - LGOP A125 Transportation Services (3)
   - LGOP A235 Transport Operations Management (3)
   - MATH A107 College Algebra (4)
   or
   - MATH A172 Applied Finite Mathematics (3)
2. Complete four of the following courses:
   - BA A273 Introduction to Statistics for Business and Economics (3)
   - BA A295 Internship in Business Administration (3)
   - BA A375 Statistics for Business and Economics (3)
   - BA A377 Operations Management (3)
   - ECON A429 Business Forecasting (3)
   - Any 300- or 400-level LOG course (3)
   - OSH A101 Introduction to Occupational Safety and Health (3)
   - OSH A108 Injury Prevention and Risk Management (4)
   - OSH A250 Hazardous Material Operation (3)
   - TECH A295 Technical Internship (1-6)
   - TECH A302 Operational Safety (3)

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 Management are listed with the BBA located earlier in this chapter.

FACULTY
Elisha (Bear) Baker, IV, Term Professor, AFERB1@cbpp.uaa.alaska.edu
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The University of Alaska Anchorage is in full compliance with the institutional reporting requirements mandated in Title II of the Higher Education Act Amendments of 1998. Please contact the College of Education for a copy of the completed report.

The College of Education comprises a community of educators dedicated to improving the quality of education. The mission of the College of Education is to prepare educators and support the lifelong learning of professionals to embrace diversity and to be intellectually and 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.

We believe that learning must be designed, delivered, and evaluated within the contexts of these core values and program outcomes.

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, 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. 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.
UNDERGRADUATE PROGRAMS, COLLEGE OF EDUCATION

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. 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 web site.

Candidats 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.

UNDEGREEATE PROGRAM OPTIONS

The College of Education offers several program options for candidates interested in working with children. The Early Childhood Development Certificate and Associate of Applied Science in Early Childhood Development provides preparation for candidates who already have baccalaureate degrees to work with young children from birth through age eight. The Post-Baccalaureate Certificate in Early Childhood Pre-K-Third Grade is designed for candidates who have completed all or part of an approved program at another university and wish to meet Alaska Department of Education and Early Development teacher certification or endorsement requirements. Refer to Chapter 11 for information about post-baccalaureate programs.

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

Fingerprinting and a background check are required to participate in internships and may be required to participate in other field experiences.

Undergraduate Programs, College of Education

Practicums, 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.

Candidates who have completed 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 Anchorage prior to being admitted to an advanced practicum or internship.

The College of Education has three academic departments:

1. The Department of Teaching and Learning with programs in 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 adult education and educational leadership (principal and superintendent preparation). (907) 786-4450

PROFESSIONAL AND CONTINUING EDUCATION

http://coe.uaa.alaska.edu/pace

The Office of Professional and Continuing Education (PACE) facilitates professional development opportunities for educators and other service professionals. PACE works collaboratively with UAA academic units and partner organizations to provide responsive service and support for pre-service training, workshops, conferences, institutes, and academies. Committed to addressing the community’s immediate and changing professional development needs, PACE works closely with school districts, professional societies, and private and government agencies.

EARLY CHILDHOOD

Professional Studies Building (PSB), Suite 220, (907) 786-4481
http://edit.coe.uaa.alaska.edu/programs/teaching/childhood/index.cfm

The Early Childhood Program at UAA blends theory and practice in the preparation of early childhood educators who can deliver quality care and education for young children from birth through age eight years.

Within the Early Childhood Program there are four options:

- Early Childhood Development Certificate
- Associate of Applied Science in Early Childhood Development
- Bachelor of Arts in Early Childhood Education
- Post-Baccalaureate in Early Childhood Pre-K-Third Grade

PROGRAM DESCRIPTION AND OUTCOMES

The Early Childhood Development Certificate Program and the Associate of Applied Science in Early Childhood Development Program prepare paraeducators and other professionals to work in early care and education settings, including the public school system. The Bachelor of Arts in Early Childhood prepares professionals to work with young children from birth through age eight. 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. All programs are developed to meet the National Association for the Education of Young Children guidelines for personnel preparation.

The four early childhood programs address the following five National Association for the Education of Young Children (NAEYC) teacher education standards:

1. Promoting child development and learning
2. Building family and community relationships
3. Observing, documenting, and assessing to support young children and families
Student outcomes differentiate the mastery levels of each program.

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 preschool educational programs.

**Early Childhood Development**

**Admission Requirements**

Applicants must satisfy the Admission to Certificate and Associate Degree Programs Requirements in Chapter 7, Academic Standards and Regulations. In order to be admitted to the Early Childhood Development Program, applicants must complete an application to the Early Childhood Development Certification 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 for and be admitted by an advisor into the practicum course and have earned a grade of C or above in all EDEC courses.

**Academic Progress**

All candidates in the Early Childhood Development Certificate Program must maintain a cumulative GPA of 2.00 or above in all EDEC courses.

**Certificate Requirements**

1. Complete the following required courses:
   - **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 A303** Young Children in Inclusive Settings 3
   - **DN A145** Child Nutrition 3
   - **PSY A245** Child Development (3) 4
   - **PSY A245L** Child Development Lab (1) or
   - **EDSE A212** Human Development and Learning (3) and
   - **EDSE A212L** Human Development and Learning Lab (1)
   - **EDEC A295** Practicum 3
   - **EDEC A292** Early Childhood Seminar 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, Academic Standards and Regulations. 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 for and be admitted by an advisor into the practicum course and have earned a grade of C or above in all EDEC courses.

**Academic Progress**

All candidates in the 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:
   - **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 Requirements:
   - **ENGL A111** Methods of Written Communication (3) and one of the following:
   - **ENGL A211** Academic Writing About Literature (3)
   - **ENGL A213** Writing in the Social and Natural Science (3)
   - **ENGL A214** Persuasive Writing (3)

3. General Requirements:
   - **MATH A105** Intermediate Algebra (or higher) (3)

4. 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.

**Major Requirements**

1. Complete the following required courses:
   - **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 A303** Young Children in Inclusive Settings 3
   - **DN A145** Child Nutrition 3
   - **PSY A245** Child Development (3) 4
   - **PSY A245L** Child Development Lab (1) or
   - **EDSE A212** Human Development and Learning (3) and
   - **EDSE A212L** Human Development and Learning Lab (1)
   - **EDEC A295** Practicum 3
   - **EDEC A292** Early Childhood Seminar 1

2. Complete 12 credits of advisor-approved electives
   - **EDEC A100** Fundamentals in Early Childhood is strongly recommended.

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 eight. Individuals with baccalaureate degrees should refer to Chapter 11 for information on post-baccalaureate certificates.

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 a year-long internship 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. The deadline for internship placement consideration is February 20.

Field experiences and internships are made in cooperation with the participating early childhood programs or schools. The partnership programs that work in cooperation with the College of Education Early Childhood Development program reserve the right to request additional information and/or preparation from candidates, in accordance with the program’s established policies and practices. Cooperating partnership programs can 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. Partnership programs 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, admitance to a degree/certificate/endorsement program does not guarantee acceptance by partnership programs. Unacceptable academic performance, an unprofessional attitude, unsatisfactory field reports, violation of professional ethics, or other factors may result in removal from the field placement.

ADMISSION REQUIREMENTS

Admission to the University of Alaska Anchorage: Early Childhood Major

Applicants must complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations. Application forms are available on the UAA website 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 by one of the following dates: March 1, August 1, or November 1.
2. Complete a minimum of 45 foundation credits, including all General Education Requirements, required for the degree (transfer credits may be used).
3. Complete a minimum of 18 lower division Early Childhood Major requirement credits.
4. Have a cumulative GPA of 2.75.
5. Successfully complete the Praxis I exam. at the level established by the College of Education.
6. Provide evidence of a current negative TB skin test. Free tests are available at the Student Health Center for current UAA students.

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 by February 20.
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 all foundation coursework with a 2.75 GPA and a passing score on Praxis II: Elementary Content Knowledge.
5. Provide evidence of successful experiences working with children.
6. Interview.
7. Initiate fingerprinting and criminal background check process.
8. Provide evidence of a current physical exam and negative TB skin test. These services are 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

Satisfactory progress in the first internship is required for enrollment in the second internship. All Early Childhood major courses must be completed with a grade of C or higher in order to obtain an institutional recommendation for teacher certification. In addition, MATH A205 and foundation courses in child development and families and community relationships 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. 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.

Oral and Written Communication Skills (9 credits)

Select one course from GER Oral Communication List
Select two courses from GER Written Communication List

Liberal Studies Integrated Sciences Core (10 credits)

LSIS A102 Origins: Earth-Solar Systems-Life
LSIS A201 Life on Earth

Mathematical Skills (6 credits)

Select one course from GER Quantitative Skills List
(MATH A107 recommended)
D. MAJOR REQUIREMENTS

1. Complete the following core courses. Field experience in early childhood programs may be required as part of the courses. Fingerprinting and a background check may be required to participate in field experiences.

**Liberal Studies Humanities Core** (9 credits)
- Select two courses from GER Humanities List
- Select one course from GER Fine Arts List

**Liberal Studies Social Sciences Core** (9 credits)
- Select one course from GER Social Sciences

**Child Development** (7 credits)
- PSY A245 Child Development (3) and PSY A245L Child Development Lab (1)
- EDSE A212 Human Development and Learning (3) and EDSE A212L Human Development and Learning Lab (1)
- DN A145 Child Nutrition (3)

**Families & Community Relationships** (3 credits)
- SWK 342 Human Behavior in the Social Environment (3) or SWK 409 Introduction to Child Welfare (3)

2. Early Childhood Internship

**Early Childhood Internship** (25 credits)
- EDEC A403 Mathematics and Science in Early Childhood (3)
- EDEC A404 Literacy for Young Children (3)
- EDEC A492 Senior Seminar in Early Childhood (2)
- EDEC A495C Internship I, Primary (3)
- EDEC A495D Internship II, Primary (6)
- EDEL A431 Creative Expression: Music, Art, and Drama for Elementary Teachers (3)
- EDEL A427 Teaching Social Studies in Elementary Schools (2)
- EDEL A429 Teaching Health Education in Elementary Schools (2)
- EDEL A432 Physical Education for Elementary Classroom Teachers (1)

3. Complete an additional 6 credits of electives from Liberal Studies core, Early Childhood, or advisor approved courses.

A total of 123 credits is required for the degree, of which 42 must be upper division.

INSTITUTIONAL RECOMMENDATION

**PRE-K-3 TEACHER CERTIFICATION**

Candidates who complete the 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. Foundation courses in child development and families and community relationships 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 and Praxis II exams.
6. College of Education's educational technology assessment satisfactorily completed.
7. Internships satisfactorily completed.
8. Bachelor of Arts in Early Childhood Education degree conferred.

ELEMEHTARY EDUCATION

Professional Studies Building (PSB), Suite 224, (907) 786-4412
http://edit.coe.uaa.alaska.edu/programs/teaching/elementary/index.cfm

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 information on post-baccalaureate certificates.

The BA in Elementary Education is a professional degree. Unique features of the program include a strong liberal studies emphasis, integration of educational technology, and a year-long internship that follows the school district's calendar rather than the UAA calendar. Applicants are encouraged to take EDFN A101 Introduction to Education (3 credits) to learn more about the profession. Admission to the program occurs in two stages (see below) and admission to the internship is competitive. Criteria considered for admission to the internship include academic achievement, written and oral communication skills, and community involvement. The deadline for internship placement consideration is February 20.

Practica, internships, and other field placements are made only in cooperation with participating school districts. The school districts that work in cooperation with the College of Education reserve the right to request additional information and/or preparation from candidates, in accordance with the district's established policies and practices. Cooperating districts 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 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 students, admittance to a degree/certificate/endorsement program does not guarantee acceptance by cooperating school districts. Unacceptable academic performance, an unprofessional attitude, unsatisfactory field reports, violation of professional ethics, or other factors may result in removal from the field placement.
ADMISSION REQUIREMENTS

Admission to the University of Alaska Anchorage: Elementary Education Major
Applicants must complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations. Application forms are available on the UAA website at: www.uaa.alaska.edu/admissions.

Admission to the Department of Teaching and Learning, College of Education: Elementary Education Major
Admission to the Department of Teaching and Learning is a prerequisite for all education course work with the exception of EDFN A101 Introduction to Education and EDFN A300 Philosophical and Social Context of American Education. In order to be admitted to the Department, students must:

1. Complete an application to the Department of Teaching and Learning by one of the following dates: March 1, August 1, or November 1.
2. Complete a minimum of 60 liberal studies credits, including all General Education Requirements, required for the degree (transfer credits may be used).
3. Have a cumulative GPA of 3.00.
4. Successfully complete the Praxis I exam. With the exceptions of A101 Introduction to Education and A300 Philosophical and Social Context of American Education, applicants may not enroll in education courses without passing this exam at the level established by the College of Education.
5. Provide evidence of a current negative TB skin test. Free tests are available at the UAA Student Health Center for current UAA students.

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 Elementary Internship
The Elementary Education Programs Admission Committee determines a candidate's readiness to enroll in methods and the internship. 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, methodology, or classroom experience.

1. Meet all the requirements for and be admitted to the Department of Teaching and Learning as an Elementary Education major.
2. Submit an application form for internship status by February 20.
3. Submit one letter of recommendation from someone who can speak to the candidate's potential as a future elementary teacher.
4. Demonstrate general content knowledge competency through successful completion of all liberal studies course work and a passing score on Praxis II: Elementary Content Knowledge.
5. Provide evidence of successful experiences working with children.
6. Interview.
7. Initiate fingerprinting and criminal background check process.
8. Provide evidence of a current physical exam and negative TB skin test. These services are 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
Satisfactory progress in the first internship is required for enrollment in the second internship. Child development, Alaska studies, MATH A205, and all Elementary Education major courses must be completed with a grade of C or higher in order to obtain an institutional recommendation for elementary teacher certification.

GRADUATION REQUIREMENTS
Candidates must complete the following graduation requirements:

A. GENERAL UNIVERSITY REQUIREMENTS
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. 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.

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

Lifetime Wellness (2 Credits)
Pep A145 Principles of Health and Physical Activity 2

Liberal Studies Integrative Core (9 credits):
PHIL/LSIC A231 Truth, Beauty, and Goodness 3
LSIC A331 Power, Authority, and Governance 3
LSIC A332 Science, Technology, and Culture 3

Liberal Studies Integrated Sciences Core (16 credits)
LSIS A101 Discoveries in Science 1
LSIS A102 Origins: Earth-Solar System-Life 5
LSIS A201 Life on Earth 5
LSIS A202 Concepts and Processes: Natural Sciences 5

Mathematical Skills (9-13 credits)
MATH A205 Communicating Mathematical Ideas 3
STAT A252 Elementary Statistics (3) 3-4
or
STAT A253 Applied Statistics for the Sciences (4) 3-6
or
MATH A107 College Algebra (4) 3-6
or
MATH A108 Trigonometry (3) 3-6
or
MATH A109 Precalculus (6) 3-6
or
MATH A200 Calculus I (4) 3-6
or
MATH A201 Calculus II (4) 3-6

Liberal Studies Humanities Core (12-20 credits)
HUM A211 Introduction to Humanities I 3
HUM A212 Introduction to Humanities II 3
ENGL A201 Masterpieces of World Literature I (3) 3
or
ENGL A202 Masterpieces of World Literature II (3) 3
Select one course from GER Fine Arts List 3
Two semester sequence of one language* 0/8

*Any language other than English (may be waived if fluency in a language other than English can be demonstrated or if grades of C or higher were received in four years of one language completed in high school).
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 3.00.
3. Cumulative GPA of 3.00 in all major requirements.
The College of Health and Social Welfare comprises the departments of Health Sciences and Human Services, the Justice Center, the School of Nursing and the School of Social Work. The Gerontology Minor is also housed in the College. The College offers a variety of certificate, 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 Human Development, the Alaska Area Health Education Center, the Justice Center, the Institute for Circumpolar Health Studies and the National Resource Center for American Indian, Alaska Native and Native Hawaiian Elders. Together, through multi-disciplinary approaches, the schools, departments, centers and institutes take direct action to address the needs and potentials of Alaska’s peoples and communities.

The Center for Community Engagement and Learning serves the entire university and connects academic programs with community-engaged activities so that faculty, students, and community partners can forge linkages between theory and practice, knowledge, and action, and the university’s academic resources and the community’s development. The Center offers a baccalaureate Civic Engagement Certificate, the Bonner Leader Program, and Community Service-learning Advocates Program for students who wish to pursue public issues, action research, and service projects.

The Certificate in Civic Engagement prepares undergraduates and people with bachelor's degrees to become active, effective, ethical citizens in their professional and personal lives. Students from any major degree program develop the reflective, analytic, and practical skills to link curricular and co-curricular learning to civic engagement outside the academy through service-learning classes, internships, and community-engaged scholarship and creative activity. The Certificate is intended for motivated students committed to action for the greater good.

Civic, personal, and academic growth are equally important in this program. Civic and personal growth is best accomplished through experiential education in the community together with critical reflection. Community-based, service-learning is defined as a course or competency-based, credit-bearing educational experience in which students:

1. Participate in an organized service activity that meets identified community needs;
2. Gain an enhanced sense of civic responsibility; and
3. Reflect on the service activity in such a way as to gain further understanding of course content and a broader appreciation of the discipline.

Critical reflection entails describing activities, examining them in light of specific learning objectives, and articulating lessons and action plans from them. Reflection is widely recognized as a key means of linking scholarly ideas with the empirical world in everyday life.

Students who earn the Certificate in Civic Engagement will gain competencies in three domains: academic, personal, and civic.

Academically, students will achieve the outcomes of their majors and will be able to:
- Relate service and professional ethics to civic engagement frameworks;
- Identify and analyze social, cultural, economic, environmental, technical, and political aspects of public problems;
- Translate theoretical perspectives and frameworks of their disciplinary majors into actions solving concrete public problems affecting Alaskan, U.S. and international communities, with substantive emphases on ethics, poverty and sustainability; and
- Apply critical thinking skills and empirical evidence to make judgments regarding public problems outside the classroom.

Personally, students will be able to:
- Develop moral dispositions of judgment, civic participation and public commitments related to their personal values;
- Enter unfamiliar situations with confidence and participate effectively;
- Identify the disciplinary, societal, and cultural values that shape their own and others’ responses to poverty and sustainability; and
- Assume responsibility for enacting public uses of their education and civic engagement in their anticipated vocational and personal trajectories.

Civically, students will be able to:
- Utilize communication and problem-solving skills in addressing public problems at multiple levels;
- Evaluate the places, interests and competing demands of others in the community and consider ethical implications to resolving them;
- Demonstrate commitment to resolving public problems beyond their college careers and to fostering others’ involvement;
- Transform civic imaginations to enhance abilities of individuals, groups, and communities to embrace a vision for the future; and
- Assume leadership roles in groups and organizations capable of taking action on matters of common concern.

A student must satisfy the Admission to Certificate Requirements in Chapter 7, Academic Standards and Regulations.

A student must be enrolled in a major or pre-major baccalaureate degree program or have completed a baccalaureate degree.

A student must submit a plan of study demonstrating integration of the Certificate with her/his major course of study, formulated in conjunction with Certificate and departmental advisors. Regular advising is a crucial component of the Certificate program. Although the CEL Curriculum Committee approves courses as meeting Certificate criteria, the Certificate Faculty Advisor approves courses with and for individual students.

1. Meet all general University requirements for undergraduate Certificates.
2. Concurrent completion of a baccalaureate degree program or
completed baccalaureate degree.

3. Submission of a final Program of Study, which indicates all approved classes, to the Certificate Faculty Advisor, the Director of the Center for Community Engagement & Learning, and the Dean of the College of Health & Social Welfare. The Program of Study must be forwarded to Degree Services at least two semesters prior to graduation.

4. Completion of the following according to the student's individual Program Plan:
   Certificates core courses:
   - CEL A292 Introduction to Civic Engagement 3
   - CEL A395 Civic Engagement Internship 9
   - CEL A450 Civic Engagement Capstone 3
   Area concentration courses, approved for Certificate by CEL Curriculum Committee, approved for student by Certificate Faculty Advisor:
   - Course with poverty or environmental sustainability as a substantive focus. A course that has a community-based learning component is preferred. 3
   - Course with community-building or public policy as a substantive focus. A course that has a community-based learning component is preferred. 3
   - Course with ethics as a substantive focus. 3
   Course must have a community-based learning component. 3
   Electives (must have community-based learning component), approved for Certificate by CEL Curriculum Committee, approved for student by Certificate Faculty Advisor:
   - 1 lower division (100-299) 3
   - 1 upper division (300-499) 3

5. A total of 30 credits is required for the certificate.


FACULTY
Nancy Andes, Director and Professor, AFNA@uaa.alaska.edu
Tracey Burke, Assistant Professor, AFTKB1@uaa.alaska.edu
Diane Hirshberg, Assistant Professor, AFDBH1@uaa.alaska.edu

CENTER FOR HUMAN DEVELOPMENT
2702 Gambell St., Suite 103, Anchorage, AK 99503, (907) 272-8270 or (800) 243-2199
http://alaskachd.org

OCCUPATIONAL ENDORSEMENT CERTIFICATE, CHILDREN’S RESIDENTIAL SERVICES
The Occupational Endorsement Certificate, Children's Residential Services is a 16-credit occupational endorsement for paraprofessionals currently working or planning to work with children and youth in therapeutic residential settings. By completing the endorsement certificate requirements, students gain skills essential to become effective members of therapeutic treatment teams.

STUDENT OUTCOMES:
Students who successfully complete this program will be able to:
- Use knowledge of therapeutic techniques, child development, and cultural responsiveness to interpret treatment plans in therapeutic residential settings for children and youth.
- Apply an array of strategies to support and shape behavior of children and youth with challenging behaviors.
- Abide by professional practices accepted in the field of children’s residential care.
- Blend concepts and skills to develop trauma-informed practices in children’s residential care.

ADMISSION REQUIREMENTS
Complete the Admission to Occupational Endorsement Certificates requirements in Chapter 7, Academic Standards & Regulations. Students will also need to provide proof of a current criminal background check that meets industry standards.

ACADEMIC PROGRESS REQUIREMENTS:
In order to earn the occupational endorsement, all courses must be completed with a grade of C or better. Students who audit a course in Disability & Long Term Supports or who are unable to earn a grade of a C or better in the course may repeat it following the procedures outlined in Chapter 7, Academic Standards & Regulations.

CERTIFICATE REQUIREMENTS
Complete 16 credits in the following courses:
- DLS A101 Introduction to Children's Residential Care 3
- DLS A201 Skill Basics in Residential Services 3
- DLS A205 Teaching Social Skills to Youth in Residential Care 4
- DLS A206 Positive Behavioral Supports in Youth Residential Care 3
- DLS A385 Working with Traumatized Children 3

FACULTY
Karen Ward, Ed.D., Professor, Psychology Department: afkmw@uaa.alaska.edu

GERONTOLOGY
Gordon Hartlieb Hall (GHH), Room 106, (907) 786-6900
www.uaa.alaska.edu/gerontology

Gerontology is the study of the aging process as individuals mature from middle age through later life. It includes the study of physical, mental, emotional and social changes in older people as they age. Gerontology investigates changes in society that result from an aging population and applies this knowledge to policies and programs. This field is multidisciplinary and the study of aging combines and/or integrates information from academic and applied areas of study.

The field of gerontology is diverse and offers many different employment opportunities. Jobs may be found in:
- Community, human service, and religious organizations
- Health care and long-term care institutions
- Federal, state, and local government agencies
- Retirement communities
- Academic and other educational and research settings
- Professional organizations
- Business organizations

The minor is comprised of a selection of courses that specifically relate to issues concerning the aging process. Because of its multidisciplinary emphasis, there is no one preferred student major background necessary for working towards a minor. Please also read the policy section regarding Minors at the beginning of this chapter.

MINOR, GERONTOLOGY
The undergraduate Minor in Gerontology is comprised of a selection of courses that specifically relate to issues concerning the aging process. A total of 18 credit hours is required for the minor.

1. Complete required Minor core courses:
   SOC A110 Introduction to Gerontology: Multidisciplinary Approach 3
HEALTH SCIENCES

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  Seminar: 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)
SWK A470  Social Work with the Aging and Elderly (3)

Approved Selected/Special Topics course(s) related to Gerontology (1-3)*

* Selected or Special Topics Courses related to aging will be periodically offered by various departments. These courses are typically listed under A490. Topics must be reviewed and approved by the gerontology committee.

Examples of existing A490 courses include:
ANTH Cross Cultural Perspectives on Aging
PSY Women and Aging
SWK Promoting Successful Aging

** 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 and are offered by various departments. Practica must be approved by the gerontology committee. A maximum of 6 credits may be from practicum courses.

FACULTY
Janet Emerman, Associate Professor/Chair, janet@uaa.alaska.edu

HEALTH SCIENCES

Diplomacy Building (DPL), Room 404, (907)786-6565
http://hs.uaa.alaska.edu/dept

BACHELOR OF SCIENCE,
HEALTH SCIENCES

Physician Assistant Track

The Bachelor of Science in Health Sciences Degree (BSHS), with a Physician Assistant Track provides a BS Degree for students who have completed the required education and clinical experience to work as a physician assistant.

The UAA program consists of a minimum of two years of pre-major coursework and health care experience, a year of clinical and didactic instruction at approved training sites, and a year of clinical and family practice clerkships.

Physician assistants (PAs) are health care professionals licensed to practice medicine with physician supervision. As part of their comprehensive responsibilities, PAs conduct physical exams, diagnose and treat illnesses, order and interpret tests, counsel on preventive health care, assist in surgery, and can write prescriptions in most states. Physician assistants practice in primary care medicine - family medicine, internal medicine, pediatrics, obstetrics and gynecology and in surgery and the surgical subspecialties. Within the physician-PA relationship, physician assistants exercise autonomy in medical decision making and provide a broad range of diagnostic and therapeutic services. PA practice may also include education, research, and administrative services.

Program Outcomes

Graduates of the BSHS Physician Assistant Track will:

- Perform data collection, medical interviewing, and physical examination skills and communicate the acquired information effectively.
- Formulate medical decisions and treatment plans.
- Perform procedural skills appropriate to the Physician Assistant's role.
- Work with patients to educate them about appropriate treatments and interventions to maximize health.
- Have knowledge of pharmacology and other treatment modalities to enable the Physician Assistant to function at the full scope of practice as allowed by individual state law.
- Provide assessment and care for common mental health conditions and concerns.
- Understand the unique features of the Physician Assistant role, including the Physician Assistant's legal relationship with supervising and delegating physicians.
- Increase health care access by providing primary care services to under-served populations.

Physician Assistant Students Enrolled at MEDEX

Completion of the BSHS degree requires a year of intense didactic instruction that is not available in Alaska. While students may earn a PA certificate through a number of training programs, special arrangements have been made with the University of Washington (UW) so that the UAA BSHS Degree, with a Physician Assistant Track may be awarded in conjunction with coursework taken through the UW MEDEX Certificate Program. Students are admitted at both UAA and UW and must satisfactorily complete PA courses at UW in their junior year and Clerkship courses at UAA in their senior year.

Procedures for the participation of UAA students in the UW MEDEX Northwest Physician Assistant Program

Up to six students from Alaska may be admitted to the University of Washington MEDEX program annually, in accordance with the joint selection process established in the collaborative agreement between UAA and UW. Applicants are evaluated on their previous clinical experience and their commitment to practice in Alaska, particularly in under-served areas, in addition to their overall academic performance in the pre-physician assistant curriculum.

Students admitted into the MEDEX program spend their junior year of the PA program at one of the UW training sites (Seattle, Spokane or Yakima), where they receive intense clinical and didactic instruction. The senior year of the BSHS program is spent in Alaska, consisting of practicum (Clerkship) placement. The practicum year corresponds to UW's year of field placement and supervision that completes the MEDEX certificate program. The 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. Students are placed in Alaska training sites currently utilized by the MEDEX program.

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 Degree in Health Sciences.

For more information about the MEDEX Northwest Physician Assistant Program contact:

BSHS ADMISSION REQUIREMENTS

Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations. Students who declare a Health Sciences major and do not meet the additional admission
requirements listed below, but do meet the University’s general admission requirements, will be admitted as Health Sciences pre-majors (see pre-major admission below).

Health Care Experience
Students without health care experience should note that admission to the MEDEX program requires a minimum of two (2) 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 Graduation Requirements). 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 contact: http://washington.edu/medicine/som/depts/medex/applicants/applicants.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 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 pre-major courses: ENGL A111, ENGL A212, BIOL A111/L, BIOL A112/L and CHEM A103/L or BIOL A102 or BIOL A240. PSY A111 or PSY A150 is also highly recommended. (The MEDEX program requires a minimum grade of B- in each course applied toward the UW admission requirements.)

ACADEMIC PROGRESS
Students in pre-major admission status who are unsuccessful after three attempts to be admitted into the MEDEX program will be removed from the MEDEX program. MEDEX students who do not successfully complete or are dismissed from the MEDEX program may be removed from the BSHS program.

CERTIFIED PHYSICIAN ASSISTANT’S DEGREE COMPLETION ADMISSION REQUIREMENTS
Students who have graduated from the UW MEDEX program or another accredited PA program, and hold current NCCPA certification may be admitted to the UAA BS HS degree program to complete their degree. They must meet the Baccalaureate Degree Programs Admission Requirements in Chapter 7 of this catalog and must submit official transcripts and official documentation of successful PA program completion.

Students admitted to the BSHS Program who hold a current PA Certificate through an ARC-PA accredited program and satisfy all UAA requirements may be awarded credits for the certificate and apply those credits toward the BSHS. Contact the BSHS Department for details.

GRADUATION REQUIREMENTS
Students must complete the following requirements:

A. GENERAL UNIVERSITY REQUIREMENTS
All students, with the exception of the following, must complete all General University Requirements for All Baccalaureate Degrees at the beginning of this chapter.

In conjunction with a collaborative agreement between the University of Washington MEDEX program and UAA, students who hold a MEDEX PA certificate may use their MEDEX courses to meet the UAA General University Requirements that 24 upper division credits must be completed in residence at UAA and 12 credits in the major must be completed in residence at UAA. These students will, however, be required to meet all other General University Requirements including completion of at least 30 credits in residence at UAA.

B. GENERAL EDUCATION REQUIREMENTS
Complete the General Education Requirements for Baccalaureate Degrees at the beginning of this chapter.

C. MAJOR REQUIREMENTS
1. Complete the following course:
   HS A490 Selected Topics: Health Care Issues in Alaska (1-6) 3
2. MEDEX students concurrently admitted to the BSHS degree program at UAA and the UW MEDEX program must complete the following:
   HS A463 Physician Assistant Clinical Clerkship I 12
   HS A464 Physician Assistant Clinical Clerkship II 12
   HS A465 Physician Assistant Family Practice Clerkship I 12
   HS A466 Physician Assistant Family Practice Clerkship II 12
3. A total of 120 credits is required for the degree, of which 42 must be upper division.

FACULTY
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HUMAN SERVICES
Beatrice McDonald Hall (BMH), Room 106, (907) 786-6437
http://hums.uaa.alaska.edu

The Department of Human Services offers both an Associate of Applied Science degree in Human Services preparing students for entry-level employment and a Bachelor of Human Services practitioner’s degree which holds as its mission, the preparation of students to work effectively in any paraprofessional counseling and human service practice. 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, respect of clients through a collaborative relationship founded upon a developmental model. Specific skill courses combined with practica are strengthened through conceptual course work 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 first hand experience in their desired specialty.

An important part of the program is Human Services 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. Contact the Human Services Department at 786-6437 for an appointment with an advisor.

Both the Human Services AAS and BHS are accredited by the Council for Standards in Human Services Education.

**OCCUPATIONAL ENDORSEMENT CERTIFICATE, CONFLICT RESOLUTION**

The Human Services Occupational Endorsement Certificate in Conflict Resolution provides students the opportunity to acquire skills used in various conflict resolution methods used in human service agencies. The 18 credit program provides a balanced education in the study of Family Mediation, Alternative Dispute Resolution, Paraprofessional Counseling and Group Facilitation. Instruction is delivered through classroom lectures, demonstrations, case studies and role plays.

**Outcomes**

Students completing this certificate are prepared to:

- Understand the nature of conflict through theory and collaborative practices.
- Demonstrate enhanced communication skills and interpersonal skills to include negotiation.
- Incorporate conflict management skills in Human Service practice.
- Integrate concepts of diversity into various collaborative practices.

**ADMISSION REQUIREMENTS**

1. Satisfy the admission requirements for Occupational Endorsements found in Chapter 7 of this catalog.

**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
   - Complete 6 credits from the following: 6
     - General Human Services Emphasis
     - Substance Abuse Emphasis

3. A total of 18 credits is required for the Occupational Endorsement Certificate.

**ASSOCIATE OF APPLIED SCIENCE, HUMAN SERVICES**

Graduates of this program are able to:

- Analyze and navigate community based human services agencies, service delivery systems and secure a variety of community resources.
- Utilize a strengths-based approach to working with people and their problems in living.
- Effectively use intervention, and core paraprofessional counseling skills.
- Apply their acquired human services skills in a service agency, to include assessment, interviewing, treatment planning, service delivery, and paraprofessional counseling.
- Demonstrate consolidation of knowledge through three areas of learning including:
  - Understanding of an agency, its target population and services delivered, and interaction with their community partners.
  - Development of their professional selves and identities with appropriate use of supervision
  - Application of client/community intervention skills
  - Qualify for employment in the human services workforce.
  - Build on their human services degrees as a foundation for further education.

**ADMISSION REQUIREMENTS**

Satisfy the admission requirements for certificate and associate degree programs found in Chapter 7 of this catalog.

**GENERAL UNIVERSITY REQUIREMENTS**

1. Complete the General University Requirements for Associate of Applied Science Degrees found at the beginning of this chapter.
2. Complete the General Course Requirements for Associate of Applied Science General Degrees located at the beginning of this chapter.

**MAJOR REQUIREMENTS**

1. Complete the following required courses:
   - ANTH A200 Natives of Alaska (3) or ANTH A202 Cultural Anthropology (3)
   - HUMS A101 Introduction to Human Services 3
   - HUMS/PSY A453 Application of Statistics to the Social Sciences (3)
   - HUMS A295A Human Services Practicum I 3
   - HUMS A295B Human Services Practicum II 3
   - HUMS A324 Introduction to Paraprofessional Counseling I 3
   - HUMS A223 Introduction to Paraprofessional Counseling II 3
   - PSY A111 General Psychology 3
   - PSY A150 Life Span Development 3
   - Complete 6 credits from one of the emphasis areas: 6

   **NOTE: Each Human Service degree (Associate of Applied Science and Bachelor of Human Services) requires a 6 credit emphasis area. BHS students may complete 6 credits from a different emphasis area or an additional 6 credits from the emphasis area used for the AAS.**

**General Human Services Emphasis**

Complete 6 credits from the following: 6

- HUMS/PSY A453 Application of Statistics to the Social Sciences (3)
- HUMS A295A Human Services Practicum I 3
- HUMS A295B Human Services Practicum II 3
- HUMS A223 Introduction to Paraprofessional Counseling I 3
- HUMS A224 Conflict and Collaborative Systems 3
- HUMS A324 Introduction to Paraprofessional Counseling II 3
- PSY A111 General Psychology 3
- PSY A150 Life Span Development 3
- Complete the General University Requirements for Associate of Applied Science General Degrees located at the beginning of this chapter.

**Substance Abuse Emphasis**

Complete 6 credits from the following: 6

- HUMS A122 Substance Abuse as a Contemporary Problem (3)
- HUMS A123 Public Education and Prevention in Substance Abuse (3)
- HUMS A124 Introduction to Physiology and Pharmacology of Substance Abuse (3)
- HUMS A222 Introduction to Paraprofessional Counseling I 3
- HUMS A223 Introduction to Paraprofessional Counseling II 3
- HUMS A416 Substance Abuse and the Older Adult (3)
Bachelor of Human Services Admission process.

C. MAJOR REQUIREMENTS

B. GENERAL EDUCATION REQUIREMENTS

A. GENERAL UNIVERSITY REQUIREMENTS

Students must complete the following graduation requirements:

1. Complete the following Bachelor of Human Services core requirements:
   - HUMS A321 Diversity Issues in Human Services Practice (3)
   - HUMS A322 Service Coordination in Human Services Practice (3)
   - HUMS A333 Alternative Dispute Resolution (3)
   - HUMS A412 Ethical Issues in Human Services Practice (3)
   - HUMS A414 Rural Treatment Strategies for Human Service Professionals (3)
   - HUMS A417 Substance Abuse Counseling for Human Service Professionals (3)
   - HUMS A424 Advanced Counseling for Human Service Professionals (3)
   - HUMS A434 Group Facilitation for Human Service Professionals (3)
   - HUMS A461 Crisis Intervention (3)
   - HUMS A495A Human Services Practicum III (3)
   - HUMS A495B Human Services Practicum IV (3)

* Note: Cannot be used in emphasis areas.

2. Complete an additional 6 credits (to total 12 credits) from the AAS Major Requirements Emphasis Areas.

**Note: Each Human Service degree (Associate of Applied Science and Bachelor of Human Services) requires a 6-credit emphasis area. BHS students may complete 6 credits from a different emphasis area or an additional 6 credits from the emphasis area used for the AAS.

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

MINOR, ADDICTION STUDIES

The Addiction Studies Minor, coordinated by the Human Services Department, provides students with the opportunity to gain knowledge about the process and effects of addictive behaviors, and their treatment. By providing students with contemporary information, and an opportunity to select from an array of courses that meet their professional interests and goals, the minor prepares students for entry-level positions in treatment programs, substance abuse agencies, or for graduate study in this or related areas. The minor also enhances the capabilities of students in human service fields, such as human services, social work, nursing, justice, and psychology, to acquire knowledge about substance abuse, a major factor in many human dilemmas. Course work may also apply toward certification from the State of Alaska as a substance abuse counselor. Please note that additional course work and practicum hours may be required for this certification.

The Addiction Studies minor requires a total of 18 credits, of which a minimum of 9 must be upper division.

1. Complete 6 credits from the following courses:
   - HUMS A122 Substance Abuse as a Contemporary Problem (3)
   - HUMS A226 Intervention Continuum in Substance Abuse Counseling (3)

2. Complete 12 credits from the following:
   - HS A480 Contemporary Issues in Addiction Studies (1-3)
   - HUMS A123 Public Education and Prevention in Substance Abuse (3)
   - HUMS A124 Introduction to Physiology and Pharmacology of Substance Abuse (3)
   - HUMS A416 Substance Abuse and the Older Adult (3)
   - HUMS A417 Substance Abuse Counseling for Human Services Professionals (3)
   - JUST A110 Introduction to Justice (3)
   - NS A428 Nursing the Chemically Dependent Client (3)
   - SWK A471 Addictions and Social Work (3)

3. A total of 18 credits is required for the minor.

FACULTY

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JUSTICE

Social Sciences Building (SSB), Room 306, (907) 786-1810
http://justice.uaa.alaska.edu

The Justice Center has statewide responsibility for higher education and research related to the areas of crime, law, and the administration of justice. The Center offers a baccalaureate degree program for students interested in the justice area. In addition, a Paralegal Studies Certificate is available for qualified students who wish to pursue a paralegal career.

Justice faculty have professional research and service obligations beyond classroom teaching. The Center is an organized research unit, which, at its own initiative or in response to requests from outside the university, conducts research and public education programs. Efforts are made to ensure that all undergraduate students who major in Justice have opportunities to work with faculty members on Justice Center research and service projects.

JUSTICE RESEARCH HONORS

The Justice Center recognizes those undergraduate students who develop exceptional social science research skills by awarding them Justice Research Honors and noting the award on their permanent university transcript. Students majoring in Justice are eligible to graduate with Justice Research Honors upon satisfactory completion of all of the following requirements:

1. Meet the requirements for a BA degree in Justice.
2. Meet the requirements for membership in the national justice honor society, Alpha Phi Sigma (including, 3.2 GPA in UAA Justice Courses, 3.0 overall).
3. Complete the following courses with a grade of B or better:
   - JUST A400 Advanced Research Methods
   - JUST A401 Inferential Data Analysis in Justice
   - JUST A488 Research Practicum
4. Students intending to graduate with Justice Research Honors must notify the Justice Center Undergraduate Program Coordinator, in writing, on or before the date they file their Application for Graduation with the Enrollment Services Office.

BACHELOR OF ARTS, JUSTICE

The Bachelor of Arts degree in Justice satisfies the educational prerequisites for a variety of administrative, operational, research, and planning positions related to crime, law, and the administration of justice. Those graduates with records of high achievement in the Justice undergraduate program are prepared to pursue advanced education in graduate and professional degree programs at the University of Alaska Anchorage and other universities.

Graduates who receive a Bachelor of Arts degree in Justice have both broad educational preparation for productive citizenship and the specialized knowledge and skills required for the evaluation, administration and improvement of police, court, and correctional policies and organizations.

ADMISSION REQUIREMENTS

Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.

GRADUATION REQUIREMENTS

Students must complete the following graduation requirements:

A. GENERAL UNIVERSITY REQUIREMENTS

   Complete the General University Requirements for All Baccalaureate Degrees listed at the beginning of this chapter.

B. GENERAL EDUCATION REQUIREMENTS

   Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

C. MAJOR REQUIREMENTS

1. Complete the following required courses:
   - JUST A110 Introduction to Justice 3
   - JUST A200 Introduction to Research Methods 3
   - JUST A201 Justice Data Analysis 3
   - JUST A221 Justice Organization and Management 3
   - JUST A250 Development of Law 3
   - JUST A251 Criminology 3
   - JUST A330 Justice and Society 3
   - JUST A360 Justice Processes 3
   - Upper division Justice electives 15
   - Justice electives, any level 6

   *Paralegal Studies courses can be counted as Justice electives. Only 6 credits of JUST A490 may be counted toward the Justice electives required for the BA in Justice.

2. Complete a University-approved minor in another discipline. Specific requirements for minors are listed in the catalog by school or department.

3. All Justice majors must take the Justice Exit Exam.

   There is no minimum score required for graduation.

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

MINOR, JUSTICE

Students majoring in another subject who wish to minor in Justice must complete the following requirements. A total of 18 credits is required for the minor, 9 of which must be upper division.

   - JUST A110 Introduction to Justice 3
   - JUST A251 Criminology 3
   - Upper division Justice electives 9
   - Justice electives, any level 3

   *Paralegal Studies courses can be counted as Justice electives. Only 6 credits of JUST A490 may be counted toward the Justice electives required for the Minor in Justice.

FACULTY

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PARALEGAL STUDIES

Social Sciences Building (SSB), Room 306, (907) 786-1810
http://justice.uaa.alaska.edu

UNDERGRADUATE CERTIFICATE,
PARALEGAL STUDIES

The Paralegal Studies Certificate Program is approved by the American Bar Association.

PROGRAM GOALS

1. Broad-based knowledge achieved through general college education.
2. Exceptionally strong competency in critical thinking and in written and oral communication skills.
3. Comprehensive understanding of ethical responsibilities as assistants to attorneys, governed by the rules of professional responsibility.
4. Legal vocabulary and understanding of procedure required to perform paralegal duties in a civil practice.
5. Operative knowledge of the interviewing and investigatory techniques required for paralegal performance.
6. Command of skills required for both law library and computerized legal research, and for memoranda of legal analysis.
7. Knowledge of the variety of legal specialties performed by paralegals.
8. Practical experience in a law office or agency that allows students to apply classroom skills.

**ADMISSION REQUIREMENTS**

Students must have completed a total of 6 credits in ENGL A111 (or equivalent), A211, A212, A213, A311, A312, or A414 with a minimum grade of B in each class. Students must have a 2.00 overall GPA to be admitted to the Paralegal Studies Certificate Program. Students must apply and be admitted to the program at the Anchorage campus before completing 12 credits of the paralegal core curriculum.

*Note: Special admission requirements for this certificate are enforced and certificates cannot be completed at extended campuses. Certain courses required for the certificate must be taken only at the Anchorage campus.*

Students are encouraged to complete a BA or Associate of Arts in conjunction with the Paralegal Certificate. Paralegal courses fulfill the Justice elective requirements for the Justice BA and the General Elective requirements for the Associate of Arts. Students who have already completed a degree at an accredited institution whose composition courses meet UAA's written communication and program admission requirements need only complete the Paralegal core courses. Transfer credit for some core courses may be determined at the departmental level.

Students interested in the Paralegal Studies Certificate Program should consult a faculty advisor in the Justice Center before enrolling in paralegal courses.

**CERTIFICATE REQUIREMENTS**

1. Complete 6 credits in Written Communications (ENGL A111, A211, A212, A213, A311, A312, or A414) with a minimum grade of B in each class. 6
2. Complete the following required core courses:
   - PARL A101 Introduction to Law 3
   - PARL A215 Paralegal Studies 3
   - PARL A235 Factual Investigation and Interviewing 2
   - PARL A236 Ethics and Paralegals 1
   - PARL A238 Civil Procedure 3
   - PARL A256 Legal Research I 3
   - PARL/JUST A340 Family Law (3) or
   - PARL/JUST A352 Substantive Criminal Law (3) or
   - PARL/JUST A354 Criminal Procedure (3) or
   - PARL A362 Commercial Law (3) or
   - Other upper division law course from Justice curriculum with paralegal coordinator approval (3)
   - PARL A375 Litigation 3
   - PARL A456 Advanced Legal Analysis and Writing 4
   - PARL A470 Law of Government Regulation 3
   - JUST A495 Internship (1-6) 3
3. Complete at least 20 credits, in addition to the preceding core courses, from the General Education Requirements for Baccalaureate Degrees list or from courses that meet the general requirements in humanities, social sciences, and math/natural sciences for the associate degree. 20
4. Complete 3 credits of any elective at the 100-level or above. 3
5. Students must achieve a minimum grade of C in each paralegal core course to receive the certificate. Courses may be repeated to improve grades according to University or program policy.
6. A total of 60 credits is required for the certificate.

*Note: Graduates are not authorized to provide direct legal services to the public. The Paralegal Studies Certificate Program is a training program for paralegals who are authorized to perform substantive legal work under the supervision of an attorney. The program does not train lawyers or legal administrators.*

**FACULTY**

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**SCHOOL OF NURSING**

Professional Studies Building (PSB), Suite 103, (907) 786-4550
http://nursing.uaa.alaska.edu

The mission of the Nursing program is to educate students for productive citizenship, personal growth, and professional nursing practice. The department offers potential students interested in becoming qualified to practice as a Registered Nurse two options: the Associate of Applied Science degree in Nursing and the Bachelor of Science degree in Nursing Science. The programs are designed to reflect Alaska's needs and health care delivery systems, although graduates are prepared for beginning practice positions in other geographic areas as well. 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 Licensure 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.

Advising sessions are available to interested students. Times and locations are recorded on (907) 786-4560.

**UNDERGRADUATE CERTIFICATE, PRACTICAL NURSING**

Graduates of the Practical Nursing Certificate Program are prepared to provide basic nursing care in structured care settings under the supervision of a registered nurse or other authorized licensed health provider. Students acquire theoretical concepts by completing a series of computer based lessons, coupled with weekly class discussions; simultaneously, clinical learning experiences under the direct supervision of faculty; reinforce theoretical learning and facilitate development of clinical skills relevant to the legal scope of practice of the practical nurse. Graduates are eligible to sit for the national practical nurse licensing examination (NCLEX-PN) and are prepared for initial employment in hospitals, clinics, and long-term care settings.
ADMISSION REQUIREMENTS
Satisfy the Admission to Certificate Requirements in Chapter 7, Academic Standards and Regulations.

Students may complete the Practical Nursing Certificate in one calendar year of full time study. Admission is competitive and is based on consideration of high school grade point average, assessment scores in reading and mathematics on an approved placement test, and prior experience in health care. Students are encouraged to submit application to the University and complete placement testing by June to ensure complete processing by October 1. In order to have a student file ranked for possible admission to the Practical Nursing Certificate Program, the following items must be submitted or completed by August 1:

1. UAA Application for Admission, including transcripts from high school or GED and from prior college work;
2. Appropriate Reading score on a UAA-approved placement test;
3. Appropriate Math score on a UAA-approved placement test;
4. Documented advising meeting with a member of the practical nurse program faculty (can be completed by phone or in person);
5. Completed School of Nursing application;
6. Three letters of reference mailed directly by the writer to the Practical Nursing Certificate Program.

Once admitted to the Practical Nursing Certificate program, students are required to provide the following before actually beginning clinical course work:

1. Immunity to rubella and rubeola, confirmed by titer;
2. Immunity to Hepatitis B, confirmed by titer or documentation to having received first immunization in the three-shot series (and second immunization if sufficient time since first has passed); students are required to complete the immunization series on schedule during the program;
3. Documentation of having completed first Hepatitis A immunization in the two-shot series (series must be completed on schedule during the program);
4. Freedom from active tuberculosis, documented by negative PPD skin test or by health exam by a nurse practitioner, physician, or physician assistant (PPD must be repeated annually and must be repeated prior to the start of any term if it would expire during the course of that term);
5. Documentation of having had an HIV test; results should not be provided to the School of Nursing (required annually; must be repeated prior to start of any term in which the annual review would normally expire);
6. Results of a national level criminal background check completed within the six months prior to the start of clinical courses;
7. Current Health Provider Certification in Cardiopulmonary Resuscitation for infants, children, and adults; must be current through the semester and must be repeated prior to start of any term during which certification expires;
8. Professional liability insurance in the amount of $1 million/$3 million; insurance must be maintained throughout duration of the program. Specific information regarding acceptable professional liability insurance policies may be obtained directly from the Program.

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 experience; students who are injured while completing clinical assignments are responsible for all associated medical costs. Students are strongly encouraged to maintain personal medical insurance.

ACADEMIC PROGRESS

In order to progress in the Practical Nursing Certificate program, students must earn a satisfactory grade (C or higher or P) in all required courses. A student who is unable to earn a satisfactory grade in a required course during their initial enrollment may attempt to earn a satisfactory grade one additional time on a space-available basis. Students who are enrolled in one course must be concurrently enrolled in all courses with that common number (NUPN A101 and NUPN A101L; NUPN A110 and NUPN 110L; NUPN A112 and NUPN A112L; NUPN A113 and NUPN A113L). The three term clinical sequence must be completed within two years; students who have a progression delay or more than one year will be required to demonstrate current knowledge and clinical competence.

GENERAL UNIVERSITY REQUIREMENTS
Complete the General University Requirements for Certificates located at the beginning of this Chapter.

MAJOR REQUIREMENTS:

1. Complete the following required courses:
   - NUPN A101 Fundamental Concepts and Skills for Practical Nursing 7
   - NUPN A101L Fundamental Concepts and Skills for Practical Nursing Lab 5
   - NUPN A105 Human Anatomy and Function (3) or 3/8
   - BIOL A111 Human Anatomy and Physiology I (4)
   - BIOL A112 Human Anatomy and Physiology II (4) with grade of C or higher
   - NUPN A110 Adult Medical-Surgical Nursing for Practical Nurses 5
   - NUPN A110L Adult Medical-Surgical Nursing for Practical Nurses Lab 3
   - NUPN A112 Mother-Baby Nursing for Practical Nurses 3
   - NUPN A112L Mother-Baby Nursing for Practical Nurses Lab 2
   - NUPN A113 Nursing of Children for Practical Nurses 3
   - NUPN A113L Nursing of Children for Practical Nurses Lab 2
   - NUPN A115 Concepts in Mental Health for Practical Nurses 1
   - NUPN A116 Role Transition to LPN 1
   - NUPN A118L Integrated Clinical Practicum for Practical Nurses 2

2. A total of 37 credits is required for the certificate.

ASSOCIATE OF APPLIED SCIENCE, NURSING
Graduates of the Associate of Applied Science, Nursing program are prepared to use the nursing process to provide effective nursing services to individuals receiving care in inpatient settings and in structured outpatient settings. The academic program provides students with a closely related mix of theory and clinical practice; students gain experience in hospitals, nursing homes, clinics, and community agencies.

ADMISSION REQUIREMENTS
Students may complete the Associate of Applied Science, Nursing program in two academic years (four semesters); admission to the clinical sequence is determined by a ranking process, admission is selective, and admission requirements must be completed prior to February 1 (see items 1-6 below). Students are encouraged to submit application to the University by August to ensure complete processing of application and transcript evaluation by February 1. Students are encouraged to complete co-requisite courses while waiting for admission to the clinical sequence.
In order to have a student file ranked for possible admission to the nursing sequence, the following items must be completed no later than February 1:

1. UAA Certificate of Admission from Enrollment Services, 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 2.00 C or above: Algebra, Biology with laboratory, and Chemistry with laboratory. Courses may have been taken at the high school or college-level. Equivalent college-level courses in lieu of high school are: MATH A055, BIOL A102 and BIOL A103, CHEM A055.

2. Student attends an advising session with the Coordinator of Student Affairs, School of Nursing, (call (907) 786-4560 for a recorded message).

3. School of Nursing Application and Confidential Required Information form sent to the Coordinator of Student Affairs, School of Nursing.

4. Three letters of reference sent to the Coordinator of Student Affairs, School of Nursing.

5. Upon completion of items 1-4, student has an interview with a member of the AAS Admissions Committee.

6. Take the Nurse Entrance Test (NET) through Advising and Testing (call (907) 786-4500 for specific dates and to sign up.

7. Upon completion of items 1-6, student’s file is ranked based on a point system.

Please contact 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 actually beginning clinical course work:

1. Evidence of:
   a. Immunity to rubella and rubovula, 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 ten years (with booster required at the time of expiration);
   e. Freedom from active tuberculosis, documented annually by negative PPD skin test or by health exam 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 3rd 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 A223 and NURS A223L; NURS A250 and NURS A250L).

The four semester clinical course sequence, which begins with NURS A120/120L must be completed within four years.

GENERAL UNIVERSITY REQUIREMENTS

1. Complete the General University Requirements for Associate Degrees located at the beginning of this chapter.

2. Complete the Associate of Applied Science General Degree Requirements (15 credits) located at the beginning of this chapter. At least 3 of the 6 credits of general requirements must be a social science course.

MAJOR REQUIREMENTS

1. Complete the following required courses:
   BIOL A111 Human Anatomy and Physiology I 4
   BIOL A112 Human Anatomy and Physiology II 4
   BIOL A240 Introductory Microbiology for Health Sciences 4
   DN A203 Nutrition for Health Sciences 3
   NURS A120 Nursing Fundamentals 3
   NURS A120L Nursing Fundamentals Lab 4
   NURS A125 Adult Nursing I 3
   NURS A125L Adult Nursing I Lab 4
   NURS A180 Basic Nursing Pharmacology 3
   NURS A220 Perinatal Nursing 2
   NURS A220L Perinatal Nursing Lab 2
   NURS A221 Advanced Parenteral Therapy Lab 1
   NURS A222 Pediatric Nursing 2
   NURS A222L Pediatric Nursing Lab 2
   NURS A225 Adult Nursing II 3
   NURS A225L Adult Nursing II Lab 3
   NURS A250 Psychiatric Nursing 2
   NURS A250L Psychiatric Nursing Lab 2
   NURS A235 Staff Nurse: Legal, Ethical, and Organizational Issues 1
   PSY A150 Life Span Development 3

2. A total of 70 credits is required for the degree.

ASSOCIATE OF APPLIED SCIENCE, NURSING LICENSED PRACTICAL NURSE OPTION

Licensed Practical Nurses may complete the AAS Nursing Program in three semesters. Admission to the clinical sequence is selective and determined by a ranking process. Students are encouraged to complete co-requisite 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 1st:

1. UAA Certificate of Admission from Enrollment Services, 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 (2.00) or higher: Algebra, Biology with laboratory, and Chemistry with laboratory. Students may use courses equivalent to

University of Alaska Anchorage 2007-2008 Course Catalog www.uaa.alaska.edu
the following UAA courses in lieu of work at the high school level:
MATH A055 (Algebra), BIOL A101 and A103 (Biology) and CHEM A055 (Chemistry).
2. Successful completion of or concurrent enrollment in the following coursework.
a. BIOL A111 Anatomy and Physiology I
b. ENGL A111 Methods of Written Communication
c. PSY A150 Life Span Development
3. Current active Alaska LPN license.
4. Completed School of Nursing Application and Confidential Information form (sent to the Coordinator of Student Affairs, School of Nursing).
5. Three letters of references mailed directly to the Coordinator of Student Affairs, School of Nursing.
6. Interview with a member of the AAS Admissions Committee (scheduled after items 1-5 above are completed).

When items 1-6 are complete, the student's file will be entered into the ranking process; further details about the ranking process may be obtained directly from the AAS Nursing Program. Students are notified of the results of the ranking process by March 30th. Once admitted to the associate degree clinical courses, students are required to provide documentation of health, CPR, and liability insurance before actually beginning clinical course work.

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 ten years (with booster required at the time of expiration);
e. Freedom from active tuberculosis, documented annually by negative PPD skin test or by health exam by a nurse practitioner, physician, or physician’s assistant;*
f. Documentation of HIV testing annually (results not required).
2. Current Health Provider certification in Cardiopulmonary Resuscitation for infants, children, and adults (information regarding acceptable courses may be obtained from the department).*
3. Professional liability insurance in the amount of $1 million/$3 million; insurance must be maintained throughout the duration of the student's enrollment in clinical nursing courses. Specific information regarding acceptable professional liability insurance policies may be obtained directly from the Program.*
4. Results of a national level criminal background check.

Students enrolled in clinical courses must provide their own transportation to clinical assignments and will be required to purchase uniforms and specialized equipment. The School assumes no responsibility for illnesses and injuries experienced by students in conjunction with their clinical experiences; students who are injured while completing clinical assignments are responsible for all associated medical costs. It is strongly recommended that students maintain personal medical insurance.

**GENERAL UNIVERSITY REQUIREMENTS**

1. Complete the General University Requirements for Associate Degrees.
2. Complete the Associate of Applied Science General Degree Requirements (15 credits). At least 3 of the 6 credits of general requirements must be earned in a social science course.

**MAJOR REQUIREMENTS**

Within the LPN Option, licensed practical nurse students returning to school to complete the AAS degree in nursing will be in the LPN Direct Articulation track.

**LPN Direct Articulation Track**

Licensed practical nurse students with a current unencumbered Alaska LPN license are eligible for the LPN Direct Articulation track. This track enables the LPN to enter NURS A125/A125L of the AAS nursing program. Upon successful completion of NURS A125 with a C or higher grade, and NURS A125L with a “pass,” the student would be granted UAA course credits for NURS A120 and NURS A120L, for a total of 7 credits. To receive credit, the student must complete the appropriate form and pay an administrative fee per UAA policy. (NOTE: Any direct articulation LPN student not passing NURS A125/125L would not receive credit for NURS A120/120L, and would need to take these courses to continue toward the AAS degree in nursing).

1. Complete the following required courses:
   - BIOL A111 Human Anatomy & Physiology I 4
   - BIOL A112 Human Anatomy & Physiology II 4
   - BIOL A240 Introductory Microbiology for Health Sciences 4
   - DN A203 Nutrition for Health Sciences 3
   - NURS A180 Basic Nursing Pharmacology 3
   - NURS A220 Perinatal Nursing 2
   - NURS A220L Perinatal Nursing Lab 2
   - NURS A221 Advanced Parenteral Therapy Lab 1
   - NURS A222 Pediatric Nursing 2
   - NURS A222L Pediatric Nursing Lab 2
   - NURS A225 Adult Nursing II 3
   - NURS A225L Adult Nursing II Lab 3
   - NURS A250 Psychiatric Nursing 2
   - NURS A250L Psychiatric Nursing Lab 2
   - NURS A255 Staff Nurse: Legal, Ethical, and Organizational Issues 1
   - PSY A150 Life Span Development 3
   - Complete electives to total 70 credits.

3. A total of 70 credits is required for the degree.

**BACHELOR OF SCIENCE, NURSING SCIENCE**

Students pursuing the baccalaureate degree in nursing science are provided both the theory and clinical base to enable them to assess plan, implement, and evaluate health care to meet the needs of individuals, families, groups, and communities whose health status varies qualitatively and quantitatively. Students working on a degree in Nursing Science may choose from two options: the Basic Student Option and the Registered Nurse Option.

**HONORS IN NURSING**

Students majoring in Nursing are eligible to graduate with departmental honors by satisfying the following requirements:

1. Meeting the requirements for Graduation with Honors as listed in the UAA catalog.
2. Meeting the requirements for a BS in Nursing.
3. Earning a grade point average of 3.5 or higher in courses within the School of Nursing (courses with NS prefix).
4. Completing the following process
   a. Obtaining written support for the intent to graduate with honors from the individual's faculty advisor.
   b. Notifying the Chair of the Baccalaureate Program and the Baccalaureate Curriculum Committee in writing of the intent to Graduate with Honors prior to enrolling in the first semester senior year classes.
   c. Obtaining approval to enroll in the Honors Electives from the Baccalaureate Chair and Baccalaureate Curriculum Committee prior to enrolling for first semester senior year classes.
5. Satisfactorily completing the 2 Honors Electives* courses during the senior year of the Baccalaureate Nursing Program.

6. Applicants may not repeat any prerequisite course more than once.

7. Completion of specified prerequisite courses:
   - BACC 204
   - ENGL 111
   - ENGL 112
   - ENGL 215
   - PSY 110 or PHIL 100

8. Application to the Baccalaureate Nursing Major. After completion of the first 34 credits, as outlined in #5, and during enrollment in courses outlined in #6, the student meets with the Coordinator of Student Affairs to verify course completion and GPA and completes the Application to the Nursing Major. The student may call (907) 786-4550 to set up an appointment.

9. School of Nursing Application and Confidential Required Information form on file in the School.


11. A current Plan of Study signed by a School of Nursing Advisor on file with the School of Nursing.

12. After completion of all the above steps, the student’s file is forwarded to the School’s Admissions Committee for acceptance into the Nursing Major. Formal admission to the Nursing program is based on the student’s relative standing on the minimum requirements outlined above. There are two deadlines for consideration by the Committee: October 1 in the following fall semester and February 1 in the following spring semester.

13. Achievement of a C or higher in the specified courses for the major that are in progress when admission is sought (i.e., PSY A150, BIOL A240), and maintenance of a minimum 2.70 GPA until the semester of enrollment in beginning nursing courses (NS A204 and NS A216).

14. Preference will be given to residents of the State of Alaska as defined by the University’s policy on residency for tuition purposes.

CLINICAL REQUIREMENTS

All students who are admitted to clinical nursing courses are required to provide copies of documentation of health, CPR and personal liability insurance prior to beginning those courses. Requirements marked with an asterisk (*) are considered valid only if the expiration date does not occur prior to the end of the semester of current enrollment:

1. Evidence of:
   - a. Immunity to rubella and rubeola confirmed by titer;
   - b. Immunity to Hepatitis A and Hepatitis B confirmed by titer (first semester clinical students may be in the process of completing the immunization series, for those students, documentation of immunity by titer is required prior to entry into second year courses);
   - c. Diphtheria/tetanus vaccination within the last ten years (booster required at time of expiration);
   - d. Freedom from active tuberculosis, documented annually by negative PPD skin test or by health exam by a nurse practitioner, physician, or physician’s assistant.*
   - e. Immunity to chicken pox confirmed by health history, titer, or immunization;
   - f. Documentation of HIV testing annually (results not required).

2. Current Health Provider certification in Cardiopulmonary Resuscitation for infants, children and adults (information regarding acceptable courses may be obtained from the department) (*).

3. Professional liability insurance in the amount of $1 million/$3 million; insurance must be maintained throughout the duration of the student’s enrollment in clinical nursing courses. (Specific information regarding acceptable professional liability insurance policies may be obtained directly from the Program)(*).

4. Results of a national level criminal background check. Students enrolled in clinical courses must provide their own transportation to clinical assignments and will be required to purchase uniforms and specialized equipment. The School assumes no responsibility for illnesses and injuries experienced by students in conjunction with their clinical experiences; students who are injured while completing clinical assignments are responsible for all associated medical costs. It is strongly recommended that students maintain personal medical insurance.

ACADEMIC PROGRESS

In order to progress within the baccalaureate nursing program, students must earn a satisfactory grade (C or higher or P) in all nursing sciences courses.

Re-Enrollment: Students who are unable to earn an acceptable grade in a nursing course during their initial enrollment may attempt to earn a satisfactory grade one additional time on a space available basis.
Concurrent Enrollment: Students enrolled in one course must be concurrently enrolled in all courses with that common number (NS A313, NS A313L; NS A315, NS A315L; NS A401, NS 401L; NS A406, NS A406L; NS A411, NS A411L, NS A416, NS A416L).

Basic Student Option Progress: The four-semester clinical sequence must be completed in seven semesters and no more than a one-semester delay between sequential clinical courses will be permitted without validation of continued competence and currency.

GRADUATION REQUIREMENTS
Students must complete the following graduation requirements:

A. GENERAL UNIVERSITY REQUIREMENTS
Complete the General University Requirements for All Baccalaureate Degrees listed at the beginning of this chapter.

B. GENERAL EDUCATION REQUIREMENTS
Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter. In the Nursing program, some required prerequisite courses fulfill general education requirements.

C. MAJOR REQUIREMENTS
1. Complete all 44 credits of support courses for the Nursing Science major with a grade of C or better. Courses marked with an asterisk (*) must be completed prior to admission to clinical nursing courses:
- **ANTH or ECON General Education Requirement 3
- *BIOL A111 Human Anatomy and Physiology I 4
- *BIOL A112 Human Anatomy and Physiology II 4
- *BIOL A240 Introductory Microbiology for Health Sciences 4
- *CHEM A103/L Survey of Chemistry with Laboratory 4
- *CHEM A104/L Introduction to Organic Chemistry and Biochemistry with Laboratory 4
- *DN A203 Nutrition for the Health Sciences 3
- *ENGL A213 Writing in the Social and Natural Sciences 3
- PHIL A302 Biomedical Ethics 3
- *PSY A150** Life Span Development 3
- PSY or SOC General Education Course 3
- *Reasoning Skills** 3
- ENGL A120, or PHIL A101, or PHIL A201 3
- STAT A307 Probability and Statistics (3) or
- STAT A252 Elementary Statistics (3)

**Must be in addition to the required General Education Requirements.

2. Nursing Courses: Complete required nursing courses for the Nursing Science major (64 credits).
- NS 204 Technology and Nursing Informatics 3
- NS A216 Pathophysiology 4
- NS A300 Foundations of Nursing I 4
- NS A303 Foundations of Nursing II 3
- NS A303L Foundations of Nursing II Lab 5
- NS A309 Pharmacology in Nursing 3
- NS A313 Health Disruptions I 3
- NS A313L Health Disruptions I Lab 3
- NS A315 Health I: Nursing Therapeutics 3
- NS A315L Health I: Nursing Therapeutics Lab 3
- NS A400 Research in Nursing 3
- NS A401 Health Disruptions II 3
- NS A401L Health Disruptions II Lab 2.5
- NS A406 Nursing Therapeutics in Complex Health Disruptions 2
- NS A406L Nursing Therapeutics in Complex Health Disruptions Lab 2.5
- NS 411 Health II: Nursing Therapeutics 3
- NS411L Health II: Nursing Therapeutics Lab 3
- NS A415 Nursing Management and Legal Perspectives 4
- NS A416 Concentration in Clinical Nursing 0.5

3. A total of 126 credits is required for the degree; 42 credits must be upper division.

REGISTERED NURSE OPTION
For students who hold current licensure as a Registered Professional Nurse in the State of Alaska, the School offers "RN-only" courses and sections within the nursing major designed to build upon the RN’s basic preparation and experience and to facilitate progress in meeting program objectives. Previous college credits are evaluated for comparability to established requirements within the program and may be accepted for transfer; in addition, credit by examination is available to satisfy some General Education Requirements. Additional information is available upon request.

ADMISSION REQUIREMENTS
Registered nurses returning to complete the baccalaureate degree in nursing science must successfully complete the same academic prerequisites as basic students. Students who apply to the baccalaureate nursing major and who qualify for admission to baccalaureate study are admitted as pre-nursing majors. Admission as a pre-nursing major does not guarantee admission to the Nursing program. Registered Nurses must apply for admission to the nursing major during the semester in which they are completing the final prerequisites for NSA204. The deadlines for RN admission are twice a year on November 1 and March 1 for the following summer. Formal admission to the Nursing program is based on the Registered Nurse’s relative standing on the following minimum requirements:

1. UAA Certificate of Admission and transcript evaluations from Enrollment Services.
2. Current licensure as a Registered Professional Nurse in the State of Alaska. Copy of licensure on file with the School.
3. A current Plan of Study signed by a Nursing advisor and the RN student on file with the School of Nursing and Health Sciences. The student may call (907) 786-4550 to set up an advising session.
4. An extracted minimum grade point average of 2.00. The grade point average will be calculated using grades from all courses which are required for the nursing major that have 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 or credit for specified prerequisite courses (17 credits):
   - BIOL A111 Human Anatomy and Physiology I 4
   - CHEM A103/L Survey of Chemistry with Laboratory 4
   - ENGL A111 Methods of Written Communication 3
   - COMM A111, ENGL A120, PHIL A101, PHIL A201, or PSY A150 3
   - General Education Requirement 3
   - For students not required to take ENGL A111, another English composition course will be substituted. For transfer students, grades from equivalent courses will be substituted.
7. Enrollment in, or credit for,
   - BIOL A112 Human Anatomy and Physiology II 4
   - CHEM A104/L Introduction to Organic Chemistry and Biochemistry with Laboratory 4
   - ENGL A120, PHIL A101, or PHIL A201 3
   - ENGL A213 Writing in the Social and Natural Sciences 3
   - General Education Requirement 3 at the time of application to the major, on achieving a C in the specified courses for the major that are in progress when admission is sought (i.e., CHEM A104/L, BIOL A112), and on maintaining a minimum 2.00 grade point average until beginning nursing courses.
8. A School of Nursing and Health Sciences application on file in the School.
9. Three letters of reference, one of which must be a professional reference.

Registered Nurse students not formally admitted by UAA as a baccalaureate seeking student in the Nursing program or admitted as pre-nursing majors are eligible to take the following courses:

Nursing electives for which prerequisites have been met.

**RN Clinical Requirements**

See Clinical Requirements under the Basic Student Option.

**RN Academic Progress**

See Academic Progress under the Basic Student Option.

**Graduation Requirements**

Students must complete the following graduation requirements:

**A. General University Requirements**

Complete the General University Requirements for All Baccalaureate Degrees listed at the beginning of this chapter.

**B. General Education Requirements**

Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter. In the Nursing program, some required prerequisite courses fulfill general education requirements.

**C. Major Requirements**

1. Support Courses: Complete support courses for the Nursing Science major (38 credits). All support courses must be completed with a grade of C or better prior to admission to 300-level clinical nursing courses:

ANTH or ECON* General Education Requirement 3

BIOL A111 Human Anatomy & Physiology I 4

BIOL A112 Human Anatomy & Physiology II 4

BIOL A240 Introductory Microbiology for Health Sciences 4

CHEM A103/L Survey of Chemistry/Lab 4

CHEM A104/L Introduction to Organic Chemistry and Biochemistry/Lab 4

DN A203 Nutrition for the Health Sciences 3

ENGL A213 Writing in the Social and Natural Sciences 3

PHIL A302 Biomedical Ethics 3

PSY A150* Human Development 3

PSY or SOC General Education Requirement 3

Reasoning Skills* 3

ENGL A120, or PHIL A101, or PHIL A201

STATA252 Elementary Statistics (3) or

STAT A307 Probability and Statistics (3)

*Must be in addition to the required General Education Requirements.

**RN Licensure Credit**

An accepted, degree-seeking UAA nursing student who has successfully passed the National Council Licensure Exam (NCLEX) and has current RN licensure in the State of Alaska may be granted the following UAA course credits (27 credits) upon admission to the Nursing Major:

NS A216 Pathophysiology 4

NS A309 Pharmacology in Nursing 3

NS A303 Foundations of Nursing II 3

NS A303L Foundations of Nursing II Lab 5

NS A313 Health Disruptions I 3

NS A313L Health Disruptions I Lab 3

NS A401 Health Disruptions II 3

NS A401L Health Disruptions II Lab 3

NS A408 Complex Health Disruptions: Nursing Therapeutics 2

NS A408L Complex Health Disruptions: Nursing Therapeutics Lab 2

NS A411 Health II: Nursing Therapeutics 3

NS A411L Health II: Nursing Therapeutics Lab 3

NS A417 Management in Nursing 3

Three (3) credits of Nursing elective may be met with a current recognized nursing certification.

3. Complete elective credits to total 126 credits.

4. A total of 126 credits is required for the degree, 42 credits of which must be upper division.

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The School of Social Work

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http://socialwork.uaa.alaska.edu

The educational purpose of the Bachelor of Social Work (BSW) program at the University of Alaska Anchorage is to prepare graduates for beginning professional social work practice. Preparation for professional practice builds on a broad-based liberal arts education accomplished through completion of General Education and major degree requirements.

Social work is a profession committed to assisting individuals, families, groups, organizations, communities, and society as a whole in the improvement of the quality of life through the amelioration of social problems, equitable distribution of social resources, and client empowerment. Within an overall emphasis on consumer-centered planned change, the Bachelor of Social Work degree program at University of Alaska Anchorage is guided by the following principles:

- Social work practice is based on selective use of knowledge in planned efforts with human systems and social problems.
- Social work practice recognizes human diversity as a strength.
- Social work practice is based on professional values and ethics.
- Social work practice is based on professional relationships.
- Social work practice is based on reciprocal role performance.
- Social work practice is based on a strengths perspective.

Social work education engages the student in carefully planned experiences to achieve the knowledge, skills, and values necessary for beginning professional practice. These experiences take place in the classroom, laboratory, volunteer experience, small seminars, and selected field work practicum placements. The practicum placement is an essential component for completion of the professional degree for the BSW.

The Bachelor of Social Work degree program is accredited by the Council on Social Work Education (CSWE). BSW program admission and curriculum requirements are consistent with BSW licensing requirements for the State of Alaska.

Bachelor of Social Work

Admission Requirements

Students declare a major and 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 from programs which are not accredited by CSWE.

Requirements for Full Admission to the Social Work Program

To apply for full admission to the Social Work Program, students must complete:

1. General Education Requirements for Baccalaureate Degrees.
2. Liberal Arts Foundation courses. A grade of C or better must be earned in all Liberal Arts Foundation courses.
3. The following Social Work courses with a grade of C or better (24 credits):
   - SWK A106, SWK A206, SWK A330, SWK A331, SWK A342, SWK A243 or SWK A343, SWK A424, and SWK A481.

   Once the above requirements are met, students must submit the following 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.
   3. A Student Practicum Interest sheet.
   4. A Change of Major form indicating change of status from Pre-Major to Full-Major.

Students participate in an interview with faculty and community members to assess the student’s readiness to participate in practicum and continue in the Social Work Program. The School of Social Work will notify applicants of their status by December 1st.

Admission to the Social Work program is based on 1) successful completion of the requirements listed above; 2) demonstration of beginning competence in client-centered communication skills developed in SWK A330, documented in videotaped simulated interviews; and 3) professional judgment of social work faculty.

Placements may become competitive if the number of applicants exceeds the number of spaces. The program and agencies also reserve the right to refuse and/or terminate students who do not meet a minimum standard of performance. Thus, while the School of Social Work makes every effort to find appropriate field placements for students, admittance to the BSW program does not guarantee acceptance by cooperating social services agencies.

Only students eligible to receive state licensure will be admitted to the BSW degree program. Please contact the School of Social Work for further information.

Departmental Honors

The Bachelor of Social Work Program recognizes exceptional performance by conferring Departmental Honors in Social Work. The award is noted on the student’s permanent transcript. In order to receive Honors in Social Work, a student must meet each of the following requirements:

1. Complete all requirements for the BSW degree. A minimum of 30 credits applicable to the BSW degree must be completed at UAA.
2. Have a GPA of 3.75 or higher in upper division (300 and 400 level) social work courses.
3. Completion of:
   - SWK A363 Great Books in Social Work
   - SWK A463 Social Work Honors Research
   - HNRS A310 Community Service: Theory and Practice; or
   - SWK A243 Cultural Diversity and Community Services
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 Enrollment Services Office, of the intent to graduate with Departmental Honors.

Successful completion of Departmental Honors in Social Work earns the right to waive a regular review of an admission packet to the Master of Social Work Program with Advanced Standing status. Admission to the MSW Program for advanced standing status must be exercised within seven (7) years of receiving the BSW degree. Students are responsible for completing a UAA Graduate Application for Admission and a program application for admission to the MSW Program. The application packet should be submitted to the MSW Admissions Committee by the application deadline with request to waive the regular review process. Admission will be granted if the applicant meets all of the requirements for departmental honors.

Academic Progress

Students in the Social Work program must earn a grade of C or better in the required liberal arts and the required social work courses. Adherence to the Code of Ethics established by the National Association of Social Workers is required.
**COURSE CONTENT CURRENCY REQUIREMENT**
All upper division courses with a Social Work subject code (SWK) must be completed within seven (7) years prior to graduation.

**GRADUATION REQUIREMENTS**
Students must complete the following graduation requirements:

**A. GENERAL UNIVERSITY REQUIREMENTS**
Complete the General University Requirements for All Baccalaureate Degrees listed at the beginning of this chapter.

**B. GENERAL EDUCATION REQUIREMENTS**
Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

**C. MAJOR REQUIREMENTS**
1. Complete the following liberal arts foundation courses, with a grade of C or better:
   - ANTH A200 Natives of Alaska (3) 3
   - ANTH A202 Cultural Anthropology (3)
   - BA A151 Introduction to Business (3) 3
   - ECON A201 Principles of Macroeconomics (3) 3
   - BIOL A102 Introductory Biology (3) 3-4
   - BIOL A111 Human Anatomy and Physiology I (4)
   - BIOL A112 Human Anatomy and Physiology II (4)
   - BIOL A115 Fundamental of Biology I (4)
   - BIOL A116 Fundamentals of Biology II (4)
   - ENGL A311 Advanced Composition (3) 3
   - ENGL A313 Professional Writing and Editing (3)
   - ENGL A414 Research Writing (3)
   - ENGL A120 Critical/Creative Thinking (3) 3
   - PHIL A101 Introduction to Logic (3)
   - PHIL A201 Introduction to Philosophy (3)
   - PHIL A301 Ethics (3)
   - PHIL A421 Philosophy of the Sciences (3)
   - PSY A150 Life Span Development 3
   - SOC A101 Introduction to Sociology 3

2. Complete the following required core courses:
   - SWK/ HUMS A106 Introduction to Social Welfare 3
   - SWK A206 Introduction to Social Work 3
   - SWK A243 Cultural Diversity and Community Services (3) 3
   - SWK A343 Human Behavior: Diversity and Discrimination (3)
   - SWK A330 Social Work Practice I 3
   - SWK A331 Social Work Practice II 3
   - SWK A342 Human Behavior in the Social Environment 3
   - SWK A424 Social Work Research with Statistical Application 3
   - SWK A430 Social Work Practice III 3
   - SWK A431 Social Work Practice IV 3
   - SWK A461B Social Work Practicum I 6
   - SWK A462B Social Work Practicum II 6
   - SWK A481 Case Management in Social Work Practice 3
   - Upper division Social Work electives 6

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

   *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 Services (3)
   - SWK A343 Human Behavior: Diversity and Discrimination (3)
   - SWK A342 Human Behavior in the Social Environment 3
   - Upper division Social Work electives 3

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**COMMUNITY AND TECHNICAL COLLEGE**

The UAA Community and Technical College (CTC) is dedicated to the development and delivery of quality career and technical, community, and continuing education programs. CTC strives to meet community and industry demand for these types of education and training.

In keeping with the mission of the University of Alaska Anchorage, the Community and Technical College has a commitment to innovation and flexibility that makes high quality education and training available to all who have the ability and interest to pursue an education or profession. To accomplish this, the College delivers career and technical education to both non-degree-seeking and certificate or degree-seeking students; continuing education courses to professionals and the community; instruction and services for under-prepared, linguistically diverse, or at-risk students; as well as cultural and community service programs for all.

CTC provides educational and learning support opportunities through the student success units: College Preparatory & Developmental Studies; Learning Resources Center; Military Programs; and Chugiak Eagle River. These units support students in all colleges and in all majors. CTC provides training for personal and professional development through specialized training units: Community Education; Workforce Development; and the North Pacific Fisheries Observer Training Center.

Faculty within the College are highly trained professionals, many with years of experience in the technical specialties related to their teaching areas. Career and Technical Education Advisory Committees help insure that programs are closely linked to the needs of the state economy. Graduates of CTC programs generally find immediate employment in their chosen field of study.

CTC’s career and technical education leads to Occupational Endorsement Certificates, Undergraduate Certificates, Associate of Applied Science degrees, and Bachelor of Science degrees in a total of over 20 program areas. CTC Career and Technical programs focus on eight areas: Allied Health Sciences; Aviation Technologies/AFROTC; Career & Technical Education; Construction & Design Technology; Computers & Electronics Technologies; Culinary Arts, Hospitality, and Restaurant Management; Health, Physical Education, & Recreation; and Transportation & Power.

**ADVISING**

Prospective students should contact the CTC Academic Advising Coordinator at (907) 786-6480 for more information on CTC programs.

**REGISTRATION**

The Community and Technical College offers registration for CTC’s non-credit courses, continuing education unit courses, and professional development courses in the University Center, Room 141, (907) 786-6400. Additionally, the Chugiak-Eagle River Campus has registration site at the Eagle Center, (907) 694-3313 for all courses offered through that campus.

**ARTICULATION WITH HIGH SCHOOL PROGRAMS**

The Community and Technical College has a close and positive working relationship with Alaska school districts that eases the transition from high school to college. Students may earn college credit for tech prep courses while still in high school. Information regarding these programs can be obtained by calling the Community and Technical College Tech-Prep Office at 786-6464, refer to Tech-Prep Program in Chapter 9, or by visiting the website at [http://techprep.uaa.alaska.edu](http://techprep.uaa.alaska.edu).

**REGIONAL COORDINATION**

The Community and 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 course work in Kenai, Kodiak, and Palmer. The goal of regional coordination of career and technical education is to allow the student maximum flexibility within acceptable academic guidelines. Many courses are offered between UAA and the Southcentral extended campuses, and may be easily transferred from one campus to another.

**COLLEGE PREPARATORY & DEVELOPMENTAL STUDIES**

The College Preparatory & Developmental Studies Department (CPDS) helps under-prepared, linguistically diverse, and non-traditional students develop the academic and language skills necessary to pursue successfully their lifelong learning goals.

The CPDS department offers composition, English-as-a-Second Language (ESL), mathematics, reading, and study skills courses that prepare students to advance to the next academic level. The department uses placement and retention advising, tutoring, and a developmental teaching philosophy to help students succeed.

The College Preparatory & Developmental Studies focuses on academic and professional English-as-a-Second Language at the intermediate and advanced levels. These courses strengthen ESL students’ usage of Standard American English and build ESL students’ confidence in their English abilities.

Developmental Math courses (MATH A050, MATH A054, MATH A055, and MATH A105) are taught to insure mastery of the required course material. Classes incorporate in-class lectures, work in the math lab with instructors and certified tutors, un-timed testing in the math lab with flexible hours, and the opportunity to retake exams. Computer supplements, videotapes, CD-ROMs, workshops, web courses, and graphing calculators are available. CDPS math courses are found under the MATH prefix, and are identified with the “_8_” 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 and Computer-Assisted Writing labs are computerized and staffed by certified tutors for composition and math. CPDS and the Learning Resource Center operate these labs.

CPDS offers an interdisciplinary learning community - Smart Start. Collaborative instruction in math, writing, reading, and academic success skills provide 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**

Air Force ROTC educates and trains UAA students to serve as officers in the United States Air Force. Air Force ROTC has two-, three-, and four-year Programs that lead to a commission as a Second Lieutenant. The curriculum consists of academic courses and a leadership laboratory. Air Force ROTC is not a degree or certificate granting program.
The academic courses cover the history, organization, and mission of the Air Force, as well as leadership, management, and national security affairs. Any UAA student may take these academic courses (except AIRS A150) without joining the Cadet Corps or the Air Force. However, certain courses require prerequisites or faculty permission.

The leadership laboratory provides practical military training. Activities include field trips to Air Force bases, physical fitness training, marching, and leadership exercises. To attend the leadership laboratory, UAA students must join the Cadet Corps and not have a medical condition that would preclude service in the Armed Forces.

To become an officer through Air Force ROTC, a student must, at a minimum, complete the Two-Year Program (300- and 400-level courses plus leadership laboratory), a summer field training encampment, and earn a baccalaureate degree in any major from UAA. Upon graduation and commissioning, new lieutenants must serve 4 years in the Air Force. Those who successfully complete Air Force pilot training must serve 10 years after training.

Two hours of mandatory Physical Training (PT) are required each week. Times and location of PT sessions will be announced.

**Two-Year Program (currently not available)**

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/Preparation 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 4.0 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 6.0 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/Preparation 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 8.0 credits. Academic courses are taken in the order listed, beginning with AIRS A101 in the fall semester.

**Scholarships and Incentive Payments**

Air Force ROTC has numerous scholarship and incentive programs for high school seniors planning to enroll at UAA and for college students currently enrolled or planning to enroll at UAA. All students receiving a scholarship or incentive payment must join the Cadet Corps and be a full-time student (at least 12 semester credits for undergraduate or 9 semester credits for graduate students).

1. High school seniors can compete for Air Force ROTC scholarships that pay tuition, fees, and books at any university with an Air Force ROTC program. The scholarship includes a monthly stipend. Students can obtain applications from the UAA Air Force ROTC office or from a high school guidance counselor. Applications must be postmarked no later than December 1 of a student’s senior year.

2. Air Force ROTC at UAA has several scholarship options for college students. These scholarships cover tuition, fees, and books for sophomores, juniors, and seniors. Scholarships also include a monthly stipend. Students compete for these scholarships during the academic year prior to activation. For example, a 100-level cadet can compete for a scholarship that would start in the fall of the cadet’s 200-level year.

3. All scholarships and incentives are subject to federally mandated age restrictions. Contact Air Force ROTC at UAA for more information.

**Commissioning**

After completing the AFROTC Program, graduating from UAA, and passing a commissioning physical, cadets will receive a commission as a Second Lieutenant in the US Air Force.

1. Cadets selected for pilot training will usually begin the training within one year of commissioning. Officers who successfully complete Air Force pilot training must serve 10 years. Cadets compete for pilot training slots in their 300-level year. The pilot selection board considers GPA, cadet ranking, Physical Fitness Test scores, previous flight time, and pilot aptitude test scores when assessing candidates. Air Force ROTC at UAA has more information on medical and age requirements for Air Force pilots.

2. Cadets not qualified for pilot training can compete for slots in other career fields. The Air Force has a variety of operations, administrative, engineering, and scientific assignments. Cadets compete for and receive career assignments during the 400-level year and will serve four years in the US Air Force after commissioning.

3. Cadets may also compete for medical school appointments. Scholarships cover tuition, fees, and books for a cadet’s undergraduate and medical school programs. Air Force ROTC at UAA has more information on this highly competitive program.

**FACULTY**

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APPRENTICESHIP TECHNOLOGIES

University Center (UC), Suite 130, (907) 786-6423
www.uaa.alaska.edu/ctc/programs/applied

Individuals, as well as Alaskan industries, must meet increasing training and certification requirements reflecting more complex business and industrial standards. The Associate of Applied Science degree in Apprenticeship Technologies serves a statewide population seeking vocational training and supporting course work. The curriculum prepares graduates for the rapidly changing global workplace of the 21st century.

The Apprenticeship Technologies program is a 60-credit Associate of Applied Science degree coordinated by the University of Alaska Anchorage, and is delivered collaboratively through 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 course work and training for vocational-technical trades. Individuals receiving this degree must complete a formal apprenticeship program and hold journeyman level status in trades recognized by the U.S. Department of Labor, Bureau of Apprenticeship and Training.

Students declaring a major in Apprenticeship Technologies must present documentation of completion of an apprenticeship program approved by the U.S. Department of Labor, Bureau of Apprenticeship and Training. The department will review the documentation and may recommend up to 38 credits be transcripted following completion of all courses listed in the Degree Requirements section.

ASSOCIATE OF APPLIED SCIENCE, APPRENTICESHIP TECHNOLOGIES

ADMISSION REQUIREMENTS

Satisfy the Admission to Certificate and Associate Degree Programs Requirements in Chapter 7, Academic Standards and Regulations.

GENERAL UNIVERSITY REQUIREMENTS

1. Complete the associate degree requirements located at the beginning of this chapter.
2. Complete the associate of applied science degree requirements (15 credits) located at the beginning of this chapter. Some of the major requirements will also fulfill Associate of Applied Science degree general requirements.

MAJOR REQUIREMENTS

1. Complete the following required courses:
   ENGL A111 Methods of Written Communication 3
   ENGL A212 Technical Writing 3
   EMT A110 Emergency Trauma Technician 3
   HUMS/PSY A153 Human Relations (3) 3
   MATH A107 College Algebra (4) 3-4 or STAT A252 Elementary Statistics (3) 3
2. Complete one of the following: 3
   COMM A111 Fundamentals of Oral Communication (3)
   COMM A235 Small Group Communication (3)
   COMM A237 Interpersonal Communication (3)
   COMM A241 Public Speaking (3)
3. Select 3 credits from the following: 3
   CIS A105 Introduction to Personal Computers and Application Software (3)
   CS A100 Introduction to Computers (3)
4. Technical credits from approved apprenticeship program 38
   See Non-Traditional Credit section of the catalog.
5. Elective to complete 60 credits as needed.
6. A total of 60 credits is required for the degree.

ARCHITECTURAL AND ENGINEERING TECHNOLOGY

Division of Construction and Design Technology (CDT)
University Center (UC), Room 130, (907) 786-6423
www.uaa.alaska.edu/ctc/construction/aet/index.cfm

The Architectural and Engineering Technology (AET) program provides entry-level skills, continuing education, and advanced technical skills in several specialized fields, including computer-aided design and drafting (CADD), 3-D modeling, and rendering. The AET program offers an Occupational Endorsement Certificate in CAD for Building Construction, four Undergraduate Certificates in the specialized areas of Architectural Drafting, Civil Drafting, Mechanical & Electrical Drafting, and Structural Drafting, and an Associate of Applied Science (AAS) degree in Architectural and Engineering Technology which encompasses all of these fields.

Students are trained to become skilled workers on architectural and engineering design teams. AET certificate and degree graduates are employed as drafters or technicians, and work in private industry as well as municipal, state, or federal agencies. Drafters and technicians work in support of professional architects and engineers to produce the technical drawings used by construction workers to build everything from roads and bridges, to homes and office buildings, to oil and gas pipelines. Their drawings provide the visual guidelines that show the technical details of the products and structures to be constructed. These drawings specify dimensions, materials to be used, and procedures to be followed. Drafters and technicians fill in technical details using drawings, rough sketches, specifications, codes, and calculations previously made by engineers, surveyors, or architects. Drafters and technicians use technical handbooks, tables, calculators, and computers to do this. Because many drafters and technicians may assist in design work, creativity is desirable. Good communication skills and the ability to work well with others are also important since they are part of a team of architects, engineers, and other technicians.

The AET AAS degree requires 4 to 5 semesters to complete.

AET Undergraduate Certificates require 2 to 3 semesters to complete. The AET Occupational Endorsement Certificate requires 1 to 2 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 exams. 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 2 years of a 4 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 4-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.
PROGRAM OUTCOMES
The specific educational outcomes that support the program objectives are to produce graduates who are able to:

1. Demonstrate an understanding of the role, duties, and responsibilities of the members of the design team, including the working relationship between technicians and professionals.
2. Demonstrate an understanding of the elements of the construction document set and the role of construction documents as communication tools for the construction contract.
3. Demonstrate an understanding of the construction process from the transformation of an idea or need into a completed project.
4. Demonstrate communication skills to be successful in employment environment.
5. Demonstrate critical thinking and problem solving skills in the employment environment.

ADVISING
All students should meet with an academic advisor prior to their first semester and each subsequent semester for the purpose of reviewing their academic status and planning future courses. Attention should be specifically directed to the proof of eligibility for placement in MATH A105 and ENGL A111 as a non-coded registration restriction, checked during the first day of class, for the introductory classes within the programs. It is particularly important for students to meet with their advisor whenever academic difficulties arise.

Students are encouraged to consult the faculty in the AET program for assistance in designing their course of study to ensure all prerequisites have been met and that university and major degree requirements are understood and followed.

Subject to scheduling, students may select either 5-week or 15-week blocks of instruction for each AET course. The content is the same; only the amount of time a course meets per week is different. Students should expect to spend at least 1 hour on outside work for each hour in the class. Computer lab facilities are available for students’ use 5 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. Contact (907) 786-6423 for further information.

CAD FOR BUILDING CONSTRUCTION

OCCUPATIONAL ENDORSEMENT CERTIFICATE
Attention should be specifically directed to the proof of eligibility for placement in MATH A105 and ENGL A111 as a non-coded registration restriction, checked during the first day of class, for the introductory classes within the programs.

OCCUPATIONAL ENDORSEMENT CERTIFICATE OUTCOMES
At the completion of this program students are able to demonstrate:

1. Proficiency in the use of computer-aided design and drafting software in the creation and modification of construction documentation.
2. Proficiency in the management of the computer-aided design and drafting software environment for the accurate application and integration of industry standards.

ADMISSION REQUIREMENTS
See occupational endorsement program admission requirements in chapter 7.

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 (3 or 4)
   - AET A283 CADD Software Customization (3)
   - AET A181 Intermediate CADD for Building Construction

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 & Electrical Drafting, and Structural Drafting. While the introductory course work for all certificates is the same to establish a common theoretical foundation, the majority of the course work is specific and focused for standards and professional practice of each industry.

ADMISSION REQUIREMENTS
Satisfy the Admission to Certificate and Associate Degree Programs Requirements in Chapter 7, Academic Standards and Regulations.

COURSE REQUIREMENTS
Certain courses require prerequisites or faculty permission. Contact (907) 786-6423 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.

ARCHITECTURAL DRAFTING CERTIFICATE REQUIREMENTS
1. Complete the following required courses:
   - AET A101 Fundamentals of CADD for Building Construction 4
   - AET A102 Methods of Building Construction 3
   - AET A121 Architectural Drafting 3
   - AET A123 Codes and Standards 3
   - AET A181 Intermediate CADD for Building Construction 4
   - AET A286 Design Project 4
   - ENGL A111 Methods of Written Communication 3
   - Oral Communication Course 3
   - Choose from one of the following:
     - COMM A111, COMM A235, COMM A237, or COMM A241
     - MATH A105 Intermediate Algebra 3
   - A total of 30 credits is required for the certificate.
CIVIL DRAFTING CERTIFICATE REQUIREMENTS
1. Complete the following required courses:
   - AET A101 Fundamentals of CADD for Building Construction 4
   - AET A102 Methods of Building Construction 3
   - AET A111 Civil Drafting 3
   - AET A181 Intermediate CADD for Building Construction 4
   - AET A213 Civil Technology 4
   - AET A286 Design Project 4
   - ENGL A111 Methods of Written Communication 3
   - Oral Communication Course 3
   - Choose from one of the following:
     - COMM A111, COMM A235, COMM A237, or COMM A241
     - MATH A105 Intermediate Algebra 3
2. A total of 31 credits is required for the certificate.

MECHANICAL AND ELECTRICAL DRAFTING CERTIFICATE REQUIREMENTS
1. Complete the following required courses:
   - AET A101 Fundamentals of CADD for Building Construction 4
   - AET A102 Methods of Building Construction 3
   - AET A142 Mechanical & Electrical Technology 4
   - AET A143 Mechanical & Electrical Drafting 3
   - AET A181 Intermediate CADD for Building Construction 4
   - AET A286 Design Project 4
   - ENGL A111 Methods of Written Communication 3
   - Oral Communication Course 3
   - Choose from one of the following:
     - COMM A111, COMM A235, COMM A237, or COMM A241
     - MATH A105 Intermediate Algebra 3
2. A total of 31 credits is required for the certificate.

STRUCTURAL DRAFTING CERTIFICATE REQUIREMENTS
1. Complete the following required courses:
   - AET A101 Fundamentals of CADD for Building Construction 4
   - AET A102 Methods of Building Construction 3
   - AET A131 Structural Drafting 3
   - AET A181 Intermediate CADD for Building Construction 4
   - AET A231 Structural Technology 4
   - AET A286 Design Project 4
   - Oral Communication Course 3
   - Choose from one of the following:
     - COMM A111, COMM A235, COMM A237, or COMM A241
     - MATH A105 Intermediate Algebra 3
2. A total of 31 credits is required for the certificate.

ASSOCIATE OF APPLIED SCIENCE, ARCHITECTURAL AND ENGINEERING TECHNOLOGY

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. Contact (907) 786-6423 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. Contact (907) 786-6423 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. GEOL A111 and MATH A105 are recommended.

MAJOR REQUIREMENTS
1. Complete the following required courses (45 credits):
   - AET A101 Fundamentals of CADD for Building Construction 4
   - AET A102 Methods of Building Construction 3
   - AET A111 Civil Drafting 3
   - AET A121 Architectural Drafting 3
   - AET A123 Codes & Standards 3
   - AET A131 Structural Drafting 3
   - AET A142 Mechanical & Electrical Technology 4
   - AET A143 Mechanical & Electrical Drafting 3
   - AET A181 Intermediate CADD for Building Construction 4
   - AET A213 Civil Technology 4
   - AET A231 Structural Technology 4
   - AET A286 Design Project 4
   - MATH A105 Intermediate Algebra* 3
   - Electives 3
2. AET A295 is strongly recommended.
3. A total of 60 credits is required for the degree.
   * This course satisfies the General Course Requirements

RECOMMENDED COURSE SEQUENCE
Not all AET courses are offered every semester. Students should consult the faculty in the AET program for assistance in designing their course of study to ensure that university and major degree requirements are understood and followed. The sequence for a particular program is based on the semester of admission to the program and is available on the departments web page at: www.uaa.alaska.edu/ctc/programs/cdt/aet.

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AUTOMOTIVE AND DIESEL TECHNOLOGY

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 ASEF option for the AAS degree is designed to prepare students for a career in General Motors dealerships. Students train on current technology vehicles and components donated by General Motors Corporation. Graduates from the two corporate-sponsored AAS degree options receive factory credentials upon graduation. These credentials are recognized by the respective dealerships across the country.

The AAS degree and Undergraduate Certificate in Heavy Duty Transportation and Equipment (HDTE) are designed to prepare students to work as repair and maintenance technicians in the HDTE industry. Much of the curriculum is based on medium and heavy duty maintenance and repair task lists developed by the National Institute for Automotive Service Excellence. Students train on vehicles, equipment, and components provided, by or procured from, major manufacturers of medium and heavy duty trucks and equipment.

OCCUPATIONAL ENDORSEMENT CERTIFICATES, AUTOMOTIVE

CERTIFICATE DESCRIPTION AND OUTCOMES

Four Occupational Endorsement Certificate programs are available: Automotive Electrical; Automotive Brakes, Suspension and Alignment; Automotive Power Trains; and Automotive Engine Performance. These programs allow students to develop focused skill sets in high-demand areas of automotive maintenance and repair. At the completion of this certificate program, students are able to demonstrate:

1. Proficiency in diagnosis and repair of electrical/electronic systems OR automotive brakes, suspension, and alignment OR automotive power trains OR automotive engine performance.
2. Specialized employability skills for maintenance and repair technicians.

ADMISSION REQUIREMENTS

See Occupational Endorsement Certificate admissions requirements in Chapter 7 of this catalog.

ADVISORY

Students should consult the ADT faculty for assistance in curriculum planning toward the Occupational Endorsement Certificate.

COMPUTER COMPETENCY REQUIREMENT

Automotive Technology Occupational Endorsement Certificates require demonstrated computer competency. Computer competency may be demonstrated in any of the following ways:

1. A 3-credit course in a computer language or an introductory course in data processing or microcomputers.
2. Work-related experience verifying computer competency as approved by the faculty advisor.
3. Self-initiated computer competency as approved by the faculty advisor.

OCCUPATIONAL ENDORSEMENT CERTIFICATE REQUIREMENTS

1. Satisfy the General University Requirements for Occupational Endorsement Certificates at the beginning of this chapter.
2. Satisfy the program requirements for the emphasis area selected below.

A. Automotive Electrical

1) Complete the following courses:

   - ADT A102 Introduction to Automotive Technology 3
   - ADT A121 Basic Electrical Systems 3
   - ADT A131 Auto Electrical II 3
   - ADT A195 Automotive Practicum I (1-6) 6
   - ADT A227 Auto Electrical III 3

2) A total of 18 credits is required for the Occupational Endorsement Certificate.

B. Automotive Brakes, Suspension and Alignment

1) Complete the following courses:

   - ADT A102 Introduction to Automotive Technology 3
   - ADT A121 Basic Electrical Systems 3
   - ADT A131 Auto Electrical II 3
   - ADT A150 Brake Systems 4
   - ADT A162 Suspension and Alignment 4
   - ADT A195 Automotive Practicum I (1-6) 6

2) A total of 23 credits is required for the Occupational Endorsement Certificate.

C. Automotive Power Trains

1) Complete the following courses:

   - ADT A102 Introduction to Automotive Technology 3
   - ADT A160 Manual Drive Trains and Axles 4
   - ADT A260 Electronic and Automatic Transmissions 3
   - ADT A121 Basic Electrical Systems 3
   - ADT A131 Auto Electrical II 3
   - ADT A195 Automotive Practicum I (1-6) 6

2) A total of 22 credits is required for the Occupational Endorsement Certificate.

D. Automotive Engine Performance

1) Complete the following courses:

   - ADT A102 Introduction to Automotive Technology 3
   - ADT A121 Basic Electrical Systems 3
   - ADT A122 Engine Theory and Diagnosis 3
   - ADT A131 Auto Electrical II 3
   - ADT A140 Automotive Engine Repair 3
   - ADT A202 Auto Fuel and Emissions Systems 4
   - ADT A222 Engine Performance 3
   - ADT A295 Automotive Practicum II 3

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AUTOMOTIVE TECHNOLOGY

These programs are modeled after a variety of very successful corporate training programs. Each program is four semesters long. The programs incorporate a prearranged, supervised, evaluated practicum in each of the first three semesters, with the possibility of an additional practicum during the last semester. Many students also choose to complete a summer practicum while enrolled in the program.

Students experience training on a wide variety of modern domestic and imported vehicles, light trucks, and vans. Laboratory and shop objectives are met on training vehicles, components, and live shop projects. Automotive Technology graduates have been placed in dealerships, independent shops, service stations, mass merchandisers, aviation ground support, and fleet repair facilities. Employers require a current vehicle operator's license and a good driving record. The student should have physical capabilities required of the trade which typically include standing long hours; lifting heavy objects; contacting hazardous materials; operating machinery; exposure to noise, heat, cold, vapors, and other work place hazards; manipulating tools; and working with small parts in confined and awkward positions.

Technicians must be able to distinguish colors in minimal light, transcribe numbers up to 17+ digits, and work up to 10 hours a day, six days per week. Equal opportunities are available for men and women.

UNDERGRADUATE CERTIFICATE, AUTOMOTIVE TECHNOLOGY

CERTIFICATE DESCRIPTION AND OUTCOMES

This certificate program prepares students to understand the theory of, diagnose, and repair engines, transmissions, transaxles, suspension, steering, brake systems, electrical/electronic systems, heating and air conditioning systems, as well as fuel and ignition systems of modern vehicles. At the completion of this certificate program, students are able to demonstrate:

1. Proficiency in diagnosis and repair of modern vehicles.
2. Entry-level employability skills for maintenance and repair technicians.
3. Job upgrade skills.

ADMISSION REQUIREMENTS

Satisfy the certificate admissions requirements in Chapter 7 of this catalog.

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**
   - ADT A102 Introduction to Automotive Technology (3)
   - ADT A121 Basic Electrical Systems (3)
   - ADT A131 Auto Electrical II (3)
   - ADT A150 Brake Systems (3)
   - ADT A195 Automotive Practicum (1-6) (2)

   **Second Semester**
   - ADT A122 Engine Theory and Diagnosis (3)
   - ADT A160 Manual Drive Trains and Axles (4)
   - ADT A162 Suspension and Alignment (4)
   - ADT A195 Automotive Practicum (1-6) (2)

   **Third Semester**
   - ADT A140 Automotive Engine Repair (3)
   - ADT A225 Auto Heating and A/C (3)
   - ADT A227 Auto Electrical III (3)
   - ADT A195 Automotive Practicum (1-6) (2)

   **Fourth Semester**
   - ADT A202 Fuel and Emissions (4)
   - ADT A222 Engine Performance (3)
   - ADT A260 Electronic & Automatic Transmissions (3) or
   - ADT A295 Automotive Practicum II (3)

2. A total of 25 credits is required for the Occupational Endorsement Certificate.

ASSOCIATE OF APPLIED SCIENCE, AUTOMOTIVE TECHNOLOGY

The Associate of Applied Science in Automotive Technology is offered with three options: General Automotive, Ford ASSET and General Motors 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.

DEGREE DESCRIPTION AND OUTCOMES

This associate 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 degree program, students are able to demonstrate:

1. Proficiency in diagnosis and repair of modern vehicles (general, Ford, or GM).
2. Entry-level employability and problem solving skills for maintenance and repair technicians.
3. Job upgrade skills.
4. Teamwork skills necessary to effectively participate and contribute in the workplace.
5. Effective interpersonal skills through clear, concise, and accurate written and oral communication with co-workers and customers.

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 ten 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 ASEP (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 ten 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 ASEP option. Prospective students should provide the UAA ASEP instructor with a resume and a copy of their driving record.
2. Admission to UAA ASEP requires employment by a sponsoring Alaskan General Motors dealership.
3. Apply for admission to UAA and to the UAA ASEP department by contacting the Automotive and Diesel Technology Department, University of Alaska Anchorage, 3211 Providence Drive, Anchorage, Alaska 99508. Telephone (907) 786-1461.
4. Have official high school transcripts, or official GED, and any vocational-technical training certificates sent to UAA Enrollment Services, 3211 Providence Drive, Anchorage, Alaska 99508.
5. Present evidence to UAA ASEP of math competency equivalent to completion of MATH A055. This may be accomplished by a presentation of college transcripts for department evaluation, or by achieving an appropriate score on a UAA-approved placement test administered by Testing and Assessment Services. 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 ASEP.

ADVISING

Students should consult the ADT faculty for assistance in curriculum planning toward the Associate of Applied Science degree.

COMPUTER COMPETENCY REQUIREMENT

The AAS degree in Automotive Technology requires demonstrated computer competency. Computer competency may be demonstrated in any of the following ways:

1. A 3-credit course in a computer language or an introductory course in data processing or microcomputers.
2. Work-related experience verifying computer competency as approved by the faculty advisor.
3. Self-initiated computer competency as approved by the faculty advisor.

DEGREE REQUIREMENTS (ALL OPTIONS)

1. Complete the General University Requirements for Associate of Applied Science Degrees located at the beginning of this chapter.
2. Complete the General Course Requirements for Associate of Applied Science Degrees listed at the beginning of this chapter.
3. Complete the Major Requirements listed below.

MAJOR REQUIREMENTS

1. Complete the following required courses:
   First Semester
   - ADT A102 Introduction to Automotive Technology 3
   - ADT A121 Basic Electrical Systems 3
   - ADT A131 Auto Electrical II 3
   - ADT A150 Brake Systems 4
   - ADT A195 Automotive Practicum I (1-6) 2
   - One AAS General Course Requirement 3
   Second Semester
   - ADT A122 Engine Theory and Diagnosis 3
   - ADT A160 Manual Drive Trains and Axles 4
   - ADT A162 Suspension and Alignment 4
   - ADT A195 Automotive Practicum I (1-6) 2
   - One AAS General Course Requirement 3
   Third Semester
   - ADT A140 Automotive Engine Repair 3
   - ADT A225 Auto Heating and A/C 3
   - ADT A227 Auto Electrical III 3
   - ADT A195 Automotive Practicum I (1-6) 2
   - One AAS General Course Requirement 3
   Fourth Semester
   - ADT A202 Auto Fuel and Emission System 4
   - ADT A222 Engine Performance 3
   - ADT A260 Electronic & Automatic Transmissions (3) 3
   or
   - ADT A225 Automotive Practicum II (3) 2
   Students admitted to the ASSET or the ASEP options must complete both ADT A260 and ADT A295
   Two AAS General Course Requirements 6
   2. A total of 64 credits is required for the degree.

UNDERGRADUATE CERTIFICATE, HEAVY DUTY TRANSPORTATION AND EQUIPMENT

CERTIFICATE DESCRIPTION AND OUTCOMES

The Heavy Duty Transportation and Equipment (HDTE) Undergraduate Certificate is designed to teach students the skills needed to be successful as technicians in the medium and heavy duty truck and equipment service industry. The Undergraduate Certificate may be completed in five semesters which includes one summer
semester of practicum. Laboratory experiences are performed on equipment and components currently used in the heavy duty transportation, construction and power generation industries.

Career opportunities for HDTE graduates include manufacturer and independent repair and maintenance shops, fleets, construction, mining, aviation ground support, and the seafood processing industry. Employers require technicians to be drug free and physically fit, and to have a current vehicle operator’s license with a good driving record. Equal opportunities are available for men and women.

This Undergraduate Certificate program prepares students to understand the theory of, diagnose, and repair diesel engines, as well as, medium and heavy-duty drive trains, pneumatic and hydraulic brake systems, suspension steering, electrical/electronic systems, and heating and air conditioning systems on medium and heavy duty vehicle applications. At the completion of this Undergraduate Certificate program, students are able to demonstrate:

1. Proficiency in diagnosis and repair of diesel engines, as well as medium and heavy-duty applications.
2. Proficiency in proper preventive maintenance on medium and heavy duty applications.
3. Entry-level employability skills for maintenance and repair technicians.
4. Job upgrade skills.

ADMISSION REQUIREMENTS

Satisfy the requirements for Admission to Undergraduate Certificate Programs found in Chapter 7 of this catalog.

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 for Certificates.
2. Complete the Major Requirements listed here.

MAJOR REQUIREMENTS

1. Complete these required courses:
   ADT A121 Basic Electrical Systems 3

ASSOCIATE OF APPLIED SCIENCE, HEAVY DUTY TRANSPORTATION AND EQUIPMENT

DEGREE DESCRIPTION AND OUTCOMES

The Heavy Duty Transportation and Equipment (HDTE) AAS degree is designed to teach students the skills needed to be successful as technicians in the medium and heavy duty truck and equipment service industry. The AAS degree may be completed in five semesters which includes one summer semester of practicum. Laboratory experiences are performed on equipment and components currently used in the heavy duty transportation, construction and power generation industries.

Career opportunities for HDTE graduates include manufacturer and independent repair and maintenance shops, fleets, construction, mining, aviation ground support, and the seafood processing industry. Employers require technicians to be drug free and physically fit, and to have a current vehicle operator’s license with a good driving record. Equal opportunities are available for men and women.

This Associate of Applied Science degree program prepares students to understand the theory of, diagnose, and repair diesel engines, as well as, medium and heavy-duty drive trains, pneumatic and hydraulic brake systems, suspension steering, electrical/electronic systems, and heating and air conditioning systems on medium and heavy duty vehicle applications. At the completion of this Undergraduate Certificate program, students are able to demonstrate:

1. Proficiency in diagnosis and repair of diesel engines, as well as medium and heavy-duty applications.
2. Proficiency in proper preventive maintenance and problem solving capabilities necessary for technicians in the medium and heavy-duty industry.
3. Entry-level employability skills for maintenance and repair technicians.
4. Job upgrade skills.
5. Teamwork skills necessary to participate and contribute in the workplace.
6. Effective interpersonal skills through clear, concise and accurate written and oral communication with co-workers and customers.

ADMISSION REQUIREMENTS

Satisfy the requirements for Admission to Associate Degree Programs found in Chapter 7 of this catalog. Students must complete the following admission requirements:

1. Submit UAA Undergraduate Application for Admission for the Heavy-Duty Transportation and Equipment Associate of Applied Science.
2. Document placement at the MATH A055 entry-level or higher. For testing schedule contact Advising and Testing at (907) 786-4500.
3. Document placement at the ENGL A111 entry-level or higher. For testing schedule contact Advising and Testing at (907) 786-4500.
4. Demonstrate welding competency using one of the following methods:
   a. A course in welding (see faculty advisor for approved courses).
   b. Documented work experience verifying welding competency as approved by the faculty advisor.
   c. Demonstrated competency in welding as approved by the faculty advisor.
5. Demonstrate computer competency using one of the following methods:
   a. A course in computers (see faculty advisor for approved courses).
   b. Documented work experience verifying computer competency as approved by the faculty advisor.
   c. Demonstrated competency in computers as approved by the faculty advisor.

ADVISING

Students should consult the ADT faculty for assistance in curriculum planning toward the Associate of Applied Science degree.

DEGREE REQUIREMENTS

1. Complete the General University Requirements for Associate Degrees listed at the beginning of this chapter.
2. Complete the General Course Requirements for Associate of Applied Science Degrees listed at the beginning of this chapter.
3. Complete the Major Requirements listed here.

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) 6
   - ADT A225 Auto Heating and A/C 3
   - ADT A227 Auto Electrical III 3
   - ADT A266 Heavy Duty Power Systems Lab 4
   - ADT A267 Heavy Duty Fuel Systems 4
   - ADT A268 Hydraulics and Pneumatics 4
   - ADT A269 Heavy Duty Drive Trains 4
2. A total of 66 credits is required for the AAS degree.

FACULTY

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AVIATION TECHNOLOGY

Aviation Complex (AVNC), 2811 Merrill Field Drive, (907) 786-7200
http://aviation.uaa.alaska.edu

The Aviation Technology Division (ATD) is a component of the University of Alaska Anchorage, Community and Technical College and is located at the Aviation Technology Center on Merrill Field Airport approximately two miles north of the UAA main campus. The mission of the ATD is to enhance, promote, and provide quality aviation education, research, and service worldwide. The Division 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 thirteen ATC programs in colleges and universities nation-wide 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 administrative support while the Bachelor of Science in Aviation Technology (BSAT) with the Aviation Management emphasis is designed to prepare graduates for entry-level management positions in all aspects of the aviation industry. This emphasis area includes courses specifically written to familiarize the student with the unique operational and management requirements of airlines, airports, and general aviation support operations.

The Aviation Maintenance Technology (AMT) program is a Federal Aviation Administration (FAA) approved and nationally recognized course of study that is 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 careers in professional flying. Both an AAS degree and the BSAT degree with a Professional Piloting emphasis are available. 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 modern, state-of-the-art fully equipped flight training airplanes and airplane simulators to enhance the educational experience of the students.

The Aviation Minor allows those students pursuing other than aviation degrees the opportunity to gain aviation related knowledge to complement their major.

ADVISING

Individuals employed in the aviation industry desiring to update skills and knowledge may take random courses. These individuals are strongly encouraged to contact the ATD office about prerequisites and other lab or course requirements.
ASSOCIATE OF APPLIED SCIENCE, AIR TRAFFIC CONTROL

ADMISSION REQUIREMENTS
1. See Certificate and Associate Degree Program Admission Requirements at the beginning of this chapter.
2. Selection in to the ATC College Training Initiative (CTI) program is determined by a ranking process based on ACT, SAT, or University-administered Sentence Skills, Reading Comprehension, and Mathematics ACCUPLACE scores.

FEDERAL AVIATION ADMINISTRATION (FAA) RECOMMENDATION FOR EMPLOYMENT
To receive a university recommendation for employment with the FAA, students must have a 3.0 combined average in the following Air Traffic Control courses: AT A143, A144, A147, A241, A242, and A243.

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.
3. 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.

SPECIAL CONSIDERATIONS
UAA has no restrictions on age or physical condition of students. However, students desiring employment with the FAA should be aware that while UAA has no restrictions on age or physical condition of students, FAA has 30-year-old maximum age restriction for students anticipating employment with the FAA.

GENERAL COURSE REQUIREMENTS
1. Complete the following required courses:
   - AT A100 Private Pilot Ground School (3)
   - AT A102 Introduction to Aviation Technology (3)
   - AT A132 History of Aviation (3)
   - AT A143 ATC Regulations (3)
   - AT A144 ATC Flight Procedures (3)
   - AT A147 Pilot/Controller Techniques (3)
   - AT A223 Elements of Weather (3)
   - AT A241 Control Tower Operations (3)
   - AT A241L Control Tower Operations Lab (1)
   - AT A242 ATC Terminal Radar Procedures (3)
   - AT A242L ATC Terminal Radar Procedures Lab (1)
   - AT A243 ATC Enroute Procedures (3)
   - AT A243L ATC Enroute Procedures Lab (1)
   - AT A325 Tools for Weather Briefing (3)

   One of the following:
   - AT A133 Aviation Law and Regulations (3)
   - AT A134 Principles of Aviation Administration (3)
   - AT A231 Search, Survival, and Rescue (3)
   - AT A232 Advanced Aviation Navigation (3)
   - AT A233 Aviation Safety (3)

   One of the following:
   - MATH A105 Intermediate Algebra (3)
   - MATH A107 College Algebra (3)
   - MATH A172 Applied Finite Mathematics (3)
   - MATH A272 Applied Calculus (3)

   One of the following Aviation electives:
   - AT A133, A134, A231, A232, A233
     (choose one NOT selected above)
   - AT A331, A332, A333, A337, A425, A431, A490, A491

2. A total of 60 credits are required for the degree.
3. See the Aviation Technology Division Advisor for appropriate sequence of courses.

ASSOCIATE OF APPLIED SCIENCE, AVIATION ADMINISTRATION

PROGRAM DESCRIPTION AND OUTCOMES
Aviation administrators require knowledge of aircraft operating limitations and performance, weather and atmospheric processes, Federal regulations, and airport operations. The AAS degree in Aviation Administration provides an introduction to administrative duties and requirements as well as the skills necessary to provide administrative support. At the completion of this program, graduates are able to demonstrate:
1. Proficient, entry-level aviation administrative support techniques, procedures, and skills.
2. Knowledge of aviation history, law, and regulations, as well as the aviation industry’s social and economic importance.

ADMISSION REQUIREMENTS
Satisfy the Certificate and Associate Degree Program Admission Requirements in chapter 7 of this catalog.

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)
   - AT A100 Private Pilot Ground School (3)
   - AT A102 Introduction to Aviation Technology (3)
   - AT A132 History of Aviation (3)
   - AT A133 Aviation Law and Regulations (3)
   - AT A233 Aviation Safety (3)
   - AT A235 Elements of Weather (3)
   - *BA A151 Introduction to Business (3)
   - BA A231 Fundamentals of Supervision (3)
3. Present evidence of a proficiency in mathematics at or exceeding MATH A055 level. An appropriate score on the UAA-approved Math Placement Exam is required prior to registration for all AMT courses. Length. Typically, AMT courses have prerequisites and advisor approval is required prior to registration for all AMT courses.

**GENERAL UNIVERSITY REQUIREMENTS**

Complete the General University Requirements for Undergraduate Certificates located at the beginning of this chapter.

**MAJOR REQUIREMENTS**

1. Core Courses apply to both certificates: complete the following required courses:

   **General Subject Areas:**
   - AMT A170 Aircraft Ground Operations and Safety 1
   - AMT A171 Basic Aerodynamics 3
   - AMT A172 Aircraft Publications, Regulations and Records 3
   - AMT A174 Fundamentals of Aircraft Electronics 3
   - AMT A174L Fundamentals of Aircraft Electronics Lab 2
   - AMT A175 Drawing and Precision Measurement 2
   - AMT A176 Aircraft Materials and Processes I 2
   - AMT A186 Aircraft Non-Destructive Inspection Methods 3

   **Combined General, Airframe & Powerplant Subject Areas:**
   - AMT A181 Aircraft Fuel Systems 3
   - AMT A181L Aircraft Fuel Systems Lab 1
   - AMT A272 Aircraft Electrical Hardware and Systems 3
   - AMT A274 Aircraft Electronic Systems 5
   - AMT A274L Aircraft Electronic Systems Lab 1

2. For the **AMT Powerplant Certificate**, complete the above core courses plus the following powerplant courses:

   - AMT A177 Reciprocating Engine Theory 2
   - AMT A178 Turbine Engine Theory 2
   - AMT A187 Aircraft Reciprocating Engine Overhaul 3
   - AMT A187L Aircraft Reciprocating Engine Overhaul Lab 2
   - AMT A279 Aircraft Turbine Engine Repair and Overhaul Lab 1
   - AMT A279L Aircraft Turbine Engine Repair and Overhaul 3
   - AMT A282 Aircraft Propeller Systems 1
   - AMT A284 Aircraft Electrical Machinery 2
   - AMT A284L Aircraft Electrical Machinery Lab 2
   - AMT A287 Reciprocating Engine Installation and Operations 3
   - AMT A287L Reciprocating Engine Installation and Operations Lab 2
   - AMT A289 Turbine Engine Installation and Operations 3
   - AMT A289L Turbine Engine Installation and Operations Lab 2

3. For the **AMT Airframe Certificate**, complete the above core courses plus the following airframe courses:

   - AMT A185 Aircraft Sheetmetal Structures 3
   - AMT A185L Aircraft Sheetmetal Structures Lab 2
   - AMT A273 Aircraft Fluid Power Systems 2
   - AMT A273L Aircraft Fluid Power Systems Lab 2
   - AMT A283 Aircraft Auxiliary Systems 3
   - AMT A283L Aircraft Auxiliary Systems Lab 1
   - AMT A285 Aircraft Bonded Structures 4

   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.
ASSOCIATE OF APPLIED SCIENCE, AVIATION MAINTENANCE TECHNOLOGY

PROGRAM DESCRIPTION AND OUTCOMES
Aviation Maintenance Associate of Applied Science degree is designed to prepare graduates for employment as maintenance technicians in general aviation, corporate aviation, airlines, or aerospace manufacturers. In addition to traditional aircraft maintenance courses, the curriculum emphasizes modern aircraft systems. At the completion of this program, graduates are able to demonstrate:

1. Proficient, entry-level aviation maintenance skills.
2. Proficiency in emphasis area skills: Airframe or powerplant
3. Knowledge of aircraft engines, structures, and systems, as well as appropriate FAA regulations.
5. Critical thinking, problem solving, and communication skills.

ADMISSION REQUIREMENTS
1. Satisfy Certificate and Associate Degree Program Admission Requirements in chapter 7 of this catalog.
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) 264-7400, Fax: (907) 264-7400 or at: www.uaa.alaska.edu/aviation.

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. 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 in Aviation Technology or Bachelor of Science in Technology at UAA. Those intending to pursue a four-year degree must discuss their plans with an AMT faculty advisor for proper course sequence.

AAS degree candidates who have completed an FAA approved program in aviation maintenance at a nationally or regionally accredited institution, passed all courses in the major with a grade of C or better, and currently hold a valid FAA Mechanic's Certificate may, with the approval of the department, use the certificate for a portion of the AAS major degree requirements. Individuals considering this option must discuss their plans with an AMT faculty advisor.

ACADEMIC PROGRESS REQUIREMENTS
Computer Literacy
This degree requires computer competency, which may be demonstrated by any one of the following:

1. A 3-credit course in computer language or an introductory course in data processing or microcomputers.
2. Work-related experience verifying computer literacy as approved by the faculty advisor.
3. Self-initiated computer literacy as approved by the faculty advisor.

Mathematics Proficiency
Demonstrate a proficiency in mathematics at or exceeding the intermediate algebra (MATH A105) level.

GENERAL UNIVERSITY REQUIREMENTS
Complete the General University Requirements for Associate of Applied Science Degrees located at the beginning of this chapter.

GENERAL COURSE REQUIREMENTS
Complete the General Course Requirements for AAS degrees located at the beginning of this chapter.

MAJOR REQUIREMENTS
1. Complete the following core requirements:
   - AMT A170 Aircraft Ground Operations and Safety 1
   - AMT A171 Basic Aerodynamics 3
   - AMT A172 Aircraft Publications, Regulations and Records 3
   - AMT A174 Fundamentals of Aircraft Electronics 3
   - AMT A174L Fundamentals of Aircraft Electronics Lab 2
   - AMT A175 Drawing and Precision Measurement 2
   - AMT A176 Aircraft Materials and Processes I 2
   - AMT A181 Aircraft Fuel Systems 3
   - AMT A181L Aircraft Fuel Systems Lab 1
   - AMT A186 Aircraft Non-Destructive Inspection Methods 3
   - AMT A272 Aircraft Electrical Hardware & Systems 3
   - AMT A274 Aircraft Electronics Systems 5
   - AMT A274L Aircraft Electronics Systems Lab 1
   - AMT A279 Aircraft Turbine Engine Repair and Overhaul 3
   - AMT A279L Aircraft Turbine Engine Repair and Overhaul Lab 2
   - AMT A280 Aircraft Propeller Systems I 1
   - AMT A282 Aircraft Propeller Systems II 2
   - AMT A283 Aircraft Fluid Power Systems 2
   - AMT A284 Aircraft Electrical Machinery 2
   - AMT A284L Aircraft Electrical Machinery Lab 2
   - AMT A285 Aircraft Bonded Structures 4
   - AMT A285L Aircraft Bonded Structures 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 2
   - AMT A280 Aircraft Propeller Systems II 1
   - AMT A282 Aircraft Fluid Power Systems 2
   - AMT A283 Aircraft Auxiliary Systems 3
   - AMT A284 Aircraft Electrical Machinery 2
   - AMT A284L Aircraft Electrical Machinery Lab 2
   - AMT A285 Aircraft Bonded Structures 4
   - AMT A285L Aircraft Bonded Structures Lab 1

B. Airframe courses (28 credits)
   - AMT A185 Aircraft Sheetmetal Structures 3
   - AMT A185L Aircraft Sheetmetal Structures Lab 2
   - AMT A273 Aircraft Fluid Power Systems 2
   - AMT A273L Aircraft Fluid Power Systems Lab 2
   - AMT A283 Aircraft Auxiliary Systems 3
   - AMT A283L Aircraft Auxiliary Systems Lab 1
   - AMT A285 Aircraft Bonded Structures 4
   - AMT A285L Aircraft Bonded Structures Lab 1
ASSOCIATE OF APPLIED SCIENCE, PROFESSIONAL PILOTING

PROGRAM DESCRIPTION AND OUTCOMES
Professional pilots need knowledge of aerodynamics, aircraft engine and system operation, aircraft operating limitations and performance, weather and atmospheric processes, as well as navigation and communication methods. This degree program prepares graduates for careers in professional flying. At the completion of this program, graduates are able to demonstrate:

1. Proficiency in basic and commercial pilot flight skills and knowledge.
2. Understanding of aviation law and regulations, as well as the responsibility and authority of Department of Transportation and Federal Aviation Administration.
3. Awareness of industry information: current status, segments and opportunities.

ADMISSION REQUIREMENTS
Satisfy Certificate and Associate Degree Admission Requirements found in Chapter 7 of this catalog.

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.

SPECIAL CONSIDERATIONS
The following applies for those students desiring to pursue a Professional Piloting degree or BSAT emphasis:

1. Costs for flight training are not included in University tuition and fees.
2. Students must pass an FAA Class II medical exam before beginning any flight training.
3. Students must present verification of U.S. citizenship before beginning any flight or airplane simulator training. The following three methods are acceptable: an unexpired U.S. Passport, an original or raised seal official copy of Birth Certificate, or an original or raised seal official copy of Certificate of Naturalization. Non-U.S. citizens must register and receive approval from the Transportation Security Agency before beginning any flight or simulator training; please contact the Aviation Technology office for information.
4. Once formally registered for Aviation classes at UAA, all subsequent flight training must be completed in residence at UAA. Flight training through other programs while enrolled at UAA is not permitted. Enrolled students who receive flight training outside UAA that is required under specific curricula will not receive credit for the corresponding UAA courses.
5. Under certain circumstances, academic credit may be granted for pilot certificates/ ratings earned prior to enrolling at UAA. Contact a faculty advisor for determination.
6. Military pilots currently, or within the preceding 12 months, on active flight status may petition to have appropriate curriculum requirements awarded based on FAA pilot certificates without a proficiency check.

ACADEMIC PROGRESS REQUIREMENTS
Once enrolled in any flight training course, students are expected to complete the course requirements within the equivalent of two semesters. Failure to do so will be considered unsatisfactory progress and will result in a failing (F) grade.

GENERAL UNIVERSITY REQUIREMENTS
Complete the General University Requirements for Associate of Applied Science Degrees located at the beginning of this chapter.

GENERAL COURSE REQUIREMENTS
Complete the General Course Requirements for AAS degrees located at the beginning of this chapter.

MAJOR REQUIREMENTS

1. Complete the following required courses:
   - AT A100 Private Pilot Ground School 3
   - AT A101 Pre-professional Flying 2
   - AT A102 Introduction to Aviation Technology 3
   - AT A116 Instrument Ground School 3
   - AT A126 Instrument Flying 2
   - AT A132 History of Aviation 3
   - AT A133 Aviation Law and Regulations 3
   - AT A200 Commercial Ground School 3
   - AT A218 Commercial Flying I 5
   - AT A219 Commercial Flying III 5
   - AT A220 Commercial Flying III 2
   - AT A231 Search, Survival and Rescue 3
   - AT A233 Aviation Safety 3
   - AT A235 Elements of Weather 3
   - AT A337 Airline Operations 3
   - CIS A110 Computer Concepts in Business (3) 3
   - *CS A100 Introduction to Computers (3)
   - *ENGL A212 Technical Writing (Note: prerequisite) 3
   - *MATH 105 Intermediate Algebra (3) 3-4 (Note: prerequisite)
   - *MATH A107 College Algebra (4) (Note: prerequisite)
   - *PHIL A101 Introduction to Logic 3
   - VE A301 Principles of Technology (3) 3-4 (Note: prerequisite)
   - *PHYS A123/L Basic Physics I with laboratory 4 (Note: prerequisite)

   *Courses may be used to fulfill the Associate of Applied Science, General Degree Requirements.

2. A total of 63 -65 credits is required for the degree.

GRADUATION REQUIREMENTS
All students are required to complete a minimum of two advanced flight courses (300-400) in residence.

BACHELOR OF SCIENCE, AVIATION TECHNOLOGY
The Bachelor of Science degree in Aviation Technology prepares individuals for professional positions within the aviation industry. Related career opportunities are found with airlines, airports, general aviation, government organizations, education, and the aerospace industry.

Within the degree there are three emphasis areas: Aviation Management, Air Traffic Control, and Professional Piloting. 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. Complete the requirements for admission to baccalaureate programs found in Chapter 7 of this catalog
2. Emphasis areas may have additional admission requirements. These requirements are listed below.
3. Students must be able to meet any certification requirements established by applicable government agencies.

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.

See the Aviation Technology Division Advisor for appropriate sequence of courses. A strong background in science, math, and reading skills is highly recommended.

ACADEMIC PROGRESS
A minimum grade of C in each Aviation Technology course is required to graduate with this degree.

GENERAL UNIVERSITY REQUIREMENTS
Complete the General University Requirements for Baccalaureate Degrees listed at the beginning of this chapter.

GENERAL COURSE REQUIREMENTS
Complete the General Education Requirements (GER) for Baccalaureate Degrees listed at the beginning of this chapter.

MAJOR REQUIREMENTS
1. Complete the following required common core courses:
   - AT A100 Private Pilot Ground School 3
   - AT A102 Introduction to Aviation Technology 3
   - AT A133 Aviation Law and Regulations 3
   - AT A233 Aviation Safety 3
   - AT A235 Elements of Weather 3
   - AT A331 Human Factors in Aviation 3
   - AT A415 Company Resource Management 3
   - AT A425 Civil Aviation Security 3
   - AT A492 Air Transportation System Seminar 3
   - BA A300 Organizational Theory and Behavior 3
   - BA A361 Human Resource Management 3
   - BA A461 Negotiations and Conflict Management 3
   - BA A488 The Environment of Business 3
   - CIS A110 Computer Concepts in Business 3
   - *ECON A201 Principles of Macroeconomics 3
   - *ENGL A212 Technical Writing (Note: prerequisite) 3
   - *MATH A272 Applied Calculus (Note: prerequisite) 3
   - *PHIL A101 Introduction to Logic 3
   - *PHYS A123/L Basic Physics I (Note: prerequisite) (3) or
   - *CHEM A105/L General Chemistry I (Note: prerequisite) (4)
   - *Courses may be used to fulfill the Bachelor of Applied Science, General Education Requirements.
   - 2. Select one of the three following BSAT emphasis areas and complete the listed required courses.

AVIATION MANAGEMENT EMPHASIS
EMPHASIS DESCRIPTION AND OUTCOMES
The BSAT with the Aviation Management emphasis is designed to prepare graduates for entry-level management positions in all aspects of the aviation industry. The BSAT prepares students not only with the organizational, human relations, and managerial skills required in aviation management, but also with the appropriate technical background. At the completion of this program, graduates are able to demonstrate:
1. Proficient, entry-level aviation management techniques, procedures, and skills.
2. Knowledge of aviation history, law, and regulations, as well as the aviation industry’s social and economic importance.
3. Awareness of contemporary issues and trends in the air transportation industry.
5. Principles and techniques of human resource management, financial management, safety, negotiations, conflict management, and conflict resolution in aviation.
6. Problems solving, mathematical and technology skills.
7. Required Emphasis Courses:
   - ACCT A201 Principles of Financial Accounting 3
   - ACCT A202 Principles of Managerial Accounting 3
   - AT A132 History of Aviation 3
   - AT A134 Principles of Aviation Administration 3
   - AT A335 Airport Operations 3
   - AT A336 Air Service Operations 3
   - AT A337 Airline Operations 3
   - AT A431 Aircraft Accident Investigation 3
   - *BA A151 Introduction to Business 3
   - BA A343 Principles of Marketing 3
   - BAA 447 International Marketing 3
   - CIS A305 Managerial Presentations 3
   - CIS A376 Management Information Systems 3
   - ECON A202 Principles of Microeconomics 3
   - *PARL A101 Introduction to Law 3
   - Advisor Approved Elective 3

8. A minimum of 124 credits is required for the Bachelor of Applied Science, General Education Requirements.

AIR TRAFFIC CONTROL EMPHASIS
EMPHASIS DESCRIPTION AND OUTCOMES
ATC professionals utilize knowledge of aircraft operating limitations and performance, weather and atmospheric processes, radar theory and radar systems, Federal regulations, the U.S. 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, as well. At the completion of this program, graduates are able to demonstrate:
1. Proficient, entry-level air traffic controller techniques, procedures, and skills.
2. Knowledge of aircraft and air traffic control operating techniques.
3. Awareness of contemporary issues and trends in the air transportation industry.
4. Understanding of aviation law and regulations, as well as the responsibility and authority of Department of Transportation and Federal Aviation Administration.
5. Job-related technology and mathematical skills.

Federal Aviation Administration (FAA) Recommendation for Employment and FAA Employment Restrictions contained in the Associate of Applied Science, Air Traffic Control apply to this emphasis area.
ATC ADMISSION REQUIREMENTS

The Air Traffic Control College Training Initiative (CTI) program has a limited capacity. Selection into the program is determined by a ranking process based on college degrees held or ACT/SAT scores. An applicant unable to provide documentation of a college degree or ACT/SAT score will be required to take the ACCUPLACER Sentence Skills, Reading Comprehension, and Mathematics test to be considered for the ranking process.

All verification of degrees and test scores must be submitted by the following dates:

  March 1st for Fall semester registration.
  August 1st for Spring semester registration.

Students with the highest rankings will be permitted to register for AT A143/A144/A147, which are prerequisites for all of the required 200-level laboratory courses. Once capacity is reached, no additional students will be permitted to register for these courses.

1. Required Emphasis Courses:
   - AT A132 History of Aviation 3
   - AT A143 ATC Regulations 3
   - AT A144 ATC Flight Procedures 3
   - AT A147 Pilot/Controller Techniques 3
   - AT A241 Control Tower Operations 3
   - AT A241L Control Tower Ops Lab 1
   - AT A242 ATC Terminal Radar Proc 3
   - AT A242L ATC Terminal Radar Proc Lab 1
   - AT A243 ATC En Route Procedures 3
   - AT A243L ATC En Route Procedures Lab 1
   - AT A325 Tools for Weather Briefing 3
   - AT A340 Terminal Instrument Procedures 3
   - AT A440 Facility Operation and Administration 3
   - CIS A305 Managerial Presentations 3
   - CIS A376 Management Information Systems 3
   - PSY A380 Stress Mgmt: Coping With Stress 3

2. A minimum of 121 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 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. At the completion of this program, graduates are able to demonstrate:

1. Proficiency in basic and commercial pilot flight skills and knowledge.
2. Certificated Flight Instructor skills and knowledge.
3. Understanding of aviation law and regulations, as well as the responsibility and authority of Department of Transportation and Federal Aviation Administration.
4. Awareness of contemporary issues and trends in the air transportation industry.
5. Principles and techniques of human resource management, financial management, safety, negotiations, conflict management, and conflict resolution in aviation.
6. Problems solving, mathematical and technology skills.

Special Considerations, Academic Progress Requirements, and Graduation Requirements contained in the Associate of Applied Science, Professional Pilot Training apply to this emphasis area.

All students are required to complete a minimum of two advanced flight courses (300-400) in residence to meet graduation requirements.

1. Required Emphasis Courses:
   - ACCT A201 Principles of Financial Accounting 3
   - AT A101 Pre-professional Flying 2
   - AT A116 Instrument Ground School 3
   - AT A126 Instrument Flying 2
   - AT A200 Commercial Ground School 3
   - AT A218 Commercial Flying I 5
   - AT A219 Commercial Flying II 5
   - AT A220 Commercial Flying III 2
   - AT A232 Advanced Aviation Navigation 3
   - AT A300 CFI Ground School 3
   - AT A301 CFI Flying 2
   - AT A305 Additional Aircraft Rating (Multi-Engine Land) 2
   - AT A325 Tools for Weather Briefing 3
   - AT A332 Transport Aircraft Systems 3
   - AT A337 Airline Operations 3
   - AT A431 Aircraft Accident Investigation 3
   - Advisor Approved Upper-Division Elective 3

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, of which 6 credits must be upper division.

Students are encouraged to select courses from the following list. Students may request prior approval of any Aviation Technology courses.

Complete 18 credits from the following:

   - AT A100 Private Pilot Ground School (3)
   - AT A132 History of Aviation (3)
   - AT A133 Aviation Law and Regulations (3)
   - AT A147 Pilot/Controller Techniques (3)
   - AMT A171 Basic Aerodynamics (3)
   - AMT A172 Publications, Regulations and Records (3)
   - AMT A177 Reciprocating Engine Theory (2)
   - AMT A178 Turbine Engine Theory (2)
   - AMT A185/L Airplane Sheet Metal Structures and Lab (3/2)
   - AT A233 Aviation Safety (3)
   - AT A235 Elements of Weather (3)
   - AT A285/L Airplane Bonded Structures and Lab (4/1)
   - AT A331 Human Factors in Aviation (3)
   - AT A335 Airport Operations (3)
   - AT A336 Airline Operations (3)
   - AT A337 Air Service Operations (3)
   - AT A425 Civil Aviation Security (3)
   - AT A431 Aircraft Accident Investigation (3)
   - AT A492 Air Transportation Seminar (3)
   - AT A490 Advanced Topics in Aviation (3)

FACULTY

Michael Buckland, Assistant Professor, AFMPB@uaa.alaska.edu
William Butler, Assistant Professor, AFWBT@uaa.alaska.edu
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Lou Nagy, Assistant Professor, AFLN@uaa.alaska.edu
Robert Pearson, Professor, AFREP@uaa.alaska.edu
COMPUTER ELECTRONICS

Kenai Peninsula College (KPC)
34820 College Dr. Soldotna, Alaska, 99669, (907) 262-0300
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 DEGREE,
COMPUTER ELECTRONICS

The Computer Electronics program is only offered at Kenai Peninsula College (KPC).

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 university admissions requirements for associate degrees found in Chapter 7 of this catalog.

A. GENERAL UNIVERSITY REQUIREMENTS

Complete the General University and the General Course Requirements for Associate of Applied Science Degrees at the beginning of this chapter.

B. COMMUNICATION AND GENERAL REQUIREMENTS

1. Oral Communication Requirements: 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 Methods of Written Communication (3)
   ENGL A212 Technical Writing (3)

3. General Requirements:
   Math Courses:
   MATH A105 Intermediate Algebra (3)
   MATH A107 College Algebra (4)
   Physical Science Courses
   PHYS A115/L Physical Science I for Technicians (4)
   PHYS A123/L Basic Physics I (4)
   Natural Science Courses
   PHYS A124/L Basic Physics II (4)
   CHEM A103/L Survey of Chemistry (4)
   CHEM A105/L General Chemistry I (4)

C. MAJOR REQUIREMENTS

1. Complete the following required courses:
   CIS A110 Computer Concepts in Business (3)
   CNT A170 CISCO Academy Network Fundamentals (4)
   ET A101 Basic Electronics: DC Physics (4)
   ET A102 Basic Electronics: AC Physics (4)
   ET A126 Principles of Logic and Gating (4)
   ET A175 Technical Introduction to Microcomputers (3)
   ET A240 Application of Integrated Circuits (3)
   ET A241 Microcomputer Interfacing (3)

2. Complete 3 credits from the following:
   CS A109 Computer Programming: (Languages vary) (3)
   CS A110 Java Programming (3)
   CS A111 Visual Basic.NET Programming (3)
   CS A201 Programming Concepts I (3)
   CS A207 C Programming (3)

3. Applied Technology Electives 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

Wolly Barabash, Assistant Professor Electronics Technology ifadh@uaa.alaska.edu
Scott Kraxberger, Associate Professor Computer Information and Office Systems ifslk@uaa.alaska.edu
Allen Houtz, Professor Petroleum Technology ifadh@uaa.alaska.edu

COMPUTER INFORMATION AND OFFICE SYSTEMS

Anchorage
www.uaa.alaska.edu/ctc/programs/applied/cios
University Center (UC), Suite 130, (907) 786-6423

Kenai
www.kpc.alaska.edu/academics/CIOSAAS.html
Ward Building, Room 118 (907)262-0355

Kodiak
www.koc.alaska.edu/certificates/cios.asp
Campus Center, Room 123D, (907) 486-1212

Matanuska-Susitna
www.matsu.alaska.edu/cios
FSM 105, (907) 745-9763

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 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 Specialist (MOS) certification exams and the Certified Administrative Professional (CAP) and Certified Professional Secretary (CPS) certification exams.

The CIOS program provides career education leading to a Certificate or an Associate of Applied Science degree that prepares 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 following programs are available:

Occupational Endorsement Certificates:
   Administrative Office Support
**OCCUPATIONAL ENDORSEMENT CERTIFICATES**

OCCUPATIONAL ENDORSEMENT CERTIFICATES are awarded by the Computer Information and Office Systems Department in Office Technology, Bookkeeping, Medical Office Support, Web Foundations, Desktop Publishing and Graphics, Administrative Office Support, and Legal Office Support. These certificates are designed to give students intensive training in a specific occupational field and to indicate competence in technical and professional skills. The Occupational Endorsement Certificate areas are articulated with the Undergraduate Certificate in Computer Information and Office Systems and the A.A.S. in Computer Information and Office Systems. Students must receive a satisfactory grade (C or higher, or P) in all CIOS courses required in order to be awarded an Occupational Endorsement Certificate.

At the completion of a CIOS Occupational Endorsement Certificate program, students are able to demonstrate:

1. Proficiency in using appropriate software to obtain, organize, analyze, evaluate, and manage information
2. Entry-level employability skills in one of the following areas: Office Technology, Bookkeeping, Medical Office Support, Web Foundations, Desktop Publishing and Graphics, Legal Office Support, and Administrative Office Support.

**ADMISSION REQUIREMENTS**

See Occupational Endorsement Certificate admissions in Chapter 7 of this catalog.

**ADVISING**

Students should contact the CIOS faculty for assistance with course planning toward Occupational Endorsement Certificates.

**CERTIFICATE REQUIREMENTS**

**A. GENERAL UNIVERSITY REQUIREMENTS**

See general university requirements for Occupational Endorsement Certificates at the beginning of this chapter.

**Administrative Office Support**

The Administrative Office Support Occupational Endorsement Certificate provides a solid foundation of administrative, business, and communication skills necessary for employment the business world.

**Admission Requirements**

Must complete the 27 credit Office Technology Occupational Endorsement Certificate prior to admission to this program.

1. Complete 3 credits from the following:
   - ACCT A101A Principles of Financial Accounting I (3)
   - ACCT A120A Bookkeeping for Business I (3)
   - ACCT A201A Principles of Financial Accounting (3)

2. Complete the following 15 credits:
   - CIOS A140A Databases I: MS Access (1)
   - CIOS A150A Presentations: MS PowerPoint (2)
   - CIOS A240A Databases II: MS Access (2)
   - CIOS A241 Integrated Applications (3)
   - CIOS A264A Records Management (2)
   - CIOS A265 Office Management (3)
   - CIOS A270 Project Management Fundamentals (2)

3. Complete 3 credits from the following:
   - CIOS A282 Office Internship (1-3)
   - CIOS Advisor-approved Electives (1-3)
   - Recommend: CIOS 260 Business Communications (3)

4. A total of 21 credits is required for this Occupational Endorsement Certificate.

**Bookkeeping**

The Bookkeeping Occupational Endorsement Certificate provides essential skills to handle financial transactions and recordkeeping.

1. Basic Computer Skills Core (0-6 credits):
   - CIOS A115 10-Key for Business Calculations (2)
   - CIOS A118 Payroll Procedures (2)
   - CIOS A120A Bookkeeping Software Applications I: QuickBooks (1)
   - CIOS A125A Electronic Communications I: MS Outlook (1)
   - CIOS A140A Databases I: MS Access (1)
   - CIOS A160 Business English (3)
   - CIOS A165 Office Procedures (3)
   - CIOS A220A Bookkeeping Software Applications II: QuickBooks (2)
   - CIOS A235A Spreadsheets II: MS Excel (2)
   - CNT A165 Customer Service Fundamentals (1)

4. A total of 21-27 credits is required for this Occupational Endorsement Certificate.

**Desktop Publishing and Graphics**

The Desktop Publishing and Graphics Occupational Endorsement Certificate provides students entry level skills in a variety of digital software programs in order to produce professional-quality print documents and visual presentations.

1. Basic Computer Skills Core (0-6 credits):
   - 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 A240A Databases II: MS Access (2)
   - CIOS A264A Records Management (2)
   - CIOS A265 Office Management (3)
   - CIOS A270 Project Management Fundamentals (2)

3. Complete 3 credits from the following:
   - ACCT A101A Keyboarding A (25 wpm minimum required)
   - ACCT A115 10-Key for Business Calculations (2)
   - ACCT A118 Payroll Procedures (2)
   - ACCT A201A Principles of Financial Accounting (3)
   - CIOS A120A Bookkeeping Software Applications I: QuickBooks (1)
   - CIOS A125A Electronic Communications I: MS Outlook (1)
   - CIOS A140A Databases I: MS Access (1)
   - CIOS A160 Business English (3)
   - CIOS A165 Office Procedures (3)
   - CIOS A220A Bookkeeping Software Applications II: QuickBooks (2)
   - CIOS A235A Spreadsheets II: MS Excel (2)
   - CNT A165 Customer Service Fundamentals (1)

4. A total of 21-27 credits is required for this Occupational Endorsement Certificate.

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**COURSE LISTING**

- **CIOS A101A** Keyboarding A (25 wpm minimum required)
- **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 A240A** Databases II: MS Access (2)
- **CIOS A264A** Records Management (2)
- **CIOS A265** Office Management (3)
- **CIOS A270** Project Management Fundamentals (2)
- **CIOS A282** Office Internship (1-3)
- **CIOS Advisor-approved Electives** (1-3)
- **Recommend: CIOS 260 Business Communications** (3)

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2. Complete the following 20 credits:
   CIOS A108 Graphic Design Fundamentals for Computer Applications 3
   CIOS A152A Digital Imaging Concepts and Applications: Photoshop 3
   CIOS A154A Desktop Publishing I: PageMaker 1
   CIOS A160 Business English 3
   CIOS A230A Word Processing II: MS Word 2
   CIOS A251A Desktop Publishing Concepts and Applications: InDesign 3
   CIOS A254A Desktop Publishing II: PageMaker 2
   CIOS A259 Preparing Electronic Documents: Adobe Acrobat 1
   CIOS Advisor-approved Electives (1-2)

3. A total of 20-26 credits is required for this Occupational Endorsement Certificate.

Legal Office Support
The Legal Office Support Occupational Endorsement Certificate offers concentrated study in the legal office support career area.

Admission Requirements
Must complete the 27 credit Office Technology Occupational Endorsement Certificate prior to admission to this program.

1. Complete 6 credits from the following: 6
   CIOS A120A Bookkeeping Software (1)
   CIOS A140A Databases I: MS Access (1)
   CIOS A150A Presentations: MS PowerPoint (2)
   CIOS A207 Machine Transcription (1)
   CIOS A240A Databases II: MS Access (2)
   CIOS A241 Integrated Applications (3)
   CIOS A260A Business Communications (3)
   CIOS A270 Project Management Fundamentals (2)

2. Complete 3 credits from the following: 3
   CIOS A265 Office Management (3)
   CIOS A267 Law Office Procedures: Client Documents (3)

3. Complete 3 credits from the following: 3
   BA A241 Business Law I (3)
   CIOS A266 Law Office Procedures: Litigation Documents (3)
   PARL A101 Introduction to Law (3)

4. Complete 3 credits from the following: 3
   CIOS A201A Document Processing (3)
   CIOS A209A Legal Transcription (3)

5. Complete the following 5 credits: 5
   CIOS A269 Alaska Rules of Civil Procedure (3)
   CIOS A282 Office Internship (2)

6. A total of 20 credits is required for the Occupational Endorsement Certificate.

Medical Office Support
The Medical Office Support Occupational Endorsement Certificate provides a solid groundwork for individuals seeking a support position in a medical office.

1. Basic Computer Skills Core (0-6 credits)
   All students are required to take the following basic computer skills core courses or possess equivalent knowledge. Students may take challenge exams or placement tests 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 (25 wpm minimum required)
   CIOS A113 Operating Systems: MS Windows 1
   CIOS A130A Word Processing I: MS Word 1

2. Complete 3 credits from the following: 3
   CIOS A101* Keyboarding (3)
   CIOS A101B* Keyboarding B (1)
   CIOS A101C* Keyboarding C (1)
   CIOS A102 Keyboarding Skill Building (1-3)
   CIOS A201A Document Processing (3)

3. Complete the following 7 credits:
   CIOS A164 Filing 1
   CIOS A160 Business English 3
   CIOS A264A Records Management 2
   CIOS A282 Office Internship 1

4. Complete the following 10 credits:
   MA A101 Medical Terminology 3
   MA A120 Medical Office Procedures 4
   MA A140 Medical Transcription I (3) 3
   or
   CIOS A208 Medical Transcription (3)

5. A total of 20-26 credits is required for this Occupational Endorsement Certificate.
Web Foundations
The Web Foundations Occupational Endorsement Certificate concentrates on effective information delivery on the Internet. This program is designed to provide students entry level skills in creating or maintaining an organization's website.

1. Basic Computer Skills Core (0-6 credits):
All students are required to take the following basic computer skills core courses or possess equivalent knowledge. Students may take challenge exams or placement tests 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 1 (25 wpm minimum required)
- 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

2. Complete the following 18 credits:
- CIOS A108 Graphic Design Fundamentals for Computer Applications 3
- CIOS A117 Logic Concepts for Computer Technology 1
- CIOS A140A Databases I: MS Access 1
- CIOS A152A Digital Imaging Concepts and Applications: Photoshop 3
- CIOS A153B Web Site Design: Dreamweaver 3
- CIOS A156 Web Graphics: Fireworks 1
- CIOS Advisor-approved Electives 6

Recommend:
- Information Security Programming Fundamentals
- Web Scripting

3. A total of 18-24 credits is required for this Occupational Endorsement Certificate.

UNDERGRADUATE CERTIFICATE, COMPUTER INFORMATION AND OFFICE SYSTEMS
This Undergraduate Certificate program prepares students for career entry or career advancement and also offers skills preparation for personal use. It provides students with the technical, administrative, and human relations skills required of office professionals. At the completion of this Undergraduate Certificate program, students will be able to demonstrate:

1. Written and oral communication skills using a variety of media.
2. Proficiency in using appropriate software to solve problems, manage information, and enhance document production.
3. Entry-level employability skills in at least one of the following areas: Office Technology, Bookkeeping, Medical Office Support, Web Foundations, Desktop Publishing and Graphics, Legal Office Support, and Administrative Office Support.

4. Ability to function on a team.

ADMISSION REQUIREMENTS
See Undergraduate Certificate admissions in Chapter 7 of this catalog. Students interested in this certificate should first apply through the Office of Admissions.

ADVISING
Students should contact the CIOS faculty for assistance with course planning toward Undergraduate Certificates.

ACADEMIC PROGRESS
Students must earn a satisfactory grade (C or higher, or P) in all CIOS courses required for the Undergraduate Certificate.

CERTIFICATE REQUIREMENTS
A. GENERAL UNIVERSITY REQUIREMENTS
Complete the General University Requirements for Undergraduate Certificates located at the beginning of this chapter.

B. MAJOR REQUIREMENTS
1. Basic Computer Skills Core (0-6 credits):
All students are required to take the following basic computer skills core courses or possess equivalent knowledge. Students may take challenge exams or placement tests 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 1 (25 wpm minimum required)
- 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

2. Complete the following requirements for the Certificate in Computer Information and Office Systems (12 credits)
These requirements include:
- Complete the following 3 credits:
  - ENGL A111 Methods of Written Communication (3)
- Complete 3 credits from the following:
  - CIOS A261A Interpersonal Skills in Organizations (recommended) (3)
  - PSY A153 Human Relations (3)

3. Complete the following three (3) credits:
- CIOS A166 Business Calculations (3)
- MATH A102 Business Math (3)

4. A total of 20-48 credits is required for the undergraduate certificate.

Administrative Office Support (21-48 credits)
a. Must complete the OfficeTechnology emphasis or equivalent before completing the following 21-27 credits
b. Complete 3 credits from the following:
   - ACCT A101 Principles of Financial Accounting I (3)
   - ACCT A120 Bookkeeping for Business I (3)
   - ACCT A201 Principles of Financial Accounting (3)
c. Complete the following 15 credits:
   - CIOS A140A Databases I: MS Access 1
   - CIOS A150A Presentations : MS PowerPoint 2
   - CIOS A240A Databases II: MS Access 2
   - CIOS A241 Integrated Applications 3
   - CIOS A264A Records Management 2
   - CIOS A265 Office Management 3
   - CIOS A270 Project Management Fundamentals 2

4. A total of 20-48 credits is required for the undergraduate certificate.

Bookkeeping (21 credits)
a. Complete 3 credits from the following:
   - ACCT A101 Principles of Financial Accounting I (3)
4. A total of 32-38 credits is required for the undergraduate certificate.

**Legal Office Support (20-40 credits)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIOS A108</td>
<td>Graphic Design Fundamentals for Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>CIOS A152A</td>
<td>Digital Imaging Concepts and Applications: Photoshop</td>
<td>3</td>
</tr>
<tr>
<td>CIOS A154A</td>
<td>Desktop Publishing I: PageMaker</td>
<td>1</td>
</tr>
<tr>
<td>CIOS A160</td>
<td>Business English</td>
<td>3</td>
</tr>
<tr>
<td>CIOS A230A</td>
<td>Word Processing II: MS Word</td>
<td>2</td>
</tr>
<tr>
<td>CIOS A251A</td>
<td>Desktop Publishing Concepts and Applications: InDesign</td>
<td>3</td>
</tr>
<tr>
<td>CIOS A254A</td>
<td>Desktop Publishing II: PageMaker</td>
<td>2</td>
</tr>
<tr>
<td>CIOS A259</td>
<td>Preparing Electronic Documents: Adobe Acrobat</td>
<td>1</td>
</tr>
<tr>
<td>CIOS Advisor-approved Electives</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Recommend:</td>
<td>CIOS 260 Business Communications (3)</td>
<td></td>
</tr>
</tbody>
</table>

4. A total of 32-38 is credits required for the undergraduate certificate.

**Medical Office Support (20 credits)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA A101</td>
<td>Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>MA A120</td>
<td>Medical Office Procedures</td>
<td>4</td>
</tr>
<tr>
<td>MA A140</td>
<td>Medical Transcription</td>
<td>3</td>
</tr>
<tr>
<td>CIOS A208</td>
<td>Medical Transcription</td>
<td>3</td>
</tr>
</tbody>
</table>

4. A total of 32-38 credits is required for the undergraduate certificate.

**Office Technology (21 credits)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIOS A101*</td>
<td>Keyboarding (3)</td>
<td></td>
</tr>
<tr>
<td>CIOS A101B*</td>
<td>Keyboarding B (1)</td>
<td></td>
</tr>
<tr>
<td>CIOS A101C*</td>
<td>Keyboarding C (1)</td>
<td></td>
</tr>
<tr>
<td>CIOS A102</td>
<td>Keyboarding Skill Building (1-3)</td>
<td></td>
</tr>
<tr>
<td>CIOS A201A</td>
<td>Document Processing (3)</td>
<td></td>
</tr>
</tbody>
</table>

* Credit will not be counted for BOTH CIOS A101 (3) and CIOS A101A (1), A101B (1), and A101C (1).

4. A total of 32-38 credits is required for the undergraduate certificate.

**Web Foundations (18 credits)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIOS A108</td>
<td>Graphic Design Fundamentals for Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>CIOS A117</td>
<td>Logic Concepts for Computer Technology</td>
<td>1</td>
</tr>
<tr>
<td>CIOS A140A</td>
<td>Databases I: MS Access</td>
<td>1</td>
</tr>
<tr>
<td>CIOS A152A</td>
<td>Digital Imaging Concepts and Applications: Photoshop</td>
<td>3</td>
</tr>
<tr>
<td>CIOS A153B</td>
<td>Web Site Design: HTML</td>
<td>3</td>
</tr>
<tr>
<td>CIOS A156</td>
<td>Web Graphics: Fireworks</td>
<td>1</td>
</tr>
</tbody>
</table>

4. A total of 30-36 is credits required for the undergraduate certificate.
**ASSOCIATE OF APPLIED SCIENCE, COMPUTER INFORMATION AND OFFICE SYSTEMS**

This Associate of Applied Science Degree program prepares students for career entry or career advancement and also offers skills preparation for personal use. It provides students with the technical, administrative, and human relations skills required of office professionals. At the completion of this Associate of Applied Science program, students will be able to demonstrate:

1. Adept written and oral communication skills using a variety of media.
2. Proficiency in using appropriate software to solve problems, manage information, and enhance document production.
4. Ability to function on a team.
5. Administrative and interpersonal skills.
6. Application of critical thinking skills to make effective decisions and solve problems.

**ADMISSION REQUIREMENTS**

See Associate of Applied Science admissions in Chapter 7 of this catalog.

**ADVISING**

Students should contact the CIOS faculty for assistance with course planning toward the Associate of Applied Science Degree.

**ACADEMIC PROGRESS**

Students must earn a satisfactory grade (C or higher, or P) in all CIOS courses required for the degree.

**DEGREE REQUIREMENTS**

### A. GENERAL UNIVERSITY REQUIREMENTS

1. Complete the General University Requirements for Associate Degrees located at the beginning of this chapter.
2. Complete the Associate of Applied Science General Degree Requirements located at the beginning of this chapter. CIOS A260A, ENGL A212, and PSY A153 recommended.

*Note: Students should consider courses from the Baccalaureate Degree General Education Requirements List to prepare for possible future Baccalaureate degree work.*

### B. MAJOR REQUIREMENTS

#### 1. Basic Computer Skills Core (0-6 credits):

All students are required to take the following basic computer skills core courses or possess equivalent knowledge. Students may take challenge exams or placement tests to prove proficiency in these areas. Beginning computer users are encouraged to take CIOS A113 Operating Systems: MS Windows as the first course.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIOS A101A*</td>
<td>Keyboarding A</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>(25 wpm minimum required)</td>
<td></td>
</tr>
<tr>
<td>CIOS A113</td>
<td>Operating Systems: MS Windows</td>
<td>1</td>
</tr>
<tr>
<td>CIOS A130A</td>
<td>Word Processing I: MS Word</td>
<td>1</td>
</tr>
<tr>
<td>CIOS A135A</td>
<td>Spreadsheets I: MS Excel</td>
<td>1</td>
</tr>
<tr>
<td>CIOS A146</td>
<td>Internet Concepts and Applications</td>
<td>2</td>
</tr>
</tbody>
</table>

2. Complete 3 credits from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIOS A116</td>
<td>Business Calculations (3)</td>
<td></td>
</tr>
<tr>
<td>MATH A102</td>
<td>Business Math (3)</td>
<td></td>
</tr>
</tbody>
</table>

3. Complete the following 3 credits:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIOS A262A</td>
<td>Professional Development</td>
<td>3</td>
</tr>
</tbody>
</table>

4. Complete two (2) of the following emphasis areas: 40-62

**Administrative Office Support (21-41 credits)**

- **a.** Must complete the Office Technology emphasis or equivalent before completing the following 21-27 credits
- **b.** Complete 3 credits from the following:
  - ACCT A101 Principles of Financial Accounting I (3)
  - ACCT A120 Bookkeeping for Business I (3)
  - ACCT A201 Principles of Financial Accounting (3)
- **c.** Complete the following 15 credits:
  - CIOS A140A Databases I: MS Access
  - CIOS A150A Presentations: MS PowerPoint
  - CIOS A240A Databases II: MS Access
  - CIOS A241 Integrated Applications
  - CIOS A264A Records Management
  - CIOS A265 Office Management
  - CIOS A270 Project Management Fundamentals
- **d.** Complete 3 credits from the following:
  - CIOS A282 Office Internship (1-3)
  - CIOS Advisor-approved Electives (1-3)

**Bookkeeping (21 credits)**

- **a.** Complete 3 credits from the following:
  - ACCT A101 Principles of Financial Accounting I (3)
  - ACCT A120 Bookkeeping for Business I (3)
  - ACCT A201 Principles of Financial Accounting (3)
- **b.** Complete the following 18 credits:
  - CIOS A115 10-Key for Business Calculations
  - CIOS A118 Payroll Procedures
  - CIOS A120A Bookkeeping Software Applications I: QuickBooks
  - CIOS A125A Electronic Communications I: MS Outlook
  - CIOS A140A Databases I: MS Access
  - CIOS A160 Business English
  - CIOS A165 Office Procedures
  - CIOS A220A Bookkeeping Software Applications II: QuickBooks
  - CIOS A235A Spreadsheets II: MS Excel
  - CNT A165 Customer Service Fundamentals

**Desktop Publishing and Graphics (20 credits)**

- **a.** Complete the following 20 credits:
  - CIOS A108 Graphic Design Fundamentals for Computer Applications
  - CIOS A152A Digital Imaging Concepts andApplications: Photoshop
  - CIOS A154A Desktop Publishing I: PageMaker
  - CIOS A160 Business English
  - CIOS A230A Word Processing II: MS Word
  - CIOS A251A Desktop Publishing Concepts andApplications: InDesign
  - CIOS A254A Desktop Publishing II: PageMaker
  - CIOS A259 Preparing Electronic Documents: Adobe Acrobat
  - CIOS Advisor-approved Electives

**Office Technology (21 credits)**

- **a.** Complete 3 credits from the following:
  - CIOS A101* Keyboarding (3)

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Medical Office Support  (20 credits)

- Complete 3 credits from the following:  
  CIOS A101*  Keyboarding B (1)  
  CIOS A101B*  Keyboarding C (1)  
  CIOS A102  Keyboarding Skill Building (1-3)  
  CIOS A201A  Document Processing (3)  
  * Credit will not be counted for BOTH CIOS A101 (3) and CIOS A101A (1), A101B (1), and A101C (1).  

- Complete the following 7 credits:  
  CIOS A164  Filing  
  CIOS A160  Business English  
  CIOS A264A  Records Management  
  CIOS A282  Office Internship  

- Complete the following 10 credits:  
  CNT A165  Customer Service Fundamentals  
  CNT A282  Office Internship (1-2)  
  CIOS Advisor-approved Electives  

Legal Office Support  (20-41 credits)

- Complete the Office Technology emphasis or equivalent before completing the following 21-27 credits:  
  CIOS A120A  Bookkeeping Software Applications I: QuickBooks (1)  
  CIOS A140A  Databases I: MS Access (1)  
  CIOS A150A  Presentations: MS PowerPoint (2)  
  CIOS A207  Machine Transcription (1)  
  CIOS A240A  Databases II: MS Access (2)  
  CIOS A241  Integrated Applications (3)  
  CIOS A260A  Business Communications (3)  
  CIOS A270  Project Management Fundamentals (2)  

- Complete 3 credits from the following:  
  CIOS A265  Office Management (3)  
  CIOS A267  Law Office Procedures: Client Documents (3)  

- Complete 3 credits from the following:  
  CIOS A266  Law Office Procedures: Litigation Documents (3)  
  BA A241  Business Law I (3)  
  PARL A101  Introduction to Law (3)  

- Complete 3 credits from the following:  
  CIOS A201A  Document Processing (3)  
  CIOS A209A  Legal Transcription (3)  

- Complete the following 5 credits:  
  CIOS A269  Alaska Rules of Civil Procedure  
  CIOS A282  Office Internship  
  Recommend: Law Office Experience  

Web Foundations  (18 credits)

- Complete the following 18 credits:  
  CIOS A108  Graphic Design Fundamentals for Computer Applications  
  CIOS A117  Logic Concepts for Computer Technology  
  CIOS A140A  Databases I: MS Access  
  CIOS A152A  Digital Imaging Concepts and Applications: Photoshop  
  CIOS A153B  Web Site Design: HTML  
  CIOS A156  Web Graphics: Fireworks  
  CIOS Advisor-approved Electives  

- Recommend: Programming Fundamentals  
  Web Scripting  
  Information Security  

5. A total of 62-86 credits is required for the degree.

FACULTY

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Darlene Gill, Assistant Professor, Anchorage, Darlene.Gill@uaa.alaska.edu  
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Gloria Hensel, Associate Professor, Matanuska-Susitna, ghensel@matsu.alaska.edu  
Debbie Sonberg, Assistant Professor, Kenai, ifdgs@uaa.alaska.edu  
Katie Walker, Assistant Professor, Kodiak, kwalker@uaa.alaska.edu

COMPUTER SYSTEMS TECHNOLOGY

The Computer Systems Technology program is offered through the Matanuska-Susitna College and Kodiak College.

An Associate of Applied Science in Computer Systems Technology provides skills and education for qualified workers in the field of Network and Systems Administration. The degree is designed to teach students both the business and IT-related concepts needed to enter the workforce as a Systems Administrator and Technician. Four, full-time semesters are required to complete the degree program. An AAS in CST can be earned by completing a series of specific technical, business, and general education courses.

Graduates with an AAS in Computer Systems Technology can be employed as systems administrators and in a wide variety of other positions in the Information Technology field. Graduates of this program will have a firm understanding of a wide variety of technical concepts, from the latest version of the Windows Operating System to routing and switching technology using Cisco equipment. Graduates will also have a wide body of knowledge in vendor neutral and theoretical concepts and practices.

Both the Matanuska-Susitna campus and the Kodiak campus offer the degree program.

The program objective is the development of a well trained workforce for the State of Alaska. Since many jobs in the computer technology sector are predicted to grow at high rates in the coming decade, this degree program was designed to train essential employees for that sector.

The educational objectives of the Computer Systems Technology program are to produce graduates who:

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1. Have sufficient technical competence to obtain employment as an entry level technician and to be able to progress professionally within the discipline and are prepared for advanced study.
2. Are able to communicate their ideas.
3. Are able to work within a team environment.
4. Are able to apply their knowledge and skills to create and operate networked computer systems that provide solutions and add to the capabilities of business organizations.
5. Demonstrate their understanding of professional and ethical behavior in the workplace.

Students graduating from this program will demonstrate:

1. Proficiency in operating system, utility software and network installation and configuration.
2. Proficiency in computer hardware, software and network operation, trouble shooting and upgrades. Demonstrate familiarity with hardware, software and network security features.
3. Management of user accounts and group accounts in a MS Windows workgroup and/or domain.
4. Ability to identify, design, and implement a network services management strategy.
5. Setup, configuration, and management of a router to include: router interfacing, command line editing, startup, setup, and configuration.
6. Proficiency in the management of Local Area Networks (LANs).
7. Application of customer service principles, including relationships, perceptions, telephone techniques, quality, ethics, record keeping, interpersonal relationships, and teamwork.
8. Application of business principles and the fundamentals of investment, finance, organization, operation and management within a business entity.
9. Application of project management principles and practices, and use of appropriate project management software in the workplace.

ASSOCIATE OF APPLIED SCIENCE, COMPUTER SYSTEMS TECHNOLOGY

ADMISSION REQUIREMENTS

Satisfy the Admission to Certificate and Associate Degree Programs Requirements in Chapter 7, Academic Standards and Regulations. Additionally, all students are required to take CIS A105 or possess equivalent knowledge prior to entering this degree program.

ACADEMIC PROGRESS

In order to receive an Associate of Applied Science degree in Computer Systems Technology, students must achieve a grade of C or higher in all courses undertaken and applied to the degree.

GENERAL UNIVERSITY REQUIREMENTS

Complete the General University and General Course Requirements for Associate of Applied Science Degrees listed at the beginning of this chapter.

MAJOR REQUIREMENTS

1. Complete the following required courses:
   - BA A151 Introduction to Business 3
   - BA A231 Fundamentals of Supervision 3
   - CNT A160 PC Operating Systems 3
   - CNT A165 Customer Service Fundamentals 1
   - CNT A170 Cisco Academy Network Fundamentals 3
   - CNT A210 PC Technician Fundamentals 3
   - CNT A212 Network Technician Fundamentals 3
   - CNT A240 Windows System Essentials 2
   - CNT A241 Administering and Supporting Windows Workstations and Server 3
   - CNT A242 Windows Network Infrastructure Administration 3
   - CNT A243 Windows Directory Services Administration 3
   - CNT A244 Designing Secure Windows Networks 3
   - CNT A245 Windows Directory Services Design 2
   - CNT A246 Windows Network Infrastructure Design 2
   - CNT A261 Cisco Academy Router Fundamentals 3
   - CNT A270 Cisco Academy Switching and Intermediate Routing 3
   - CNT A271 Cisco Academy WAN Management 3
   - CNT A276 Independent Project 3
   - ENGL A212 Technical Writing 3
   - MATH A105 Intermediate Algebra (3) 3-4
   - MATH A107 College Algebra (4) or
   - MATH A172 Applied Finite Mathematics (3)

2. Students are required to meet a 2-credit Project Management requirement. CIOS A270 is recommended. See advisor for more information.
3. A total of 63-64 credits is required for the degree.

CONSTRUCTION MANAGEMENT

University Center (UC), Room 130, (907) 786-6423
www.uaa.alaska.edu/ctc/programs/cdt/cm

The Construction Management (CM) provides comprehensive preparation and continuing education to meet the growing need for highly trained and educated construction management professionals. Construction managers plan, direct, and are responsible for managerial oversight of construction projects. They are responsible for coordinating and managing people, materials, and equipment; budgets, schedules, and contracts; and for the safety of employees and the general public. Construction managers work closely with architects, engineers, owners, and the other contractors on a construction project. Construction managers determine construction means and methods and the most cost-effective plans and schedules. They control construction costs, administer project changes and monitor work progress while ensuring compliance with the project design. Construction managers work in all sectors of the construction industry, for both public and private owners, on projects that range from small multifamily projects to skyscrapers and from rural roads to major highways and bridges. The construction manager’s duties are varied, challenging, and rewarding.

The Construction Management program at UAA was developed with input from Alaska contractors and professional industry organizations to provide students with a broad knowledge of construction processes and techniques. The curriculum has been designed in accordance with the requirements of the American Council for Construction Education (ACCE). CM graduates understand basic business principles and possess broad knowledge of the technical and operational aspects of the construction industry. Graduates are able to function both in the construction office and on the job site.

The wide diversity in the construction management profession creates a similar diversity of employment opportunities for graduates. Associate degree graduates are prepared for entry-level positions in varying construction management roles for contractors in both home office and project office/field situations. Bachelor’s degree graduates are prepared for a wide variety of professional-level employment opportunities in construction companies, construction management consulting firms, and in the offices of government and project owner agencies. The Associate of Applied Science (AAS-CM) degree requires 4 to 5 semesters to complete. The Bachelor of Science (BSCM) degree requires 8 to 9 semesters to complete.
**ADVISING**

Students are encouraged to consult the faculty in the Construction Management program for assistance in designing their course of study to ensure all prerequisites have been met and that university and major degree requirements are understood and followed.

All students are strongly encouraged to meet with their academic advisor each semester for the purpose of reviewing their academic progress and planning future courses. It is particularly important for students to meet with their advisor whenever academic difficulties arise. Please call (907) 786-6423 to arrange an appointment with an academic advisor.

The Recommended Course Sequence for the current semester and other advising information may be found on the program website: [http://edit.uaa.alaska.edu/ctc](http://edit.uaa.alaska.edu/ctc)

**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).
- **English**: Composition (Skill level as demonstrated by ACT, SAT, or UAA approved placement test to qualify for enrollment in ENGL A111 - Fundamentals of Written Communication).

The University offers courses to help students without this preparation to meet the Math and English skill levels required in the Construction Management program. Insufficient preparation will increase the number of semesters required to complete the degree.

**ASSOCIATE OF APPLIED SCIENCE, CONSTRUCTION MANAGEMENT**

**PROGRAM OUTCOMES**

Graduates will be able to:

- Analyze, interpret and understand the fundamental processes used to create project designs and construction documents.
- Define the roles, relationships and responsibilities of the participants in the design and construction process.
- Use clear and effective written and oral communication methods to facilitate interaction with all project team participants.
- Define the methods, materials, and techniques used in the design and construction of buildings and civil works.
- Interpret construction documents to accurately predict project costs and assign resources.
- Utilize construction operations planning methods to create accurate project schedules and monitor productivity.
- Interpret and apply building codes in construction processes.
- Proficiently operate industry-standard software for computer-aided design and drafting (CADD), project cost estimating, and project scheduling.
- Utilize a working knowledge of safety, health, and environmental issues related to construction activities.

**ADMISSION REQUIREMENTS**

1. Satisfy the requirements under Admission to Certificate and Associate Degree Programs in Chapter 7, Academic Standards and Regulations.
2. Certain courses require prerequisites or faculty permission. See an academic advisor for further information.

**GRADUATION REQUIREMENTS**

In order to receive the Associate of Applied Science in Construction Management, students must achieve a grade of C or better in all courses required for the degree.

**COURSE REQUIREMENTS**

1. Complete the General University Requirements for Associate of Applied Science Degrees located at the beginning of this chapter.
2. Complete the General Course Requirements for Associate of Applied Science degrees located at the beginning of this chapter (15 credits).

**REQUIRED SUPPORT COURSES**

1. Complete the following required support courses:
   - ACCT A201 Principles of Financial Accounting 3
   - ACCT A202 Principles of Managerial Accounting 3
   - *ENGL A212 Technical Writing 3
   - *MATH A107 College Algebra (4) 6/7
   - *MATH A108 Trigonometry (3)
   - *MATH A109 Precalculus (6)
   - *PHYS A123/L Basic Physics I w/lab 4

   *Note: Required support courses may also be used to satisfy General Course Requirements.

**MAJOR REQUIREMENTS**

1. Complete the following required courses:
   - CM A101 Fundamentals of CADD for Building Construction 4
   - CM A102 Methods of Building Construction 3
   - CM A123 Codes and Standards 3
   - CM A142 Mechanical and Electrical Technology 4
   - CM A163 Building Construction Cost Estimating 3
   - CM A201 Construction Project Management I 3
   - CM A202 Project Planning and Scheduling 3
   - CM A205 Construction Safety 3
   - CM A213 Civil Technology 4
   - CM A231 Structural Technology 4
   - CM A263 Civil Construction Cost Estimating 3
   - CM A295 Construction Management Internship 3
2. A total of 65/66 credits is required for the degree.

**BACHELOR OF SCIENCE, CONSTRUCTION MANAGEMENT**

**PROGRAM OUTCOMES**

Graduates will be able to:

- Manage the principal resources of a construction industry organization including its workers, equipment, time, and budgets.
- Represent the role of the constructor in the multi-discipline team responsible for managing construction projects.
- Assess project risk and evaluate alternate project delivery systems for project procurement and construction.
- Communicate effectively with project design professionals during the planning phases of design-build projects and throughout the construction phase of all projects.
- Utilize knowledge of materials, methods, and equipment operations to plan, control, and analyze the results of construction processes.
- Manage construction operations in unique and changing conditions to produce measured results that meet stated quality criteria and overall project goals.
ADMISSIONS REQUIREMENTS
1. Satisfy the requirements under Admission to Baccalaureate Programs in Chapter 7, Academic Standards and Regulations.
2. Certain courses require prerequisites or faculty permission. See an academic advisor for further information.

GRADUATION REQUIREMENTS
In order to receive the Bachelor of Science in Construction Management, students must achieve a grade of C or better in all courses required for the degree.

GENERAL UNIVERSITY REQUIREMENTS
1. Complete the General University Requirements for All Baccalaureate Degrees located at the beginning of this chapter.
2. Complete the General Education Requirements for Baccalaureate Degrees at the beginning of this chapter.

REQUIRED SUPPORT COURSES
1. Complete the following support courses:
   - ACCT A201 Principles of Financial Accounting 3
   - ACCT A202 Principles of Managerial Accounting 3
   - BA/JUST A241 Business Law I 3
   - ECON A201 Macroeconomics 3
   - ECON A202 Microeconomics 3
   - ENGL A212 Technical Writing 3
   - ES 411 Northern Design 3
   - GEO A155 Fundamentals of Surveying 3
   - *MATH A107 College Algebra (4) 6/7
   - *MATH A108 Trigonometry (3) or
   - *MATH A109 Precalculus (6)
   - *PHIL A301 Ethics 3
   - *PHYS A123/L Basic Physics I with lab 3

2. Complete one of the following science courses:
   - *CHEM A105/L General Chemistry I with lab (4) 4
   - *GEOL A111 Physical Geology (4)

3. Complete one additional science course at or above the 100-level in CHEM, ENVI, GEOL, or PHYS (3 credits)
4. Complete one of the following: 3-4
   - *MATH A200 Calculus (4)
   - *MATH A272 Applied Calculus (3)
   - *STAT A253 Applied Statistics for the Sciences (4)
   - *Note: Required Support Courses may also be used to satisfy General Education Requirements.

MAJOR REQUIREMENTS
1. Complete the following required courses:
   - CM A101 Fundamentals of CADD for Building Construction 4
   - CM A102 Methods of Building Construction 3
   - CM A123 Codes and Standards 3
   - CM A142 Mechanical and Electrical Technology 4
   - CM A163 Building Construction Cost Estimating 3
   - CM A201 Construction Project Management I 3
   - CM A202 Project Planning and Scheduling 3
   - CM A205 Construction Safety 3
   - CM A213 Civil Technology 4
   - CM A231 Structural Technology 4
   - CM A263 Civil Construction Cost Estimating 3
   - CM A301 Construction Project Management II 3
   - CM A295 CM Internship 3
   - CM A313 Soils in Construction 3
   - CM A331 Statics & Strengths of Materials 3
   - CM A401 Construction Law 3
   - CM A422 Sustainability in the Built Environment^ 3
   - CM A440 Financial Management for Construction 3
   - CM A450 Construction Management Professional Practice* 3
   - CM A460 Construction Equipment Management and Methods 3
   - CM A495 Advanced Construction Management Internship 3
   - *Tier 3 General Education Requirement, Integrative Capstone.
2. A total of 123/125 credits is required for the degree of which 42 credits must be upper division.

ACCREDITATION
All necessary steps will be taken for successful accreditation by the American Council for Construction Education (ACCE).

FACULTY
J. Ellen McKay, Professor, afjemt@uaa.alaska.edu
Jeffrey Callahan, Assistant Professor, callahan@uaa.alaska.edu
Brian Bennett, Assistant Professor, afbeb@alaska.edu
Peter Dedych, Assistant Professor, dedych@uaa.alaska.edu
Donald Kethner, Assistant Professor, afdam@uaa.alaska.edu

CULINARY ARTS
Lucy Cuddy Hall (CUDY), Room 126, (907) 786-4728

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. Additionally, this division offers an 18-credit minor in Nutrition.

Persons employed in the foodservice industry who wish to update skills and knowledge may take culinary courses randomly. Students are strongly encouraged to contact a faculty advisor about prerequisites and other lab or course requirements.

The Culinary Arts and Hospitality and Restaurant Management Programs provide students the opportunity to acquire the culinary skills, management skills, and hospitality finesse needed to develop a career in the expanding hospitality and foodservice industry. An array of career possibilities is available to graduates in both the production and professional management in restaurants, clubs, bakeries, hotels, hospitals, camps, catering facilities, institutions, and other related operations.

The Associate of Applied Science degree generally takes two years of fulltime study to complete. With additional culinary electives, students may focus their studies in culinary/bakery, management, or hospitality. In the third or fourth semester, the capstone experience for the Associate of Applied Science degree is a 225 hour internship designed to provide direct hands-on advanced culinary experience. Arranged by the department, culinary internships are unpaid work experiences at an approved foodservice site. Through an articulation agreement, students have the option of studying abroad for one semester at the prestigious Italian Culinary Institute of Florence.

The Bachelor’s degree generally takes four to five years of study to complete. Through an agreement with the University of Nevada Las Vegas (UNLV) and Northern Arizona University (NAU), students seeking the Bachelor degree are required to complete two semesters of hospitality/hotel/restaurant management studies at either UNLV or NAU. It is possible to complete studies at UNLV or NAU via distance delivered courses. Please note that students may have to pay non-resident tuition for out of state study.
Undergraduate Programs, Community and Technical College

The capstone experience for the Bachelor’s degree is an 600 hour Alaska internship, offered through UAA and designed to provide direct hands-on hotel and restaurant operations management experience during the fourth or fifth year. Arranged by the department, internships are paid work experiences at an approved hotel/restaurant site.

To help students move efficiently through the program, the department requires specific admissions and advising procedures outlined below. An approved placement test is required for admission and, while not used for placement, is used to advise students of potential difficulties in selected courses.

With application to the program, students open a personal portfolio used to monitor and track student progress; house transcripts, resumes, letters of reference, certificates of completion, scholarship information, evidence of computer competency, internship and job placement; and any other related career planning or placement materials. Students may use their portfolios to apply for scholarships, jobs, or for other personal or professional development.

Associate of Applied Science, Culinary Arts

The Culinary Arts program produces graduates who are not just prepared for entry-level work positions in the rapidly expanding and varied foodservice, hospitality and tourism industry, but also graduates who can quickly advance in career opportunities because of their formal training and education.

At the completion of this degree program, students are able to demonstrate:
1. Entry-level skills in producing quantity food, beverage and bakery operations, utilizing cost control techniques and forecasting operations to ensure profitability.
2. Sanitation, building and fire code, and safety procedures necessary to maintain a safe foodservice production environment for employees and customers.
3. Introductory knowledge of human metabolism and diet's effect on health and disease prevention.

Admission Requirements
1. Satisfy the Admission to Associate of Applied Science Degree Programs Requirements in Chapter 7 of this catalog.
2. Request an admission and advising packet. Complete and return the application form to the department. This form opens an individual student portfolio, which is used to advise and counsel students throughout their program of study, and to contain important career planning and placement materials.

Advising
1. Contact the Culinary Arts department by calling (907) 786-4728, for an appointment with a faculty advisor to plan a personal program of study.
2. Contact Advising and Testing (786-4500) to take a UAA-approved placement test of mathematics, reading, and writing skills. Place a copy of the results in the department portfolio. SAT, ACT and other postsecondary transcripts may also be submitted to the department. These records will be used for advising only.

Academic Progress Requirements
1. Program Core
Full-time and part-time students must successfully complete the 12 credit core curriculum as a prerequisite to enrolling in culinary and bakery skill development laboratory courses. The core consists of the following courses (note each course must be completed with a grade of C or higher):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA A104</td>
<td>Sanitation</td>
<td>2</td>
</tr>
<tr>
<td>CA A105</td>
<td>Principles of Food Science</td>
<td>3</td>
</tr>
<tr>
<td>CA A107</td>
<td>Culinary Cost Control</td>
<td>2</td>
</tr>
<tr>
<td>CA A110</td>
<td>Quantity Food Purchasing</td>
<td>2</td>
</tr>
<tr>
<td>DN A101</td>
<td>Principles of Nutrition</td>
<td>3</td>
</tr>
</tbody>
</table>

2. Computer Competency
The AAS in Culinary Arts requires demonstrated computer competency evidenced by any of the following:
   a. A 3-credit or equivalent course using one or more of the following applications: word processing, spreadsheets, databases, and communications, or an introductory course in data processing or microcomputers.
   b. Participate in a work related experience whereby faculty or employer can verify computer competency.
   c. Undertake a self-initiated, independent effort to develop computer competency as approved by faculty advisor.

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:
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA A103</td>
<td>Culinary Skill Development</td>
<td>4</td>
</tr>
<tr>
<td>CA A104</td>
<td>Sanitation</td>
<td>2</td>
</tr>
<tr>
<td>CA A105</td>
<td>Principles of Food Science</td>
<td>3</td>
</tr>
<tr>
<td>CA A107</td>
<td>Culinary Cost Control</td>
<td>2</td>
</tr>
<tr>
<td>CA A110</td>
<td>Quantity Food Purchasing</td>
<td>2</td>
</tr>
<tr>
<td>CA A111</td>
<td>Bakery Skill Development</td>
<td>4</td>
</tr>
<tr>
<td>CA A201</td>
<td>A la Carte Kitchen</td>
<td>4</td>
</tr>
<tr>
<td>CA A202</td>
<td>Advanced Bakery</td>
<td>4</td>
</tr>
<tr>
<td>CA A224</td>
<td>Hospitality Service</td>
<td>3</td>
</tr>
<tr>
<td>CA A230</td>
<td>Foodservice Management</td>
<td>3</td>
</tr>
<tr>
<td>CA A295C</td>
<td>Foodservice Internship</td>
<td>3</td>
</tr>
<tr>
<td>DN A101</td>
<td>Principles of Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>CA A114</td>
<td>Beverages (3)</td>
<td></td>
</tr>
<tr>
<td>CA A220</td>
<td>Foodservice Operations (3)</td>
<td></td>
</tr>
<tr>
<td>CA A223</td>
<td>Advanced Foods: Buffet and Garde Manger (3)</td>
<td></td>
</tr>
<tr>
<td>CA A225</td>
<td>Hospitality Concept Design (3)</td>
<td></td>
</tr>
<tr>
<td>*CA A490</td>
<td>Current Topics in Foodservice and Nutrition (1-6)</td>
<td></td>
</tr>
</tbody>
</table>

*Only 3 credits of CA A490 may be applied to the AAS Culinary Arts degree.

2. Complete a minimum of 8 credits from the following:
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA A114</td>
<td>Beverages (3)</td>
<td></td>
</tr>
<tr>
<td>CA A220</td>
<td>Foodservice Operations (3)</td>
<td></td>
</tr>
<tr>
<td>CA A223</td>
<td>Advanced Foods: Buffet and Garde Manger (3)</td>
<td></td>
</tr>
<tr>
<td>CA A225</td>
<td>Hospitality Concept Design (3)</td>
<td></td>
</tr>
<tr>
<td>*CA A490</td>
<td>Current Topics in Foodservice and Nutrition (1-6)</td>
<td></td>
</tr>
</tbody>
</table>

3. A total of 60 credits is required for the degree.

Bachelor of Arts, Hospitality and Restaurant Management

The Hospitality and Restaurant 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 confidently advance to middle and upper level management opportunities because of their formal training and education.

At the completion of this degree program, students are able to demonstrate:
1. Proficiency in both managing and participating in the operations of a foodservice and or hospitality venue.
2. Proficiency in managing all fiscal matters pertaining to the profitable operation of a foodservice and or hospitality venue, including developing and implementing a promotion/ marketing plan.
3. Ethical, effective leadership in managing human resources and facilities safely, responsibly, and efficiently.
4. Manage security systems to ensure safety of staff and patrons.

ADMISSION REQUIREMENTS
1. Complete the Admission to Baccalaureate Programs Requirements in Chapter 7 of this catalog.
2. Request an admission and advising packet. Complete and return the application form to the department. This form opens an individual student portfolio which is used to advise students throughout their program of study and to contain important career planning and placement materials.

ADVISING
Contact the Culinary Arts department by calling (907) 786-4728, for an appointment with a faculty advisor to plan a personal program of study.

Contact Advising and Testing (786-4500) to take a UAA-approved placement test of mathematics, reading, and writing skills. Place a copy of the results in the department portfolio. SAT, ACT and other postsecondary transcripts may also be submitted to the department. These records will be used for advising only.

ACADEMIC PROGRESS REQUIREMENTS
Computer Literacy
The department requires that Hospitality and Restaurant Management students attain a basic level of computer competency either before they enter the program or early in their studies. Basic competency is demonstrated by the ability to use word processing, spreadsheets, databases and communications programs. Consistent with industry performance standards, each of the core theory courses includes at least one activity that requires using a computer program. Students may develop or enhance computer competency by any of the following means:
1. Enroll in a 3-credit or equivalent course using one or more of the following applications: word processing, spreadsheets, databases, and communications, or an introductory course in data processing or microcomputers.
2. Participate in a work-related experience whereby faculty or employer can verify computer competency.
3. Undertake a self-initiated, independent effort to develop computer competency as approved by faculty advisor.

DEGREE REQUIREMENTS
GENERAL UNIVERSITY REQUIREMENTS
Complete the General University Requirements for All Baccalaureate Degrees at the beginning of this chapter.

GENERAL EDUCATION REQUIREMENTS
1. Complete the General Education Requirements (GER) for Baccalaureate Degree located at the beginning of this chapter.
2. Students are highly encouraged to coordinate their course selection with their program advisor. Some courses that may fulfill general education requirements and baccalaureate requirements are prerequisites to required business core courses. To avoid taking additional courses later, it is highly recommended students complete: ECON A201, ECON A202, and MATH A105.

MAJOR REQUIREMENTS
1. Culinary Core. Complete all of the following courses:
   - CA A103 Culinary Skill Development 4
   - CA A104 Sanitation 2
   - CA A105 Principles of Food Science 3
   - CA A107 Culinary Cost Control 2
   - CA A110 Quantity Food Purchasing 2
   - CA A111 Bakery Skill Development 4
   - CA A201 A la Carte Kitchen 4
   - CA A224 Hospitality Service 3
   - CA A225 Hospitality Concept Design 3
   - DN A102 Principles of Nutrition 3

2. Business Core. Complete all of the following courses:
   - ACCT A201 Principles of Financial Accounting 3
   - ACCT A202 Principles of Managerial Accounting 3
   - AS A252 Applied Statistics 3
   - BA A300 Organizational Theory and Behavior 3
   - BA A310 Consumer Behavior 3
   - BA A361 Human Resource Management 3
   - BA A463 Promotion Management 3
   - BA A488 The Environment of Business 3
   - CIS A110 Computer Concepts in Business 3
   - STAT A252 Elementary Statistics 3

3. Hospitality and Restaurant Management Core. Note:
   - Students MUST complete the General University Requirements, the Baccalaureate Degree Requirements, the Culinary Core and the Business Core before completing the Hospitality and Restaurant Management Core. Also, two semesters prior to transferring to either NAU or UNLV students MUST apply for National Student Exchange (NSE).
   - UNLV requires transfer students to have an overall GPA of 2.5. (Special note: It is possible to complete NAU or UNLV coursework via distance delivery. This requires special coordination with your UAA program academic advisor).

   Northern Arizona University (NAU)
   - a. Complete the following:
      - HA 335 Hospitality Law 3
      - HA 345 Human Resource Management 3
      - HA 355 Food and Beverage Cost Control 3
      - HA 400 Hospitality Sales Management 3
      - HA 490C Senior Seminar (last semester at NAU) 3
   - b. Additionally, complete three courses from the following:
      - HA 340 Beverage and Bar Operations (3) (Must be 21 or older)
      - HA 390 International Hospitality Operations (spring/fall) (3)
      - HA 401 Resort Management (spring) (3)
      - HA 435 Hospitality Litigation (fall) (3)
      - HA 442 Advanced Food & Beverage Management (3)
      - HA 477 Casino Management (fall) (3)

   University of Nevada Las Vegas (UNLV)
   - a. Complete the following:
      - HMD 114 Lodging Operations 3
      - HMD 312 Exec. Planning/Housekeeping Operations 3
      - HMD 395 Facilities Management 3
      - HMD 401 Hotel Law 3
      - HMD 410 Hospitality Security/Preservation of Assets 3
      - TCA 379 Catering Sales and Operations 3
      - TCA 385 Convention Service Management 3
      - HMD or TCA Elective (300 level or higher) 3

   - 4. Internship Requirement
      - CA A495 Hospitality Internship 6

   - 5. A minimum of 124 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.

Total Credits: 124
DENTAL ASSISTING

Allied Health Sciences Building (AHS), Room 160, (907) 786-6929
http://alliedhealth.uaa.alaska.edu/da

The Dental Assisting program, as part of the Allied Health Sciences department, prepares students to become skilled members of the dental health care team. Assistants greatly increase the efficiency of the dentist in the delivery of oral health care and are valuable members of the dental care team.

The duties of the 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 pre-operative instructions, taking impressions for study casts; performing office management tasks; and performing basic dental laboratory tasks.

Many types of practice settings are available to dental assistants. An assistant may choose to work in a private practice or a group practice. In addition, an assistant can work in a general dentistry or specialty practice, such as oral and maxillofacial surgery, orthodontics, endodontics, periodontics, prosthodontics, or pediatric dentistry. Job opportunities also exist in public health facilities, federal government facilities, hospitals, dental school clinics, insurance companies, and vocational schools or community colleges and universities teaching others to become dental assistants.

The Dental Assisting program offers a 34-credit Certificate and an Associate of Applied Science Degree.

The Dental Assisting program is accredited by the Commission on Dental Accreditation of the American Dental Association, a specialized accrediting body recognized by the Council on Postsecondary Accreditation and by the United States Department of Education. As a result of this, graduates are body recognized by the Council on Postsecondary Accreditation and by the Accreditation of the American Dental Association, a specialized accrediting agencies.

ADVISING

Special admission requirements apply. Interested individuals must contact the advisor in the Department of Dental Assisting to review procedures and requirement for admission.

APPLICATION PROCEDURE

1. Complete a dental assisting application form and mail to:
   UAA Dental Assisting Program
   Allied Health Sciences Building, Room 160
   3211 Providence Drive
   Anchorage AK 99508-8371
   (907) 786-6929

2. Complete UAA approved English and Mathematics placement tests. Contact Advising and Testing at (907) 786-4500 for testing times. If test scores are low, additional course work will be recommended to help you achieve your goal of completing the Dental Assisting program.

3. Two letters of recommendation sent to the Dental Assisting program (on the required forms) are mandatory. Preferably these letters should come from former or current employers or instructors.

4. The information listed above must be in applicant's file before they are 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 and classes are recommended to improve reading comprehension levels, applicants will be advised and proof of successful course completion must be provided prior to acceptance into the program.

Expenses beyond tuition include activity fees, uniforms, lab fees, student organization membership, immunizations, cost of Basic Life Support (BLS) class, licensure fees, and student health insurance...

Immunizations and BLS certification are required prior to clinical participation. Adult, infant and child CPR certification and immunizations must be current throughout the program. Students must be free of tooth decay and active periodontal disease.

UNDERGRADUATE CERTIFICATE

DENTAL ASSISTING

ADMISSION REQUIREMENTS

See Admission to the Program and Application Procedure above.

CERTIFICATE REQUIREMENTS

Fall Semester
DA A101 Essentials of Dentistry 3
DA A102 Infection Control in Dentistry 3
DA A110 Dental Radiography 3
DA A110L Dental Radiography Lab 1
DA A127 Dental Practice Management and Professionalism 3
DA A130 Chairside Techniques I 4

Spring Semester
DA A150 Biomedical & Dental Sciences for Dental Assistants 3
DA A160 Materials in Dentistry 3
DA A195A Dental Assisting Practicum I 1
DA A201 Chairside Techniques II 4
DA A202 Dental Specialties for Dental Auxiliaries 3

Summer Semester
DA A295A Clinical Practicum II 3

ASSOCIATE OF APPLIED SCIENCE, DENTAL ASSISTING

ADMISSION REQUIREMENTS

See Admission to the Program and 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 fulfill the requirement of 6 credits of Mathematics, Humanities, Social Sciences or Natural Sciences.)
**MAJOR REQUIREMENTS**

1. Complete the required courses for the Dental Assisting Undergraduate Certificate as outlined above. 34
2. Complete one of the following Biology courses 4
   - BIOL A102 Introductory Biology (3)
   - BIOL A103 Introductory Biology Laboratory (1)
   or
   - BIOL A111 Anatomy and Physiology I (4)
   or
   - BIOL A115 Fundamentals of Biology (4)
3. Complete one of the following Nutrition Courses 3
   - DN A101 Principles of Nutrition (3)
   or
   - DN A203 Nutrition for Health Sciences (3)
4. Complete one of the following courses 3
   - PSY A111 General Psychology (3)
   or
   - PSY A150 Life Span Development (3)
   or
   - PSY/ HUMS A153 Human Relations (3)
5. Electives 7
   - Recommended courses include:
     - CIS A105 Introduction to Personal Computers and Application Software (3)
     - DA A295B Clinical Practicum III (2)
     - MA A101 Medical Terminology I (3)
     or
     - General Education Requirements (GER) for Baccalaureate Degrees
6. A total of 60 credits is required for the degree.

**FACULTY**

Cindy Armstrong, Term Assistant Professor, afcla@uaa.alaska.edu
Nancy Bish, Associate Professor, afnkb@uaa.alaska.edu
Stephanie Olson, Assistant Professor, afsno1@uaa.alaska.edu

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**DENTAL HYGIENE**

Allied Health Sciences Building (AHS), Room 160, (907) 786-6929 www.uaa.alaska.edu/ctc/alliedhealth/dh/index.cfm

The registered dental hygienist is a licensed oral health educator and clinical operator who, as part of the dental team, uses preventive, educational, and therapeutic methods which aid individuals and groups to attain and maintain optimum oral health. Dental hygienists can work as clinicians, educators, researchers, administrators, managers, preventive program developers, consumer advocates, sales and marketing managers, editors, and consultants. Clinical dental hygienists may work in a variety of health care settings such as private dental offices, schools, public health clinics, hospitals, managed care organizations, correctional institutions, or nursing homes.

The Dental Hygiene program is accredited by the Commission on Dental Accreditation of the American Dental Association, a specialized accrediting body recognized by the Council on Postsecondary Accreditation and by the United States Department of Education. The Associate of Applied Science degree is a three-year endeavor comprising one year of science and general education courses and two years of course work in dental hygiene. The program prepares graduates clinically and academically to take the National and Western Regional Examining Boards for licensure.

Clinical dental hygiene requires the ability to sit for long periods of time, good to excellent eye-hand coordination, and excellent fine hand motor skills. Dental hygienists are exposed to bacteria and viruses. Use of protective glasses, face masks and surgical type gloves is required. A professional appearance must be maintained during preclinical and clinical sessions.

Due to the nature of the work, students are not permitted to work in the classroom, laboratory or clinic when under the influence of intoxicants, drugs or medication affecting psychomotor responses. Guidelines for Infection Control in Dental-Health Care Settings from the Centers for Disease Control and Prevention will be followed for students with, or exposure to, infectious diseases. As a condition of participation in the Dental Hygiene Program students must abide by the University’s “Student Code of Conduct,” the Dental Hygiene Program’s “Policies and Procedures,” and the American Dental Hygienists’ Association “Code of Ethics for Dental Hygienists.”

Application for obtaining an Alaska dental hygiene license requires information concerning illegal activity, crimes, hospitalization history regarding emotional or mental illness, drug addiction, alcoholism and contagious diseases. If these are issues for the applicant it is highly recommended the applicant contact the Alaska Department of Occupational Licensing or a similar government agency in any state in which the applicant wants to practice. The UAA Dental Program application requires information concerning disciplinary actions taken at any university or college.

Transfer of credits may be possible to graduates of an ADA accredited dental assisting program. Contact the Dental Hygiene program advisor for details.

Some expenses beyond tuition generally include activity fees, instruments, uniforms, lab fees, student organization membership, graduation pin, immunizations, cost of Basic Life Support class, licensure fees, student health insurance, and malpractice insurance for the Western Regional Examining Boards and professional liability insurance.

Once enrolled as a dental hygiene student, the student can anticipate a four-semester, 40-hour-per-week endeavor. Some evening classes and clinics are scheduled.

**Preclinical and clinical requirements.** Once admitted to the Dental Hygiene program students are required to provide the following by the first day of class.

1. A signed application form indicating the understanding and acceptance of the Dental Hygiene Programs requirements regarding health screening, vaccinations, and immunizations.
3. Professional liability insurance must be maintained throughout the duration of the student's enrollment in Dental Hygiene courses. Specific information regarding acceptable professional liability insurance policies may be obtained directly from the Program.

Students enrolled in the Dental Hygiene Program must provide their own transportation to all off campus assignments. The Program assumes no responsibility for illnesses and injuries experienced by the student while enrolled in the Dental Hygiene Program. Students are responsible for all costs incurred due to illness or injury experienced by the student while enrolled in the Dental Hygiene Program. It is required that students maintain personal medical insurance while enrolled in the Program. In order to satisfy clinical requirements students are responsible for providing both adult and child patients.

**ASSOCIATE OF APPLIED SCIENCE, DENTAL HYGIENE**
DESCRIPTION AND OUTCOMES
This degree program prepares students to pass the American Dental Association (ADA) National Board Dental Hygiene Examination (written examination) and the Western Regional Examining Board (WREB) Dental Hygiene Examination (clinical examination), or the Western Regional Examining Board 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 demonstrate:
1. Technical skills and professional demeanor to perform occupationally related procedures in various settings.
2. Academic and clinical proficiency necessary to succeed on national and regional examinations.
3. Entry-level occupational skills to work for a variety of employers and in a variety of settings
4. Critical thinking and problem solving

ADMISSION REQUIREMENTS
1. Satisfy requirements for admission to Associate Degrees found in Chapter 7 of this catalog.
2. Special admission requirements and application procedures are required. Selection criteria change periodically. Applicants must contact the department for the selection criteria for the year they wish to apply. Completion of the admission requirements does not guarantee selection into the Dental Hygiene program. Applicants are encouraged to submit application to the University by January 1st to ensure complete processing of the application and transcripts by May 20th.
   a. Applicants must meet with the UAA Dental Hygiene Program advisor regarding application and program admission requirements prior to application deadline.
   b. Graduation from high school or equivalent.
   c. Documentation from official transcripts showing successful completion of the following science courses with a cumulative GPA of at least 2.5:
      - BIOL A111/L Human Anatomy and Physiology I with lab
      - BIOL A112/L Human Anatomy and Physiology II with lab
      - BIOL A240 Introductory Microbiology for Health Sciences
      - BIOL A241 Lectures in Introductory Microbiology for Health Sciences
      - CHEM A103 Survey of Chemistry
      - CHEM A104 Introduction to Organic Chemistry and Biochemistry
   
   d. Course must be completed by the application deadline.
   d. Documentation from official transcripts showing successful completion of the following general requirements courses with a cumulative GPA of at least 2.5:
      - COMM A111 Fundamentals of Oral Communication
      - COMM A235 Small Group Communication
      - COMM A237 Interpersonal Communication
      - COMM A241 Public Speaking
      - ENGL A111 Methods of Written Communication
      - PSY A111 General Psychology
      - PSY A150 Lifespan Development
      - PSY A153 Human Relations
      - SOC A101 Introduction to Sociology
      - SOC A201 Social Problems and Solutions

   e. International students must contact Enrollment Services regarding equivalency evaluation of transcripts.

APPLICATION PROCEDURE
To be considered for admission, the application process must be completed by May 20 for acceptance into the program beginning in the fall of the same year:
1. Complete the Dental Hygiene program application and submit to the address below.
2. Provide proof of admittance into the University of Alaska Anchorage as a premajor dental hygiene student.
3. Request official transcripts (if required) and transcript credit evaluation be sent to the Dental Hygiene program to provide proof of completion of the courses listed under Admission Requirements 3 and 4.
4. Three letters of recommendation sent to the Dental Hygiene Program. Confidential letters from employers or supervisors are recommended. Information and applications can be obtained by contacting:
   - UAA Dental Hygiene Program
   - Allied Health Sciences Building, Room 160
   - 3211 Providence Drive
   - Anchorage, AK 99508-8371
   - Please call (907) 786-6929

ADVISING
Students should contact the Dental Hygiene program advisor for details.

ACADEMIC PROGRESS
Students must earn at least 75 percent or higher in each dental hygiene course.

DEGREE REQUIREMENTS
1. Complete the General University Requirements for Associate of Applied Science Degrees located at the beginning of this chapter.
2. Complete the Associate of Applied Science General Course Requirements located at the beginning of this chapter (ENGL A212 or ENGL A213 are recommended).
3. Complete the Major Requirements listed below.

MAJOR REQUIREMENTS
1. Complete the following required courses:
   **Fall Semester 1st year**
   - DA A110/110L Dental Radiography 4
   - DH A111 Periodontics I 2
   - DH A112 Techniques I for Dental Hygienists 7
   - DH A114 Anatomy of the Orofacial Structures 2
   - *DN A203 Normal Nutrition(3) 3
   - *CA A102 Nutrition(3) 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**
   - DH A113 Issues in Dental Hygiene 1
   - DH A121 Periodontics II 2
   - DH A122 Techniques II for Dental Hygienists 4
   - DH A165 Pharmacology for Dental Hygienists 2
FIRE AND EMERGENCY SERVICES TECHNOLOGY

Allied Health Science Building (AHS) Room 165 (907) 786-6476
http://alliedhealth.uaa.alaska.edu/fire

The Fire and Emergency Services Technology program provides entry-level knowledge and skills for students planning a career in emergency services as well as knowledge and skill for the career firefighter.

PROGRAM OUTCOMES

Graduates of the Fire and Emergency Services Technology program are prepared to:

- Obtain employment and advance in the fire/EMS field.
- Perform as part of a team to effectively mitigate an emergency situation.
- Relate how emergency services have evolved and identify the drivers and essential components of modern emergency services.
- Provide guidance and leadership in the arena of fire prevention.

The Associate of Applied Science degree has a technical core which follows the National Fire Academy’s Fire and Emergency Service Higher Education’s model core curriculum for two-year degree programs. The technical core consists of courses in Principles of Emergency Services, Building Construction, Fire Prevention, Fire Hydraulics, Protection Systems, and Fire Behavior and Combustion. Each student must complete the technical core as well as Math A105 or higher, a natural science with lab, and remaining UAA AAS general education requirements. The student also has four (4) options from which to choose: Fire Suppression, Fire Administration, Emergency Medical Services, or Wildland Firefighting. It may take more than two years to complete the degree.

This program articulates with Western Oregon University (WOU), available through the Western Oregon State College Open Learning Fire Service Program for a baccalaureate degree in Fire Service Administration. For further info about the WOU program contact: http://wou.edu/provost/extprogram/fireserviceprograms.html or (503) 838-8690.

ASSOCIATE OF APPLIED SCIENCE, FIRE AND EMERGENCY SERVICES TECHNOLOGY

ADMISSION REQUIREMENTS

Satisfy the Admission to Certificate and Associate Degree Programs Requirement in Chapter 7, Standards and Requirements. Although it is not required, it is highly recommended that students be a member of a paid or volunteer fire department prior to or shortly after being admitted to the program.

DEGREE REQUIREMENTS

1. Complete the General University Requirements for Associate of Applied Science Degrees located at the beginning of this chapter.
2. Complete the Associate of Applied Science General Degree Requirements located at the beginning of this chapter.
3. Complete the Major Requirements listed below.

MAJOR REQUIREMENTS

1. Complete the following required courses (28 credits):
   - FIRE A101 Principles of Emergency Services 3
   - FIRE A105 Fire Prevention 3
   - FIRE A121 Fire Behavior and Combustion 3
   - FIRE A202 Fire Protection Hydraulics and Water Supply 3
   - FIRE A206 Building Construction for Fire Protection 3
   - FIRE A214 Fire Protection Systems 3
   - MATH 105 or Higher 3
   - Natural Science w/Lab (Recommend CHEM 103/L) 4
   - Social Science (PS, PSY, or SOC) 3
   - MATH, NAT SCI, and SOC SCI may also meet AAS General Course Requirements.
2. Complete 12 credits in one of the following options:
   - Fire Suppression
     - FIRE A107 Strategy and Tactics 3
     - FIRE A117 Rescue Practices 3
     - FIRE A203 Hazardous Materials Chemistry I 3
     - FIRE A123 Fire Investigation I 3
   - Fire Administration
     - FIRE A111 Fire Administration I 3
     - FIRE A170 Occupational Safety and Health for Fire Service 3
     - FIRE A220 Legal Aspects of Emergency Services 3
     - FIRE A230 Fire Department Organizational Theory and Behavior 3
   - Emergency Medical Services
     - EMT A 130 EMT I 6
     - EMT A 230 EMT II 3
     - EMT A 231 EMT III 3
   - Wildland Firefighting
     - FIRE A151 Wildland Fire Control I 3
     - FIRE A155 Wildland Fire Behavior 3
     - FIRE A157 Wildland Air Operations and Safety 3
     - FIRE A159 Wildland Fire Operations Functions 3
3. Complete an additional 11 credits from any FIRE, FSA, or EMT course or from the general education list that will lead towards a baccalaureate degree. (Advisor approval required for general education courses) 11
4. A total of 60 credits is required for the degree.

FACULTY

Gail Overby-Hughes, Assistant Professor/Program Coordinator, AFTGO@uaa.alaska.edu
Special Note: Beginning Fall 2006, courses within the Department of Health, Physical Education & Recreation have new prefixes and/or new numbers. ‘PEP’ prefixes identify ‘program’ or ‘professional’ courses. ‘PER’ prefixes identify recreational courses. Please call the department for more information.

The Department of Health, Physical Education & Recreation is committed to excellence in offering courses within the discipline of physical education and related disciplines. Some courses provide the foundation for an undergraduate major that prepares students for leadership roles in health and fitness or adventure education as well as minors and Occupational Endorsement Certificates within in the discipline. In addition, the department offers a variety of courses for students from other fields who wish to learn new physical skills and/or develop personal wellness.

ENROLLING IN HEALTH, PHYSICAL EDUCATION & RECREATION COURSES

Acknowledgement of Risk, Release of Liability and Medical Questionnaire Form: During the first class session, students will receive information about the course. A verbal description will be provided about the inherent risks associated with specific areas and activities. Students may be asked to complete one or all of the following: acknowledgement of risk forms, release of liability statements, and provide personal medical information and contact numbers. Students may be asked to obtain a physical exam and medical consent from a health professional before participation in classes. This is more likely for notable medical history or for expedition courses.

Minors: Sixteen- and seventeen-old students must receive department chair approval before they are allowed to enroll in HPER courses. Students under sixteen years of age cannot enroll in HPER courses.

Outdoor/Adventure Courses: The Department of Health, Physical Education & Recreation provides outdoor adventure education through the use of hands-on techniques. Course offerings are diverse and include topics such as backpacking, rock climbing, sea kayaking, winter camping, emergency medicine, and wilderness leadership. Outdoor/adventure classes are held in Alaska’s wilderness, an environment that can pose a risk to even the most experienced outdoor leader.

Students may be required to perform activities in extremely inclement weather i.e. rain, sleet, snow, wind or sub-zero temperatures. Additionally, there is an assumption that a minimum level of physical fitness is needed to succeed in and enjoy many of the activities. Consequently, before enrolling in any of these courses, students should review the following information.

1. PHYSICAL FITNESS LEVEL: Many 100-level courses have been designed for the student with an average level of fitness and health; e.g., a student would be expected to comfortably travel five miles over easy terrain. If a higher than average fitness level is required, a special note will identify the necessary level of fitness.
   a. Good fitness is defined as above average fitness relative to a typical, healthy adult. Courses that require good fitness will involve a moderate degree of physical activity; may involve travel over challenging terrain; may involve carrying a pack weighing 50 pounds or more; or may involve multiple hours of exercise. A student who is physically or mentally unprepared to withstand a moderate amount of exercise should not enroll in the course.
   b. Excellent fitness is defined as possessing health of outstanding quality or being in remarkably good physical condition. Excellent fitness is required for expedition courses.

II. VENUE AND TERRAIN DIFFICULTY: Students will hike and travel in a variety of environments in outdoor/adventure courses. The following breakdown provides an overview of terrain difficulty.

   a. Easy terrain can be negotiated by novices. Traveling is usually done on well-maintained trail systems; can include hiking, skiing or snowshoeing; elevation gains/losses generally under 500 feet per mile; and stream crossings of calf deep or less. Off-trail touring includes traveling on firm ground over gentle terrain.
   b. Moderate terrain requires good physical fitness. Traveling is usually done on rugged trails or off trail. The hiking often includes inclines/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 screen; 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.

III. STUDENT HEALTH INSURANCE: Students enrolling in many outdoor/adventure activity courses are provided with basic health insurance coverage during field sessions only. This policy is intended to supplement personal policies and does not include the cost of emergency evacuation.

BACHELOR OF SCIENCE, PHYSICAL EDUCATION

The department offers a Bachelor of Science in Physical Education. The core of the degree emphasizes the broad fundamental principles of physical education including scientific foundations, psychological and cultural aspects, assessment and testing methods, trends, and leadership development in a variety of physical activities. Students may choose to pursue study in one of two emphasis areas within the degree: health and fitness leadership or adventure leadership.

The health and fitness leadership emphasis and the adventure leadership emphasis prepare students for professional positions in rapidly growing fields. Each emphasis focuses on developing leadership expertise as well as the knowledge, physical skills, and technical competencies to prepare graduates for the job market. The health and fitness leadership emphasis prepares students for employment in hospital based health education and fitness programs, community or public health/fitness programs, private health clubs and fitness facilities, corporate fitness/wellness programs, military fitness centers, as personal trainers, or helps them prepare for further education in physical therapy. The adventure leadership emphasis prepares graduates for employment with youth or recreational programs, adventure tourism, guide services, camps, schools, or a host of experiential education opportunities.

PROGRAM OUTCOMES

Graduates of the BS in Physical Education will have demonstrated:

- Knowledge of physical education concepts as well as concepts related to a specific area of emphasis.
- Competency in many activity forms and proficiency in a few.
- Ability to apply established national standards in the field(s).
- Proficiency in entry-level discipline specific administrative skills.
- Proficiency in general and discipline specific technologies.
- Effective leadership skills including the abilities to: 1) evaluate and direct/re-direct skillful movement, 2) lead a variety of activities, 3) use appropriate motivational strategies, 4) employ appropriate safety and prevention techniques, 5) exercise sound judgment and good decision-making skills, and 6) effective communication skills.

Chapter 10  Page 192  University of Alaska Anchorage 2007-2008 Course Catalog  www.uaa.alaska.edu
ADMISSION REQUIREMENTS
1. Complete the Baccalaureate Degree Programs Admission Requirements in chapter 7 of this catalog.
2. Meet with a Health, Physical Education & Recreation advisor regarding application, program admission, and development of a program of study.
3. Submit a departmental application for admission to the Department of Health, Physical Education & Recreation.
4. The degree requires computer competency which may be demonstrated by:
   a. successful completion of an approved university computer course,
   b. work related experience requiring computer competency as approved by faculty or major advisor,
   c. demonstrated computer competency as approved by faculty or major advisor.

ADVISING
All students are encouraged to meet with their academic advisor each semester for the purpose of reviewing their academic progress and planning future courses. It is particularly important for students to meet with their advisor whenever academic difficulties arise.

ACADEMIC PROGRESS
Maintain a 2.5 GPA or higher for the courses within the emphasis and a B or better in the Internship.

DEGREE REQUIREMENTS
1. Complete the General University Requirements for Baccalaureate Degrees listed at the beginning of this chapter.
2. Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of this chapter.
3. Complete the Support Courses and the Major Requirements listed below.

REQUIRED SUPPORT COURSES
Complete the following support courses some of which may be used to satisfy the General Education Requirements:

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>BIOL A111</td>
<td>Human Anatomy and Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL A112</td>
<td>Human Anatomy and Physiology II</td>
<td>4</td>
</tr>
<tr>
<td>DN A203</td>
<td>Nutrition for Health Sciences (3)</td>
<td>3</td>
</tr>
<tr>
<td>DN A215</td>
<td>Sports Nutrition (3)</td>
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<tr>
<td>HS A220</td>
<td>Core Concepts in the Health Sciences</td>
<td>3</td>
</tr>
<tr>
<td>PSY A111</td>
<td>General Psychology (3)</td>
<td>3</td>
</tr>
<tr>
<td>PSY A150</td>
<td>Life Span Development (3)</td>
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</tr>
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</table>

MAJOR REQUIREMENTS
1. Complete the following core courses (39 credits):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>PEP A181</td>
<td>Introduction to Health, Physical Education and Recreation</td>
<td>3</td>
</tr>
<tr>
<td>PEP A281</td>
<td>Leadership in Activities for Diverse Populations</td>
<td>2</td>
</tr>
<tr>
<td>PEP A282</td>
<td>Leadership in Experiential Initiatives and Activities</td>
<td>2</td>
</tr>
<tr>
<td>PEP A283</td>
<td>Leadership in Aquatic Activities</td>
<td>2</td>
</tr>
<tr>
<td>PEP A284</td>
<td>Leadership in Fitness Activities</td>
<td>2</td>
</tr>
<tr>
<td>PEP A285</td>
<td>Leadership in Team Activities</td>
<td>2</td>
</tr>
<tr>
<td>PEP A286</td>
<td>Leadership in Individual and Dual Activities</td>
<td>2</td>
</tr>
<tr>
<td>PEP A287</td>
<td>Leadership in Outdoor Recreation Activities</td>
<td>2</td>
</tr>
<tr>
<td>PEP A288</td>
<td>Leadership in Rhythmic Activities</td>
<td>2</td>
</tr>
<tr>
<td>PEP A382</td>
<td>Kinesiology and Biomechanics</td>
<td>4</td>
</tr>
<tr>
<td>PEP A383</td>
<td>Movement Theory and Motor Development</td>
<td>3</td>
</tr>
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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>PEP A384</td>
<td>Cultural and Psychological Aspects of Health and Physical Activity</td>
<td>3</td>
</tr>
<tr>
<td>PEP A385</td>
<td>Physiology of Exercise</td>
<td>4</td>
</tr>
<tr>
<td>PEP A486</td>
<td>Standards and Assessment in Health, Physical Education, and Recreation</td>
<td>3</td>
</tr>
<tr>
<td>PEP A487</td>
<td>Administration and Supervision in Health, Physical Education and Recreation</td>
<td>3</td>
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</table>

2. Complete one of the following emphasis areas:

Health & Fitness Leadership (43 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>ACCT A201</td>
<td>Principles of Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BA A151</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BA A231</td>
<td>Fundamentals of Supervision</td>
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</tr>
<tr>
<td>BA A260</td>
<td>Marketing Practices</td>
<td>3</td>
</tr>
<tr>
<td>HS/NS A433</td>
<td>Health Education: Theory &amp; Practice</td>
<td>3</td>
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<tr>
<td>PEP A251</td>
<td>Prevention and Care of Activity-Related Injuries</td>
<td>3</td>
</tr>
<tr>
<td>PEP A452</td>
<td>Challenges in Health and Fitness Leadership</td>
<td>1</td>
</tr>
<tr>
<td>PEP A453</td>
<td>Health Promotion</td>
<td>2</td>
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<tr>
<td>PEP A454</td>
<td>Exercise Testing and Prescription</td>
<td>3</td>
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<tr>
<td>PEP A455</td>
<td>Cardiac Rehabilitation</td>
<td>3</td>
</tr>
<tr>
<td>PEP A456</td>
<td>Contemporary Personal Health Issues</td>
<td>3</td>
</tr>
<tr>
<td>PEP A495</td>
<td>Internship in Health and Fitness Leadership</td>
<td>6</td>
</tr>
<tr>
<td>PS A101</td>
<td>Introduction to American Government (3)</td>
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<td>PS A102</td>
<td>Introduction to Political Science (3)</td>
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<tr>
<td>PS A347</td>
<td>Public Administration</td>
<td>3</td>
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Adventureship Leadership (47 credits)

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</tr>
<tr>
<td>BA A151</td>
<td>Introduction to Business</td>
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<td></td>
</tr>
<tr>
<td>GEOL A104</td>
<td>Natural History of Alaska</td>
<td>3</td>
</tr>
<tr>
<td>PEP A161</td>
<td>Wilderness First Responder</td>
<td>4</td>
</tr>
<tr>
<td>PEP A262</td>
<td>Foundations of Adventure and Experiential Leadership</td>
<td>3</td>
</tr>
<tr>
<td>PEP A363</td>
<td>Natural History Interpretation and Environmental Education</td>
<td>3</td>
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<tr>
<td>PEP A364</td>
<td>Survival and Search and Rescue for Adventure Leaders</td>
<td>3</td>
</tr>
<tr>
<td>PEP A365</td>
<td>Adventure Leadership Theory and Practice</td>
<td>3</td>
</tr>
<tr>
<td>PEP A466</td>
<td>Organizational Safety and Risk Management</td>
<td>3</td>
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<td>PEP A496</td>
<td>Internship in Adventure Leadership</td>
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<tr>
<td>PER A169</td>
<td>Four-Season Backpacking</td>
<td>3</td>
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<tr>
<td>PER A182</td>
<td>Alaska Winter Survival</td>
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<td>PER A151</td>
<td>Beginning Canoeing (1)</td>
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<tr>
<td>PER A152</td>
<td>Beginning River Rafting (1)</td>
<td></td>
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<tr>
<td>PER A153</td>
<td>Beginning Sea Kayaking (1)</td>
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<tr>
<td>Choose two (2) of the following:</td>
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<tr>
<td>PER A146</td>
<td>Beginning Rock Climbing (1)</td>
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<tr>
<td>PER A147</td>
<td>Beginning Ice Climbing (1)</td>
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<tr>
<td>PER A148</td>
<td>Beginning Indoor Sport Climbing (1)</td>
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<tr>
<td>PER A181</td>
<td>Crevasse Rescue Techniques (1)</td>
<td></td>
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<tr>
<td>PER A246</td>
<td>Intermediate Rock Climbing (1)</td>
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<tr>
<td>Choose three (3) of the following:</td>
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<tr>
<td>PEP A467A</td>
<td>Challenge Course Adventure Leadership (2)</td>
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<tr>
<td>PEP A467B</td>
<td>Climbing-based Adventure Leadership (2)</td>
<td></td>
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<tr>
<td>PEP A467C</td>
<td>Land-based Adventure Leadership (2)</td>
<td></td>
</tr>
<tr>
<td>PEP A467D</td>
<td>Water-based Adventure Leadership (2)</td>
<td></td>
</tr>
</tbody>
</table>

3. A total of 120-124 credits is required for the degree of which 42 credits must be upper division.
MINOR, ADVENTURE LEADERSHIP *

Students who wish to minor in adventure leadership must complete the following requirements. A total of 22 credits, including 8 upper division credits is required for the minor. Prerequisites for these courses must also be satisfied. Requires a grade of C or better in PEP A467A or PEP A467B.

1. Complete the following core courses (13 credits):
   - PEP A161 Wilderness First Responder 4
   - PEP A262 Foundations of Adventure and Experiential Leadership 3
   - PEP A364 Survival and Search and Rescue for Adventure Leaders 3
   - PEP A365 Adventure Leadership Theory and Practice 3

2. Choose one (1) of the following:
   - PER A169 Four-Season Backpacking (3)
   - PER A182 Alaska Winter Survival (3)

3. Choose two (2) of the following:
   - PER A151 Beginning Canoeing (1)
   - PER A152 Beginning River Rafting (1)
   - PER A153 Beginning Sea Kayaking (1)

4. Choose two (2) of the following:
   - PER A146 Beginning Rock Climbing (1)
   - PER A147 Beginning Ice Climbing (1)
   - PER A148 Beginning Indoor Sport Climbing (1)
   - PER A181 Crevasse Rescue Techniques (1)
   - PER A246 Intermediate Rock Climbing (1)

5. Choose one (1) of the following:
   - PEP A467A Challenge Course Adventure Leadership (2)
   - PEP A467C Land-based Adventure Leadership (2)

* Not available to physical education majors with adventure leadership emphasis.

MINOR, ATHLETIC TRAINING

Students who wish to minor in athletic training must complete the following requirements. A total of 20 credits, including 14 upper division credits, is required for the minor. Prerequisites for these courses must also be satisfied. Requires a grade of C or better in PEP A346 and PEP A347.

Complete the following requirements:
- DN A203 Nutrition for Health Sciences (3) 3
- DN A215 Sports Nutrition (3)
- PEP A251 Prevention & Care of Activity-Related Injuries 3
- PEP A382 Kinesiology and Biomechanics 4
- PEP A385 Physiology of Exercise 4
- PEP A467A Challenge Course Adventure Leadership (2)
- PEP A467C Land-based Adventure Leadership (2)
- 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 (1) of the following:
   - PEP A233 Coaching Track & Field/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)
   - PEP A242 Coaching Soccer (2)
   - PEP A243 Coaching Hockey (2)
   - PEP A244 Coaching Volleyball (2)

MINOR, HEALTH & FITNESS LEADERSHIP *

Students who wish to minor in health & fitness leadership must complete the following requirements. A total of 19 credits, including 6 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 courses within the option.

1. Complete the following core courses (15 credits):
   - DN A203 Nutrition for Health Sciences (3) 3
   - DN A215 Sports Nutrition (3)
   - PEP A115 Introduction to Fitness Leadership 3
   - PEP A215 Issues in Fitness Leadership 3
   - PEP A285 Physiology of Exercise 4
   - PEP A453 Health Promotion 2

2. Choose one of the following options: 4
   - Fitness Instruction Option
     - PEP A116 Techniques in Fitness Instruction I (2)
     - PEP A216 Techniques in Fitness Instruction II (2)
   - Personal Training Option
     - PEP A117 Techniques in Personal Training I (2)
     - PEP A217 Techniques in Personal Training II (2)
   - Aqua Fitness Instruction Option
     - PEP A116 Techniques in Fitness Instruction I (2)
     - PEP A218 Techniques in Aqua Fitness Instruction (2)
   - Wellness Option
     - PEP A116 Techniques in Fitness Instruction I (2)
     - PEP A117 Techniques in Personal Training I (2)

* Not available to physical education majors with health & fitness leadership emphasis.

MINOR, PHYSICAL EDUCATION *

Students who wish to minor in physical education must complete the following requirements. A total of 21 credits, including 10 upper division credits, is required for the minor. Prerequisites for these courses must also be satisfied. Requires a grade of C or better in the leadership courses.

1. Complete the following core courses (15 credits):
   - PEP A181 Introduction to Health, Physical Education and Recreation 3
   - PEP A281 Leadership in Activities for Diverse Populations 2
   - PEP A382 Kinesiology and Biomechanics 4
   - PEP A383 Movement Theory and Motor Development 3
   - PEP A486 Standards and Assessment in Health, Physical Education and Recreation 3
2. Choose three (3) of the following:  
PEP A282 Leadership in Experiential Initiatives and Activities (2)  
PEP A283 Leadership in Aquatic Activities (2)  
PEP A284 Leadership in Fitness Activities (2)  
PEP A285 Leadership in Team Activities (2)  
PEP A286 Leadership in Individual and Dual Activities (2)  
PEP A287 Leadership in Outdoor Recreation Activities (2)  
PEP A288 Leadership in Rhythmic Activities (2)  
*Not available to physical education majors.

**OCCUPATIONAL ENDORSEMENT CERTIFICATE, COACHING LEADERSHIP**

This program is being revised. Please contact the department for more information.

**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 are available to individuals who successfully complete this program in group fitness instruction, personal training, or aquatics fitness instruction.

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, Personal Trainer, or Aquatics Fitness Instructor. 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, 6 include lecture courses and four 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 of this catalog.

**ACADEMIC PROGRESS**

A grade of B or better in each required course with an overall GPA of 3.0 or better.

**OCCUPATIONAL ENDORSEMENT REQUIREMENTS**

1. Complete the following required courses:  
PEP A115 Introduction to Fitness Leadership 3  
PEP A215 Issues in Fitness Leadership 3  
2. Complete the required courses within one of the following three emphasis areas:  
**Group Fitness Leader**  
PEP A116 Techniques in Fitness Instruction I 2  
PEP A216 Techniques in Fitness Instruction II 2  
**Personal Trainer**  
PEP A117 Techniques in Personal Training I 2  
PEP A217 Techniques in Personal Training II 2  
**Aqua Fitness Instructor**  
PEP A116 Techniques in Fitness Instruction I 2  
PEP A218 Techniques in Aqua Fitness Instruction 2

3. Possess current CPR and Standard First Aid certifications for professionals.

4. A total of 10 credits is required for this certificate.

**FACULTY**

Sandra Carroll-Cobb, Chair/Associate Professor, AFSC@uaa.alaska.edu  
Michael Chris, Assistant Professor, AFMC1@uaa.alaska.edu  
Dorothy Orr, Faculty, AFDAO@uaa.alaska.edu  
Wil Rickards, Assistant Professor, AFWHR@uaa.alaska.edu

**INDUSTRIAL PROCESS INSTRUMENTATION**

Kenai Peninsula College (KPC)  
34820 College Dr. Soldotna, Alaska, 99669, (907) 262-0300  
www.kpc.alaska.edu  

Industrial Process Instrumentation is a specialized technical degree. Strong math and science skills are emphasized. Students must work closely with advisors to complete this program in two years. A fifth semester of course work may be necessary.

Students are prepared for employment as instrument technicians. Instrument technicians are responsible for the repair, maintenance, adjustment, and calibration of automatic controls used in refineries, chemical plants, pipelines, oil and gas production facilities, food processing facilities, and other industries where automatic control is used.

**ASSOCIATE OF APPLIED SCIENCE, INDUSTRIAL PROCESS INSTRUMENTATION**

The Industrial Instrumentation program is offered only at Kenai Peninsula College.

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. Will demonstrate punctuality and responsibility suitable to work place employment.

ADMISSION REQUIREMENTS
1. Complete university admissions requirements for associate degrees found in Chapter 7 of this catalog.
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
   or
   COMM A241   Public Speaking (3)  
2. Written Communication Requirements:
   ENGL A111   Methods of Written Communication  3
   ENGL A212   Technical Writing  3
3. General Requirements:
   MATH 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
   or
   CHEM A103/L  Survey of Chemistry  4
   or
   CHEM A105/L  General Chemistry I (4)

MAJOR REQUIREMENTS
ET A101   Basic Electronics: DC Physics  4
ET A102   Basic Electronics: AC Physics  4
ET A126   Principals of Logic and Gating  4
ET A175   Technical Introduction to Microcomputers  3
ET A240   Application of Integrated Circuits  3
ET A241   Microcomputer Interfacing  3
ET A246   Electronic Industrial Instrumentation  3
PETR/PRT A140 Industrial Process Instrumentation I  3
PETR/PRT A144 Industrial Process Instrumentation II  3
PETR A155   Blueprint Reading (3)  3-4
   or
EDD A288   Computer Aided Drafting (4)
PETR A240   Industrial Process Instrumentation III  3
PETR A244   Industrial Process Instrumentation IV  3
PRT A130   Process Technology I: Equipment  4

Technical Electives – Complete one of the following:  3-4
CINT A170   CNC Network Fundamentals (4)
CS A109   Selected Computer Languages (3)
ET A243   Programmable Logic Controllers (3)
PRT A230   Process Technology II: Systems (4)
PRT A250   Process Troubleshooting (3)
A total of 66-68 credits is required for the degree.

FACULTY
Wolly Barabash, Assistant Professor Electronics Technology  wbarabasz@uaa.alaska.edu
Allen Huntz, Professor Petroleum Technology  ahuntz@uaa.alaska.edu
Drew O'Brien, Assistant Professor Mechanical Technology dbo@uaa.alaska.edu
David Spans, Term Instructor Petroleum Technology  dspans@uaa.alaska.edu

MASSAGE THERAPY
Allied Health Science Building (AHS), Room 169, (907) 786-4930
http://alliedhealth.uaa.alaska.edu/mtp

Admission to the Certificate program is currently suspended. Contact the department for further information.

MECHANICAL TECHNOLOGY
Kenai Peninsula College (KPC)
34820 College Dr. Soldotna, Alaska, 99669, (907) 262-0300, www.kpc.alaska.edu

The one-year certificate in Mechanical Technology provides the student with experience in the 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 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.

The graduates of the UAA Mechanical Technology program will have the ability to:
1. Operate basic machine tools at an entry level: lathe, mill, grinder, saws, drill press, sanders, arbor press, radial drill, ovens, precision measuring tools;
2. Measure, identify, and apply with real world parts and pieces, pipe, pipe schedules, fittings and related steel structural materials, and produce appropriate blue prints;
3. Show proficiency in the use, calibration, repair, maintenance, and care of all precision measuring tools;
4. Complete advanced machine shop projects in a variety of materials using standard machine tools and student-created blue prints;
5. Plan and complete machining jobs on the CNC (Computer Numerical Control) equipment in a variety of materials including steel, aluminum, brass, cast iron, stainless, nylon, plastics, and hardwood (optional focus);
6. Pass entry-level welding certification test (optional focus).

ADMISSION REQUIREMENTS
Complete university admissions requirements for certificates found in Chapter 7 of this catalog.

GENERAL UNIVERSITY REQUIREMENTS
Complete the General University and the General Course Requirements for Certificates located at the beginning of this chapter.

MAJOR REQUIREMENTS
1. Certificate Requirements (18 Credits):
   MATH A105   Intermediate Algebra  3
   MECH A101   Introduction to Machine Shop  4
   PRT A155   Blueprint Reading  3
   PETR A130   Process Technology I: Equipment  4
   WELD A101   Gas and Arc Welding  4
2. Choose a minimum of 14 credits from the following electives:
   EDD A288   Computer Aided Drafting  4
   ET A101   Basic Electronics: DC Physics  4
   MECH A102   Intermediate Machine Shop  4
Medical assistants are multi-skilled allied health professionals specifically trained to work in ambulatory settings, such as physicians’ offices, clinics, and group practices. They perform both administrative and clinical tasks to help keep busy medical practices running smoothly. 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) exam. The UAA 40-credit CMA Exam Preparation course of study is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Curriculum Review Board of the American Association of Medical Assistants Endowment (CRB-AAMAE): CAAHEP, 35 East Wacker Drive, Chicago, IL 60601; 312-553-9355. Students who complete the UAA CMA Exam 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 exam; however, a waiver may be granted by the American Association Medical Assistants (AAMA) Certifying Board in cases of mitigating circumstances.

In order to perform medical assisting duties, a student should have good manual dexterity, visual ability to locate patient veins and interpret color changes, and good hearing acuity. Most medical assistants should be able to lift in order to assist patients, 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.

**Preparation for the Certified Medical Assistant (CMA) Exam**

1. Demonstrate the following, or complete preparatory courses as recommended by the medical assisting academic advisor.

   - Placement into MATH A055 or above, or completion of MATH A054 with a minimum grade of C.
   - Placement into ENGL A111 or above, or completion, with a minimum grade of C, of PRPE A107 and PRPE A108, or ENGL A109.
   - Recommended keyboarding skill of 45 wpm or completion of keyboarding course(s).

2. Complete the following required courses with a minimum grade of C in each course:
   - BIOL A100 Human Biology 3
   - CIS A105 Introduction to Personal Computers and Application Software (3) 3
   - CMA A120 Medical Terminology I 3
   - CMA A120A and CMA A120B satisfies the requirement of MA A120.
   - One additional credit of CMA coursework (1)
   - MA A140 Medical Transcription I 2
   - MA A150A Medical Office Procedures II 4
   - MA A220 Coding for the Medical Office 3
   - PSY A150 Life Span Development 3
   - *Completion of MA A120A and MA A120B satisfies the requirement of MA A120.

3. Complete MA A295 Medical Office Externship. 5

4. 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 CPR (adult/child/infant) certification is required prior to the start of externship, and must be kept current throughout the externship course.
3. Current immunizations, proof of medical insurance, and criminal background checks are required by some medical offices which serve as medical office externship sites. The cost to meet these requirements is the responsibility of the student. Students who are injured while completing externship assignments are responsible for all associated medical costs. Students are strongly encouraged to maintain personal medical insurance.
4. Transportation to off-campus externship sites is the responsibility of the student.

**ASSOCIATE OF APPLIED SCIENCE, MEDICAL ASSISTING**

**DEGREE DESCRIPTION AND OUTCOMES**

At the completion of this program, students are able to demonstrate:

1. Basic knowledge in the principles and skills related to administrative, clinical, and general areas of medical assisting.
2. Entry-level medical assistant employment skills.
3. Professionalism as Certified Medical Assistant (CMA).

**ADMISSION REQUIREMENTS**

1. See Certificate and Associate of Applied Science Degree Program Admission Requirements at the beginning of this chapter.
2. Submit University of Alaska Anchorage application for admission and required transcripts.
3. Take UAA-approved English and Math placement tests. Call 907-786-4500 for testing information.
4. Call 907-786-6928 to make an appointment with a medical assisting academic advisor prior to registering for classes.

ADVISING
Medical assisting courses are offered in fall and spring semesters. A six-week 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 A101 and PSY A150 fulfill the requirement of 6 of Mathematics, Humanities, Social Sciences or Natural Sciences.)

MAJOR REQUIREMENTS
1. Complete the required courses for the Preparation for the Certified Medical Assisting (CMA) Exam as outlined above with a minimum grade of C in each course. 40
2. Complete 8 to 9 credits in the following courses: 8-9
   - ACCT A120 Bookkeeping for Business (3)
   or
   - ACCT A101 Principles of Accounting (3)
   - DN A101 Principles of Nutrition (3)
   or
   - DN A203 Nutrition for Health Sciences (3)
   - MA A110 Principles of Radiography (3)
   - MA A141 Medical Transcription II (3)
   - MA A320 Advanced Case Studies in Medical Coding (2)
   - MEDT A101 Phlebotomy Procedures (3)
3. Elective credits. 0-3
4. A minimum of 60 credits is required for this degree.

FACULTY
Pam Ventgen, Assistant Professor, AFPKV@uaa.alaska.edu
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MEDICAL LABORATORY TECHNOLOGY

Allied Health Sciences Building (AHS) Room 169, (907) 786-4930, www.uaa.alaska.edu/ctc/alliedhealth/medlab/index.cfm

The Medical Laboratory Technology Department has a strong commitment to the career ladder approach to higher education. With Career Ladder programs, the students enrolled in the Bachelor of Science in Medical Technology have an option to gain Phlebotomy certification in one year and Medical Laboratory Technician certification in two years as they pursue a bachelor’s degree. The AAS graduates who wish to obtain a bachelor’s degree in Medical Technology may “career ladder” without loss of credit.

General Admission Requirements for all students entering programs offered by the Medical Laboratory Technology Department include:
1. Complete the Medical Laboratory Technology program application.
2. Review the Essential Requirements for Admission and return the signed form to the department.
3. High School diploma or GED equivalency.
4. Prior to enrollment in either MEDT A101 or MEDT A132, students must provide documentation of the following:
   • Immunity to rubella, rubeola and chicken pox confirmed by titer.
   • Immunity to Hepatitis A and Hepatitis B. Students must have started the immunization series prior to enrolling in the courses.
   • Tetanus/diphtheria/pertussis (Tdap) vaccination within the past ten years.
   • Freedom from active tuberculosis, documented annually by negative PPD skin test or by health exam by a nurse practitioner, physician or physician’s assistant.
5. Prior to enrolling in a practicum (MEDT A195A, MEDT A195B, MEDT A295 or MEDT A495) students must
   • Demonstrate computer competency in the prerequisite MEDT courses.
   • Provide documentation of a background check within six months prior to start of practicum.
   • Provide proof of personal medical insurance coverage.

Additional admission requirements are listed under program descriptions. The Medical Laboratory Technology Department assumes no responsibility for illness or injuries experienced by students in conjunction with student labs. It is strongly recommended that students maintain personal medical insurance while enrolled in any of the programs offered by the Medical Laboratory Technology Department. Students enrolled in practicum (MEDT A195A, MEDT A195B, MEDT A295 or MEDT A495) must provide their own transportation to the clinical facility. Personal protective equipment is provided by the training facility. The clinical facilities require proof of medical insurance coverage; therefore, students are required to maintain personal medical insurance while enrolled in practicum courses. Medical insurance is available through the Student Health Center. Liability insurance is purchased by the Medical Laboratory Technology Department to cover the student’s practicum. The Occupational Endorsement Certificate, AAS, and BS degrees are not contingent upon the students passing any type of external certification or licensure examination.

The AAS in Medical Laboratory Technology and the BS in Medical Technology Programs are accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 8410 W. Bryn Mawr Avenue, Suite 670, Chicago, IL, 60631-3415, (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.

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 exams in phlebotomy after completion of MEDT A195A.
ADMISSION REQUIREMENTS

1. Complete the Occupational Endorsement Admission Requirements at the beginning of this chapter.
2. Complete the General Admissions requirements for all programs in the Medical Laboratory Technology Department that are listed at the beginning of this section.
3. Meet with the Medical Laboratory Technology Program advisor regarding application, program admission, and development of a program of study.

Students must earn a satisfactory grade (C or higher or P) in the following courses:

- MEDT A101 Phlebotomy Procedures 3
- MEDT A110 Specimen Processing 3
- MEDT A195A Phlebotomy Practicum 3

A total of 9 credits is required for the certificate.

OCCUPATIONAL ENDORSEMENT CERTIFICATE, CLINICAL ASSISTANT

Clinical assistants perform basic laboratory testing in medical laboratories, working under the supervision of a medical technologist, medical laboratory technician or pathologist. A clinical assistant collects and processes blood specimens and performs test procedures in chemistry, hematology, microbiology and urinalysis. A clinical assistant is competent in the following:

- Demonstrating knowledge of infection control and safety practices.
- Using common medical terminology.
- Following standard operating procedures to collect specimens.
- Preparing blood and body fluid specimens for analysis according to standard operating procedures.
- Preparing/reconstituting reagents, standards and controls according to standard operating procedures.
- Performing appropriate tests at the clinical assistant level, according to standard operating procedures.
- Following established quality control protocols.
- Communicating (verbally and nonverbally) effectively and appropriately in the workplace.
- Using information systems necessary to accomplish job functions.
- Identifying and reporting potential pre-analytical errors that may occur during specimen collection, labeling, transporting and processing.

ASSOCIATE OF APPLIED SCIENCE, MEDICAL LABORATORY TECHNOLOGY

The mission of the Medical Laboratory Technology program is to graduate competent, ethical professionals with the knowledge and skills necessary for work as entry-level medical laboratory technicians. The registered medical laboratory technician (also known as a clinical laboratory technician) is an allied health professional who is qualified by academic and practical training to provide service in clinical laboratory science. The ability to relate to people, a capacity for calm and reasoned judgment, and a demonstration of commitment to the patient are essential qualities for medical laboratory technicians. The medical laboratory technician must demonstrate ethical and moral attitudes and principles, which are essential for gaining and maintaining the trust of professional associates, the support of the community, and the confidence of the patient and family. An attitude of respect for the patient and confidentiality of the patient's record and/or diagnosis must be maintained. A medical laboratory technician is competent in the following:

- Performing analytical tests of body fluids, cells, and other substances.
- Performing preventive and corrective maintenance of equipment and instruments.
- Confirming abnormal results, performing and verifying quality control procedures.
- Exercising principles of safety.
- Demonstrating professional conduct and interpersonal skills with patients, laboratory personnel, other health care professionals, and the public.
- Establishing and maintaining continuing education as a function of growth and maintenance of professional competency.

Upon graduation and initial employment, the medical laboratory technician/clinical 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 exams in medical laboratory technician/clinical laboratory technician after completing the program.

PROGRAM OUTCOMES

The specific educational outcomes for the program are to produce graduates who:

- Demonstrate entry-level competencies for medical laboratory technicians in the following disciplines: Hematology, Chemistry, Immunology, Blood Bank, Urine and Body Fluid Analysis, Microbiology and Laboratory Operations.
- Demonstrate professional behavior including sound work ethics, cultural responsiveness and appearance while interacting with patients and healthcare professionals.
- Find gainful employment as laboratory professionals.
- Meet statewide staffing needs.
- Demonstrate a successful employment record in the field through employment retention and professional advancement.
- Demonstrate a commitment to the laboratory profession through participation in continuing education and providing continuing education.
- Demonstrate a commitment to the laboratory profession through sustained membership in professional organizations.
- Demonstrate a commitment to learning by pursing an advanced degree.

ADMISSION REQUIREMENTS

1. Complete the Associate Degree Programs Admission Requirements at the beginning of this chapter.
2. Complete the General Admissions requirements for all programs in the Medical Laboratory Technology Department that are listed at the beginning of this section.
3. Meet with the Medical Laboratory Technology Program advisor regarding application, program admission, and development of a program of study.

University of Alaska Anchorage 2007-2008 Course Catalog
www.uaa.alaska.edu  Chapter 10 Page 199
Academic Progress
In order to progress within the Associate of Applied Science in Medical Laboratory Technology program, students must earn a satisfactory grade (C or higher or P) in all medical laboratory technology (MEDT) courses required for the degree and demonstrate professional behavior as defined by the "Medical Laboratory Technology Department Core Abilities" and associated behavior criteria. Satisfactory progress is demonstrated by exhibiting Developing Level Criteria by the end of the second year (assessed by core faculty), and Entry Level Criteria by the end of the Clinical Practicum (assessed by clinical instructors). Students must receive a score of "3" or higher on the Developing Level Criteria in order to progress in the program and a score of "3" or higher in the Entry Level Criteria 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 availability 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 15 credits of support courses for the Medical Laboratory Technology major with a satisfactory grade (C or higher).

- BIOL A111 Human Anatomy and Physiology I 4
- BIOL A112 Human Anatomy and Physiology II 4
- CHEM A103/L Survey of Chemistry 4
- CHEM A104 Introduction to Organic Chemistry and Biochemistry 3

Major Requirements
1. Complete the following major courses with a satisfactory grade (C or higher or P).
   - MEDT A132 Introduction to Laboratory Medicine 3
   - MEDT A101 Phlebotomy Procedures (3) and
   - MEDT A133 Basic Techniques in Laboratory Medicine (1) 4
   - 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 Capstone Seminar 1
   - MEDT A295 Clinical Practicum 12
2. A total of 67-68 credits is required for the degree.

Bachelor of Science, Medical Technology
Medical Technologist
The mission of the Medical Technology program is to graduate competent, ethical professionals with the knowledge and the skills necessary for work as entry-level medical technologists. The registered medical technologist (also known as a clinical laboratory scientist) is an allied health professional who is qualified by academic and practical training to provide service in clinical laboratory science. The ability to relate to people, a capacity for calm and reasoned judgment, and a demonstration of commitment to the patient are essential qualities for a medical technologist. The medical technologist must demonstrate ethical and moral attitudes and principles, which are essential for gaining and maintaining the trust of professional associates, the support of the community, and the confidence of the patient and family. An attitude of respect for the patient and confidentiality of the patient's record and/or diagnosis must be maintained.

A medical technologist is competent in the following:
- Developing and establishing procedures for collecting, processing, and analyzing biological specimens and other substances.
- Performing analytical tests of body fluids, cells, and other substances.
- Integrating and relating data generated by various clinical laboratory departments while making decisions regarding possible discrepancies.
- Confirming abnormal results, performing and verifying quality control procedures, and developing solutions to problems concerning the generation of laboratory data.
- Making decisions in response to the results of quality control and quality assurance measures and instituting proper procedures to maintain accuracy and precision.
- Establishing and performing preventive and corrective maintenance of equipment and instruments, as well as identifying appropriate sources for repairs.
- Developing, evaluating and selecting new techniques, instruments and methods in terms of their usefulness and practicality within the context of a given laboratory's personnel, equipment and budgetary resources.
- Demonstrating professional conduct and interpersonal skills with patients, laboratory personnel, other health care professionals, and the public.
- Establishing and maintaining continuing education as a function of growth and maintenance of professional competency.
- Providing leadership in educating other health personnel and the community.
- Exercising principles of management, safety and supervision.
- Applying principles of educational methodology and principle of current information systems.

Upon graduation and initial employment, the medical technologist should be able to demonstrate entry-level competencies in the above areas of professional practice. Graduates are eligible to sit for national certification exams in medical technology/clinical laboratory science after completion of the program.

Program Outcomes
The specific educational outcomes for the program are to produce graduates who:
- Demonstrate entry-level competencies for medical technologists in the following disciplines: Hematology, Chemistry, Immunology, Blood Bank, Urine and Body Fluid Analysis, Microbiology and Laboratory Operations.
- Demonstrate professional behavior including sound work ethics, cultural responsiveness and appearance while interacting with patients and healthcare professional.
- Find gainful employment as laboratory professionals.
- Meet statewide staffing needs.
- Demonstrate a successful employment record in the field through employment retention and professional advancement.
• Demonstrate a commitment to the laboratory profession through participation in continuing education and providing continuing education.
• Demonstrate a commitment to the laboratory profession through sustained membership in professional organizations.
• Demonstrate a commitment to learning by pursing an advanced degree.

ADMISSION REQUIREMENTS
1. Complete the Baccalaureate Degree Programs Admission Requirements in Chapter 7 of this catalog.
2. Complete the General Admission Requirements for all programs in the Medical Laboratory Technology Department that are listed at the beginning of this section.
3. Meet with the Medical Technology Program advisor regarding application, program admission, and development of a program of study.

ACADEMIC PROGRESS
In order to progress within the Bachelor of Science Medical Technology program, students must earn a satisfactory grade (C or higher or P) in all medical technology courses required for the degree and demonstrate professional behavior as defined by the "Medical Laboratory Technology Department Core Abilities" and associated behavior criteria. Satisfactory progress is demonstrated by exhibiting Developing Level Criteria by the end of the second year (assessed by core faculty), and Entry Level criteria by the end of the Medical Technology Practicum (assessed by clinical instructors). Students must receive a score of “3” or higher on the Developing Level Criteria in order to progress in the program and a score of “3” or higher in the Entry Level Criteria 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 Technology program, the required support courses meet the Quantitative Skills and Natural Science Requirements.
3. Complete the Required Support Courses and Major Requirements listed below.

REQUIRED SUPPORT COURSES
Complete all 31-36 credits of support courses for the Medical Technology major with a satisfactory grade (C or higher).

<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>CHEM A103/L</td>
<td>Survey of Chemistry (4)</td>
<td></td>
</tr>
<tr>
<td>CHEM A105/L</td>
<td>General Chemistry I (4)</td>
<td></td>
</tr>
<tr>
<td>CHEM A104/L</td>
<td>Introduction to Organic Chemistry</td>
<td>4/7</td>
</tr>
<tr>
<td>CHEM A106/L</td>
<td>General Chemistry II (4 and</td>
<td></td>
</tr>
<tr>
<td>CHEM A321</td>
<td>Organic Chemistry I (3)</td>
<td></td>
</tr>
<tr>
<td>CIS A305</td>
<td>Managerial Presentations</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A212</td>
<td>Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>MATH A107</td>
<td>College Algebra or Higher (may not use MATH A205)</td>
<td>4/3</td>
</tr>
<tr>
<td>PHIL A302</td>
<td>Biomedical Ethics</td>
<td>3</td>
</tr>
<tr>
<td>STAT A252</td>
<td>Elementary Ethics or Higher</td>
<td>3/4</td>
</tr>
</tbody>
</table>

MAJOR REQUIREMENTS
1. Complete the following major courses with a satisfactory grade (Cor higher or P).
   - MEDT A132 Introduction to Laboratory Medicine 3
   - MEDT A101 Phlebotomy Procedures (3)
   - MEDT A133 Basic Techniques Laboratory Medicine (1) 4
   - 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 A301 Clinical Molecular Biology 4
   - MEDT A302 Clinical Laboratory Education and Management 4
   - MEDT A303 Advanced Clinical Microbiology 6
   - MEDT A401 Introduction to Research 2
   - MEDT A495 Medical Technology Practicum (12) 24
2. A total of 122-128 credits is required for the degree, of which 42 credits must be upper division.

FACULTY
Gloria Kragness, Assistant Professor, AFGA4@uaa.alaska.edu
Heidi Mannion, Associate Professor, AFHAM@uaa.alaska.edu

NUTRITION
Lucy Cuddy Hall (CUDY), Room 126, (907) 786-4728

MINOR, NUTRITION
Offered through the Department of Culinary Arts, Hospitality, Dietetics and Nutrition.

Nutrition is essential to the maintenance of a healthy life. A minor in nutrition will act as a supplement to other fields of study and the application of knowledge to target populations and systems. A minor requires 18 credits.

REQUIRED SELECTIVES
- DN A145 Child Nutrition (3) 3
- DN A147 Geriatric Nutrition (3)
- DN A101 Principles of Nutrition (3) 3
- DN A203 Nutrition for Health Sciences (3)

REQUIRED CORE
- DN A303 Preventive and Therapeutic Nutrition 3
- DN A415 Community Nutrition 3

OPTIONAL COURSES*
Select 6 credits from the following:
- ANTH A457 Food and Nutrition: An Anthropological Perspective (3)
- CA A104 Sanitation (3)
- CA A115 Gourmet Cooking, Healthy Style (1)
- DN A145 Child Nutrition OR (3)
- DN A147 Geriatric Nutrition (3)
- DN A155 Survey of Alaska Native Nutrition (3)
- DN A215 Sports Nutrition (3)
The Occupational Safety and Health program prepares students for employment as safety professionals in a variety of industries. Some of these industries include: construction, petroleum, mining, and tourism. The safety profession is a growing field with a wide range of opportunities for employment. This program provides a thorough background in Occupational Safety and Health preparing graduates for entry-level positions in many industries in Alaska.

The Occupational Safety and Health program is a 61 credit Associate of Applied Science degree. Students experience a wide variety of coursework in the safety field including hazardous materials, training, ergonomics, industrial hygiene, injury prevention, epidemiology, OSHA standards, and safety program development.

**ASSOCIATE OF APPLIED SCIENCE, OCCUPATIONAL SAFETY AND HEALTH**

The Occupational Safety and Health program is offered only at the Kenai Peninsula College-Anchorage Extension Site (KPC/AES) University Center Room 118, 3901 Old Seward Highway, Anchorage, AK 99503, (907) 786-6421 www.kpc.alaska.edu

Complete the following required courses:

**MAJOR REQUIREMENTS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<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 A110</td>
<td>Program Assessment, Development, and Implementation</td>
<td>4</td>
</tr>
<tr>
<td>OSH A112</td>
<td>Introduction to Injury Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>OSH A120</td>
<td>Safety Program Management and Recordkeeping</td>
<td>2</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>
<tr>
<td>OSH A210</td>
<td>Training Needs and Methods</td>
<td>3</td>
</tr>
<tr>
<td>OSH A230</td>
<td>Principles of Ergonomics</td>
<td>3</td>
</tr>
<tr>
<td>OSH A240</td>
<td>Workplace Monitoring: Instrumentation and Calibration</td>
<td>3</td>
</tr>
<tr>
<td>OSH A250</td>
<td>Hazardous Materials Operation</td>
<td>3</td>
</tr>
<tr>
<td>TECH A295</td>
<td>Technical Internship</td>
<td>1-6</td>
</tr>
<tr>
<td>VE A301</td>
<td>Principles of Technology</td>
<td>3</td>
</tr>
</tbody>
</table>

* An advisor approved elective may be substituted for TECH A295: Technical Internship.

**FACULTY**

Curt Sather, Professor Occupational Safety & Health, ifces@uaa.alaska.edu

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**PARAMEDICAL TECHNOLOGY**

Kenai Peninsula College (KPC) 34820 College Dr. Soldotna, Alaska, 99669, (907) 262-0300, www.kpc.alaska.edu

University of Alaska Anchorage - Allied Health Sciences

AHS Building Room 165
Contact Gail Ownby-Hughes (907) 786-6476
http://alliedhealth.uaa.alaska.edu/fire

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 are eligible to take the National Registry examination required for licensure.

Two primary requirements of the Paramedic 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 Soldotna 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 within Alaska.
ASSOCIATE OF APPLIED SCIENCE, PARAMEDICAL TECHNOLOGY

Graduates of the Paramedical Technology Program will have the ability to:

1. Understand their roles and responsibilities as a Paramedic within an EMS system by applying the basic concepts of development, pathophysiology and pharmacology to assess and manage patients with emergency medical needs;
2. Maintain a patient's airway, oxygenate, and ventilate a patient and be able to take a proper history and perform a comprehensive physical exam;
3. Properly administer medications, and communicate effectively with other healthcare providers including physicians, nurses, and other allied health personnel;
4. Integrate pathophysiological principles and assessment findings to formulate a field impression and implement a treatment plan for trauma and medical patients of all ages.

ADMISSION REQUIREMENTS

Kenai Peninsula College - Admission Requirements

Admission to the KPC Paramedic Program is competitive and based on a ranking process. Program applications can be requested through the department or downloaded via the internet. Application requirements must be completed prior to the APRIL 15 application deadline.

University of Alaska Anchorage Campus - Admission Requirements

Paramedical Technology is offered as a degree completion program for students who have current National Registry of EMT Paramedic Licenses. Contact Gail Owby-Hughes for more information. (907) 786-6476. http://alliedhealth.uaa.alaska.edu/fire

Admission Requirements for Paramedical Degree - Pre-Major - Kenai Campus 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 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 April 15 deadline. Formal admission requirements to the Paramedical Technology AAS degree program are listed below.

1. Certificate of Admission from Enrollment Services, including transcripts from both high school/GED and college, with transcript evaluations (if any). Documentation from college transcripts must show successful completion of Biology A111 and Biology A112 with laboratories and grades of 2.00 C or above.
2. Student must attend an advising session with the KPC Paramedic Coordinator; Call (907) 262-0378 for an appointment.
3. Paramedic Program Application and Confidential Required Information form sent to the Paramedic Coordinator
   a. Copy of current National Registry EMT-Basic or State of Alaska EMT-1 certificate
   b. Evidence of current Healthcare Provider or equivalent, CPR Card
   c. Copies of all current medical certifications or licenses
   d. Military DD-214 (long form); if applicable
   e. Complete Anatomy & Physiology I and II (BIOL A111, BIOL A112; 8 credits); with a minimum C grade.
   f. Take and submit to the program coordinator the scores from the Nurse Entrance Test (NET). It is scheduled through the Learning Center at KPC. Call (907) 262-0327 for specific dates and to sign up.
   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 applicants will be notified and invited for oral interviews by a selection committee. The top 15 will be accepted into the Program. The remaining five 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 May with their results.

ADMISSION REQUIREMENTS BEFORE BEGINNING COURSEWORK

Once admitted to the associate degree Paramedical Technology Program, students are required to provide the following before actually beginning course work.

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 PMED A295 course);
   c. Immunity to chicken pox documented by history, titer or current immunization;
   d. Diphtheria/tetanus vaccination within the past ten years (with booster required at the time of expiration);
   e. Freedom from active tuberculosis, documented annually by negative PPD skin test or by health exam by a nurse practitioner, physician, or physician's assistant;
   f. Documentation of HIV testing annually (results not required to be submitted to KPC).
2. Healthcare Provider, or equivalent CPR certificate must be kept current until graduation.
3. Professional liability insurance in the amount of $1 million/$3 million must be maintained throughout the duration of the student's enrollment in the Paramedic Program. The policy will be paid out of student lab fees.

Results of a national level criminal background check must be completed prior to the start of courses. This process takes several months to complete.

Students enrolled in clinical courses must provide their own transportation to clinical assignments and will be required to purchase uniforms and specialized equipment. The college assumes no responsibility for illnesses and injuries experienced by students in conjunction with their clinical experiences; students who are injured while completing clinical assignments are responsible for all associated medical costs. No workers compensation will be awarded if injured on a clinical site, or during the field internship. It is strongly recommended that students maintain personal medical insurance.

ACADEMIC PROGRESS

1. Students are required to earn a grade of 3.00 B or higher in each PMED course. Failure to maintain a passing grade of B will result in dismissal from the program.
2. Students MUST complete all General Degree courses (English, Communications and Math) before they register for or begin their ride-along internship (PMED A295).

GENERAL UNIVERSITY REQUIREMENTS

Complete the General University and the General Course Requirements for Associate of Applied Science Degrees located at the beginning of this chapter.
Communication Requirements (9 credits)
Oral Communication – COMM A111 is recommended (3)
Written Communication - ENGL A111 is required and ENGL A212 is recommended (6)

Natural Science Requirements (8 credits)
BIOL A111 and BIOL A112 are required prerequisites for admission into the Paramedic Program and also fulfill the general requirements for the AAS degree.

Math Requirements (3 credits)
MATH A105 Intermediate Algebra (or higher) 3

Major Requirements (48 credits)
PMD A241 Paramedic I 8
PMD A251 Paramedic II 8
PMD A261 Paramedic III 8
PMD A242 Clinical Rotation I 4
PMD A252 Clinical Rotation II 4
PMD A262 Clinical Rotation III 4
PMD A295 Paramedic Internship 12

A total of 68 credits is required for the degree.

FACULTY
Paul Perry, Instructor Paramedical Technology, ifpoe@uaa.alaska.edu

PETROLEUM TECHNOLOGY
Kenai Peninsula College (KPC)
34820 College Dr. Soldotna, Alaska, 99669, (907) 262-0300,
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.

The graduates of the UAA Petroleum Technology program will have the ability to:
1. Maintain a safe work area: To enforce safety regulations, to follow safe operating procedures, to maintain effective communications with personnel, and to identify workplace hazards;
2. Monitor area operations: To monitor equipment for efficiency and integrity, to identify process problems, and to perform trend analyses;
3. Maintain process parameters: To perform process adjustments, to start up process equipment, and to shut down process equipment;
4. Maintain emergency response preparedness: To respond to emergencies, to effectively participate in emergency response drills, and to conduct periodic review of emergency response procedures;
5. Maintain regulatory compliance: To report recordable incidents, to record discharge reports, to record regulatory data, to maintain current licensing, to participate in internal/external audits, to comply with HAZCOM requirements;
6. Coordinate maintenance activities: To generate work requests, to develop safe out procedures, to schedule maintenance activities, to prepare equipment for maintenance activity, and to issue work permits;
7. Perform administrative activities: To produce required reports, to record logbook entries, to perform personal evaluations; and,
8. Understand the need for continued professional development, to participate in job related training, to utilize self-study resources;
9. Demonstrate English skills: To communicate effectively in entry level technical occupations.

ADMISSION REQUIREMENTS
Complete university admissions requirements for certificates found in Chapter 7 of this catalog.

Complete the following requirements:
PRE A108 Introduction to College Writing (3) 3
or
ENGL A111 Methods of Written Communication (3)
MATH A105 Intermediate Algebra 3
PETR/PRT A140 Industrial Process Instrumentation I 3
PETR/PRT A144 Industrial Process Instrumentation II 3
PRT A101 Introduction to Process Technology 3
PRT A130 Process Technology I: Equipment 4
PRT A160 Oil & Gas Exploration & Production I 4
PRT A230 Process Technology II: Systems 4
PRT A231 Process Tech. III: Operations (4) 4
or
ET A101 Basic Electronics: DC Physics (4)
or
ET A126 Principles of Logic and Gating (4)
PRT A250 Process Troubleshooting 3

A total of 33 credits is required for the certificate.

FACULTY
Wolly Barabash, Assistant Professor Electronics Technology ifwib@uaa.alaska.edu
Allen Houtz, Professor Petroleum Technology ifadh@uaa.alaska.edu
David Spann, Term Instructor Petroleum Technology iflds@uaa.alaska.edu

PROCESS TECHNOLOGY
Kenai Peninsula College (KPC)
KRC (Kenai River Campus)
34820 College Dr. Soldotna, Alaska, 99669, (907) 262-0300
www.kpc.alaska.edu

AES (Anchorage Extension Site)
University Center Room 118, 3901 Old Seward Highway
Anchorage, AK 99503, (907) 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, to follow safe operating procedures, to maintain effective communications with personnel, and to identify workplace hazards;
2. Monitor area operations – to monitor equipment for efficiency and integrity, to identify process problems, and to perform trend analyses;
3. Maintain process parameters – to perform process adjustments, to start up process equipment, and to shut down process equipment;
4. Maintain emergency response preparedness – to respond to emergencies, to effectively participate in emergency response drills, and to conduct periodic review of emergency response procedures;
5. Maintain regulatory compliance – to report recordable incidents, to record discharge reports, to record regulatory data, to maintain current licensing, to participate in internal/external audits, to comply with HAZCOM requirements;
6. Coordinate maintenance activities – to generate work requests, to develop safe out procedures, to schedule maintenance activities, to prepare equipment for maintenance activity, and to issue work permits;
7. Perform administrative activities – to produce required reports, to record logbook entries, to perform personal evaluations;
8. Prepare for and understand the need for continued professional development, to participate in job related training, to utilize self-study resources.

ADMISSION REQUIREMENTS

1. Complete university admissions requirements for associate degrees found in Chapter 7 of this catalog.
2. Placement at the A105 level or above, equivalent course, or appropriate ACT/SAT scores.
3. Placement for reading at the ENGL A111 level or above.

ADvisING

Students must see a faculty advisor in the Process Technology program prior to registering for Process Technology courses.

GENERAL UNIVERSITY REQUIREMENTS

Complete the General University and the General Course Requirements for Associate of Applied Science Degrees located at the beginning of this chapter.

COMMUNICATION AND GENERAL REQUIREMENTS

1. Oral Communications Skills (One of the following) 3
   COMM A111 Fundamentals of Oral Communication (3)
   COMM A235 Small Group Communication (3)
   COMM A237 Interpersonal Communication (3)
   COMM A241 Public Speaking (3)
2. Written Communication Skills
   ENGL A111 Methods of Written Communication (3)
   ENGL A211 Academic Writing About Literature (3)
   ENGL A212 Technical Writing (3)
   ENGL A213 Writing in the Academic Disciplines (3)
   ENGL A214 Persuasive Writing (3)
3. Support Courses
   Math:
   MATH A105 Intermediate Algebra (3)
   or MATH A107 College Algebra (4)
   Computer Literacy:
   CIS A105 Introduction to Personal Computers and Application Software (3)
   or CIS A110 Computer Concepts in Business (3)
   Natural Sciences:
   CHEM A103/L Survey of Chemistry (or higher level) (4)
   or PHYS A115 Physical Science I for Technicians (4)
   and CHEM A103/L Survey of Chemistry (or higher level) (4)
   and PHYS A123/L Basic Physics I (4)

Social Science: 3
   Elective (3)

MAJOR REQUIREMENTS

1. Complete the following courses (28 credits):
   PRT A101 Introduction to Process Technology 3
   PRT A110 Introduction to Occupational Safety, Health, and Environmental Awareness 3
   PRT A130 Process Technology I: Equipment 4
   PRT/PETR A140 Industrial Process Instrumentation I 3
   PRT/PETR 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
   All 9 credits must be chosen with advisor approval. For example, they may be chosen from:
   • Electronics
   • Industrial Process
   • Instrumentation
   • Occupational Safety & Health
   • Petroleum Technology
   • Power Generation
   • Technical Internship
   • Technology
3. A total of 63 credits is required for the degree.

FACULTY

Allen Houtz, Professor Petroleum Technology fhoutz@uaa.alaska.edu
Jeff Jenkins, Instructor Process Technology afwj@uaa.alaska.edu
David Spann, Term Instructor Petroleum Technology ifhds@uaa.alaska.edu

RADIOLOGIC TECHNOLOGY

Allied Health Science Building (AHS), Room 151B, (907)786-6940
http://alliedhealth.uaa.alaska.edu/RADT

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.
ASSOCIATE OF APPLIED SCIENCE, RADIOLOGIC TECHNOLOGY

DESCRIPTION AND 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 of Applied Science Degree admissions Chapter 7 of this catalog. 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. Three letters of reference sent to Program Director, Medical Imaging Sciences Department.
4. Current First Aid/CPR for Professionals or BLS-C certification.
5. 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 ten years (with booster required at the time of expiration);
   e. Freedom from active tuberculosis, documented annually by negative PPD skin test or by health exam;
   f. Documentation of HIV testing annually (results not required).
6. Upon completion of items 1-5, student should contact the Medical Imaging Sciences Department for a personal interview with program faculty.
7. Provide non-FBI criminal background check.

ADVISING
Students should the RADT faculty for assistance with course planning toward the degree.

GENERAL UNIVERSITY REQUIREMENTS
Complete the General University Requirements for Associate 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
   or
   MATH A107 College Algebra (4)
   Select one of the following:
   PSY A111, PSY A150, PSY A153, or SOC A101.
2. Professional course requirements:
   RADT A111 Introduction to Radiologic Technology and Patient Care 3
   RADT A131 Radiographic Procedures I 3

REFRIGERATION AND HEATING TECHNOLOGY

Matanuska-Susitna College
P.O. Box 2889, Palmer, Alaska, 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 degree. A student satisfactorily completing the requirements for a certificate or the degree will possess a background in heating, air-conditioning, applied physics, mathematics, electricity, and the technical skills required to diagnose and repair modern commercial and residential heating, refrigeration, air-conditioning, and ventilation systems.

All students enrolling in the R&H program must take a standardized placement test in reading, writing, and mathematics. The faculty place heavy emphasis on student preparation for job entry-level skills.

Professional tests related to the industry are administered as part of this program. If possible, additional training may take place on the job to provide a student with work related experience. Students must successfully pass all of the classes listed in the Core Requirements module before attempting any of the specialty certificate courses.

PROGRAM OBJECTIVES AND EXPECTED OUTCOMES
The curriculum of the Matanuska Susitna College Refrigeration and Heating Program is designed to produce graduates able to:

1. Apply the fundamental laws of physics related to the Heating, Ventilation, Air Conditioning, and Refrigeration (HVAC/R) industry.
2. Use mathematical skills required to succeed in HVAC/R trades.
3. Understand and describe the function of individual components that make up HVAC/R systems.
4. Work safely with tools, torches, electricity, refrigerants, heating fuels, and other equipment and material associated with HVAC/R work.
5. Follow work practices that are environmentally responsible.
6. Obtain employment as an entry level HVAC/R technician and be able to advance professionally.
7. Work effectively with customers, employers, and co-workers.
8. Systematically troubleshoot HVAC/R systems.
9. Apply municipal, state, and national mechanical codes to decisions involving the design, installation, operation and maintenance of HVAC/R systems.

**OCCUPATIONAL ENDORSEMENT CERTIFICATES**

**ADMISSION**

Satisfy the admissions requirements for Occupational Endorsement Certificates in Chapter 7 of this catalog.

Students must achieve an acceptable score on placement tests in Reading, Writing and Mathematics.

**ADVISING**

Students are urged to meet with a faculty advisor prior to enrollment in RH classes.

**ACADEMIC PROGRESS**

Prerequisites: Certain courses require prerequisites or faculty permission.

Students must pass all courses listed in Core Requirements before attempting any of the specialty courses.

**CERTIFICATE REQUIREMENTS**

Students seeking an R&H certificate must complete the following core requirements.

**Occupational Endorsement Certificate**

Core Requirements – 12 Credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>RH A103</td>
<td>Technical Mathematics for Industrial Trades</td>
<td>3</td>
</tr>
<tr>
<td>RH A105</td>
<td>Electrical Circuits for Refrigeration and Heating I</td>
<td>3</td>
</tr>
<tr>
<td>RH A109</td>
<td>Principles of Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>RH A209</td>
<td>Codes for HVAC/R</td>
<td>2</td>
</tr>
<tr>
<td>RH A211</td>
<td>Customer Relations and Job Etiquette</td>
<td>1</td>
</tr>
</tbody>
</table>

**Occupational Endorsement Certificate, Residential and Light Commercial Heating and Ventilation**

1. Complete the Core Requirements. 12
2. Complete the following certificate requirements:
   - RH A203 HVAC/R Basic Controls: 3
   - RH A225 Heating Fundamentals and Forced Air Heat: 4
   - RH A228 Advanced Hydronic Heat Systems: 4
3. A total of 23 credits is required for the certificate.

**Occupational Endorsement Certificate, Commercial HVAC Systems**

1. Complete the Core Requirements. 12
2. Complete the following certificate requirements:
   - RH A226 Commercial HVAC/R Systems: 4
   - RH A229 HVAC/R Control Systems: 3
   - RH A232 HVAC/R Sheet Metal: 3
3. A total of 22 credits is required for the certificate.

**Occupational Endorsement Certificate, Residential and Light Commercial Air-Conditioning & Refrigeration**

1. Complete the Core Requirements. 12
2. Complete the following certificate requirements:
   - RH A101 Refrigeration and Air Conditioning Fundamentals: 4
   - RH A126 Electrical Circuits for Refrigeration and Heating II: 3
3. A total of 22 credits is required for the certificate.

**OCCUPATIONAL ENDORSEMENT CERTIFICATES**

**ADMISSION**

Satisfy the admissions requirements for Occupational Endorsement Certificates in Chapter 7 of this catalog.

Students must achieve an acceptable score on placement tests in Reading, Writing and Mathematics.

**ADVISING**

Students are urged to meet with a faculty advisor prior to enrollment in RH classes.

**ACADEMIC PROGRESS**

Prerequisites: Certain courses require prerequisites or faculty permission.

Students must pass all courses listed in Core Requirements before attempting any of the specialty courses.

**CERTIFICATE REQUIREMENTS**

Students seeking an R&H certificate must complete the following core requirements.

**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.

**UNDERGRADUATE CERTIFICATE, REFRIGERATION AND HEATING TECHNOLOGY**

**ADMISSION**

Satisfy the admissions requirements for Undergraduate Certificates and Associate degrees in Chapter 7 of this catalog.

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: 4
   - RH A126 Electrical Circuits for Refrigeration and Heating II: 4
   - 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.
ASSOCIATE OF APPLIED SCIENCE, 
REFRIGERATION AND HEATING TECHNOLOGY

ADMISSION REQUIREMENTS
Satisfy the requirements for admission to Certificate and Associate Degree Programs in Chapter 7 of this catalog.

Students must achieve an acceptable score on placement tests in Reading, Writing and Mathematics.

ACADEMIC PROGRESS
Earn a cumulative GPA of 2.0 (C) or higher in required R&H courses to receive the AAS.

AAS DEGREE REQUIREMENTS
1. Complete the General University Requirements for Associate of Applied Science Degrees located at the beginning of this chapter.
2. Complete the General Course Requirements for Associate of Applied Science Degrees located at the beginning of this chapter.
3. Complete the Major Requirements for the degree listed below.

MAJOR REQUIREMENTS
Complete the following required courses:

- RH A101 Refrigeration and Air-Conditioning Fundamentals 4
- RH A103 Technical Mathematics for Industrial Trades 3
- RH A105 Electrical Circuits for Refrigeration and Heating I 3
- RH A109 Principles of Thermodynamics 3
- RH A122 Refrigeration and Air Conditioning 4
- RH A126 Electrical Circuits for Refrigeration and Heating II 3
- RH A132 Troubleshooting for HVAC/R Systems 3
- RH A201 Commercial and Ammonia Refrigeration 4
- RH A203 HVAC/R Basic Controls 3
- RH A209 Codes for HVAC/R 2
- RH A211 Customer Relations and Job Etiquette 1
- 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.

FACULTY
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TECHNOLOGY

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

The Technology Career Specialty Certificate programs provide entry-level skills in several specialized fields including Welding, Construction, and Occupational Safety and Health.

ADMISSION REQUIREMENTS
See certificate requirements in Chapter 7 of the UAA catalog.

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 Fundamental of CADD for Building (4) 3-4
   - CIS A105 Introduction to Personal Computers and Application Software (3)
   - HUMS A153 Human Relations (3)
   - HUMS A155 Human Relations in the Workplace (3)
   - MATH A101 Technical Math (3)
   - MATH A105 Intermediate Algebra (3)
   - OSH A101 Introduction to Occupational Safety and Health 3
   - PRPE A108 Introduction to College Writing 3
   - TECH A295 Technical Internship 1
   - WELD A112 Shielded Metal Arc Welding 4
   - WELD A114 Welding of High Strength Steels 4
   - WELD A157 Technical Drawing for Welders 3
   - WELD A190 Selected Topics in Welding Technology 3

UNDERGRADUATE CERTIFICATE, CONSTRUCTION TECHNOLOGY

Students develop technical skills in 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 ADS degree.)

1. Complete the Certificate Requirements: 33 Credits
   - CIS A105 Introduction to Personal Computers and Application Software 3
   - CM A101 Fundamentals of CADD for Building Construction 4

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CM A102 Methods of Building Construction 3
CM A123 Codes and Standards 3
CM A201 Construction Project Management I 3
CM A205 Construction Safety 3
CM A231 Structural Technology 4
HUMS A153 Human Relations (3) 3
or
HUMS A155 Human Relations in the Workplace (3) 3
MATH A101 Technical Math (3) 3
PRPE A108 Introduction to College Writing 3
TECH A295 Technical Internship 1

UNDERGRADUATE CERTIFICATE, INDUSTRIAL SAFETY PROGRAM SUPPORT

Students develop technical skills in program development, assessment, and management, as well as training needs, training methods, injury prevention, risk management, workplace injury and incident evaluations. Upon completion of the certificate in construction, students are prepared for entry-level positions in Industrial Safety Program Support. (See outcomes for Occupational Safety and Health emphasis of the ADS degree.)

1. Complete the Certificate Requirements: 32 Credits
   CIS A105 Introduction to Personal Computers and Application Software 3
   ENGL A111 Fundamentals of Written Communication 3
   MATH A105 Intermediate Algebra 3
   OSH A101 Introduction to Occupational Safety and Health 3
   OSH A108 Injury Prevention and Risk Management 4
   OSH A110 Program Assessment, Development, and Implementation 4
   OSH A120 Safety Program Management and Recordkeeping 2
   OSH A180 Introduction to Industrial Hygiene 4
   OSH A201 Workplace Injury and Incident Evaluation 4
   TECH A295 Technical Internship 2

ASSOCIATE OF APPLIED SCIENCE, TECHNOLOGY

The Associate of Applied Science, Technology is offered only through Kodiak College

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 admissions requirements for associate degrees in chapter 7 of the University of Alaska Anchorage general catalog.

GENERAL UNIVERSITY REQUIREMENTS

Complete the General University Requirements for Associate Degrees in chapter 10 of the UAA catalog. 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
     Communication, select from:
     COMM A111 Methods of Oral Communication 3
     or
     COMM A235 Small Group Communication 3
     or
     COMM A237 Interpersonal Communication 3
     or
     COMM A241 Public Speaking 3
     or
     ENGL A111 Methods of Written Communication 3
     or
     ENGL A212 Technical Writing 3
     or
     MATH A105 Intermediate Algebra 3
     or
     Science, select from:
     CHEM A103/L Survey of Chemistry with Lab (for Construction or OSH emphases only) 4
     or
     CHEM A105/L General Chemistry with Lab (for Construction or OSH emphases only) 4
     or
     GEOL A111 Physical Geology (for Construction emphasis only) 4
     or
     PHYS A123/L Basic Physics I with Lab 4
   - Technology Core Requirements 23 Credits
     AET A101 Fundamentals of CAD for Building Construction 4
     CIS A105 Introduction to Personal Computers and Software Applications 3
     ET A151 Basic Electricity for the Trades 4
     or
     HUMS A153 Human Relations 3
     or
     HUMS A155 Human Relations in the Workplace 3
     or
     OSH A101 Introduction to Occupational Safety and Health 3
     or
     OSH A250 Hazardous Material Operations 3
     or
     TECH A101 Introduction to Technological Principles 3
   2. Complete one of the following Technology Career Emphasis areas:

CONSTRUCTION (27 Credits)

Outcomes

The purpose of this degree emphasis is to produce capable graduates who can perform safely and efficiently in a construction environment. Graduates will be prepared to learn the specific needs of the industries that they serve and demonstrate the abilities to:

1. Documentation: Create, interpret and use construction drawings and other documents and calculate quantities of material, labor, and equipment needed for a project.
2. Human Resources: Define the roles, responsibilities, and relationships of the participants in the construction process and understand employee relations and contract law.
3. Building Methods: Define structural theories and physical principles affecting structural behavior in buildings and civil works. Define the elements of civil construction, soil mechanics,
3. Skills in welding and thermal cutting processes and familiarity with basic metallurgy theory.


5. Construction Project Management: Familiarity with effective contract administration methods to control, organize, and monitor construction projects.

6. Management Tools: Utilize industry standard software for computer-aided drafting (CADD) and gain familiarity with estimating, scheduling and resource management.

7. Safety: Apply knowledge of safety, health, and environmental issues related to construction activities.

**WELDING (25 Credits)**

Outcomes

The purpose of this degree emphasis is to produce capable graduates who can perform safely and efficiently in a welding environment. Graduates will be prepared to learn the specific needs of the industries that they serve and demonstrate the abilities to:

1. Identify risks to life, health and property, and plan and implement strategies that prevent injuries.
2. Develop, implement and manage safety programs that comply with government regulations, industry standards and best safety practices.
3. Design and maintain company and personnel records related to safety activities, training and incidents.
4. Perform hazard recognition and mitigation related to chemical and physical conditions in the workplace.
5. Develop and implement a process of incident or injury investigation. Properly collect, organize and analyze appropriate information to link root causes with observed effects.
6. Prepare and present employee training modules and programs based on training needs assessments. Properly prepare objectives and materials and practice effective presentations.

**OCCUPATIONAL SAFETY AND HEALTH (23 Credits)**

Outcomes

The purpose of this degree emphasis is to produce capable graduates who can plan for safe activities and direct safety programs in a variety of industrial settings. Graduates will be prepared to learn the specific needs of the industries that they serve and demonstrate the abilities to:

1. Develop, implement and manage safety programs that comply with government regulations, industry standards and best safety practices.
2. Design and maintain company and personnel records related to safety activities, training and incidents.
3. Perform hazard recognition and mitigation related to chemical and physical conditions in the workplace.
4. Develop and implement a process of incident or injury investigation. Properly collect, organize and analyze appropriate information to link root causes with observed effects.
5. Prepare and present employee training modules and programs based on training needs assessments. Properly prepare objectives and materials and practice effective presentations.

**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 of this catalog.

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 phone number above.)
2. Completion of an Associate of Applied Science degree from a regionally accredited institution or equivalent credits in a technical specialty area as approved by BST faculty advisor (45 credits minimum).
3. Completion of Change of Major form from pre-major to major status signed by BST faculty advisor.

**DEGREE REQUIREMENTS**

1. Complete the General University Requirements for Baccalaureate Degrees listed at the beginning of this chapter.
2. Complete the General Education Requirements (GER) for Baccalaureate Degrees listed at the beginning of this chapter.
3. Complete Required Support Courses and Major Degree Requirements.

**PROGRAM DESCRIPTION AND OUTCOMES**

This program builds on technical skills and knowledge to achieve professional and management competencies needed over a lifetime in continuously changing technological fields. Upon completion of this program, graduates will be able to:

- Develop, demonstrate, and evaluate policies and processes to ensure a safe workplace.
- Integrate knowledge gained in the program into professional goals and objectives.
- Design, schedule, manage, and assess technical projects.
- Achieve professional and management competencies for work in technical fields.

**ADVISING**

All students are encouraged to meet with their academic advisor each semester for the purpose of reviewing their academic progress and planning future courses. It is particularly important for students to meet with their advisor whenever academic difficulties arise.
Students are advised to complete at least 18 credits of upper division work in the fulfillment of General Education Requirements, Ethics, and Natural Sciences/Quantitative Skills requirements.

**Required Support Courses (12-16 credits)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethics</td>
<td>*PHIL A301 recommended</td>
<td>3</td>
</tr>
<tr>
<td>*ENGL A312</td>
<td>Advanced Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>*MATH A108</td>
<td>Trigonometry (3)</td>
<td>3-6</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*MATH A109</td>
<td>Precalculus (6)</td>
<td></td>
</tr>
<tr>
<td>*MATH A272</td>
<td>Applied Calculus (3)</td>
<td>3-4</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*MATH A200</td>
<td>Calculus I (4)</td>
<td></td>
</tr>
</tbody>
</table>

*Note: Courses marked with an (*) fulfill UAA General Education Requirements.*

**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** 9

   Choose from any:
   - Natural Sciences GER courses
   - Quantitative Skills GER courses
   - Any upper division STAT, MATH, BIOL, CHEM, GEOL, and/or PHYS courses.

   **With faculty advisor approval, choose 9 credits of Natural Sciences or Quantitative Skills courses (in addition to the 10 credit minimum Natural Sciences (7) and Quantitative Skills (3) General Education Requirements) for which prerequisites have been met.

3. Complete the following required BST core courses (15 credits):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TECH A302</td>
<td>Operational Safety</td>
<td>3</td>
</tr>
<tr>
<td>TECH A305</td>
<td>Technology Management</td>
<td>3</td>
</tr>
<tr>
<td>TECH A433</td>
<td>Project Design, Implementation and Control (3)</td>
<td>3</td>
</tr>
<tr>
<td>Upper-Division Management Course(s) (3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TECH A443</td>
<td>Quality Leadership</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BA A300</td>
<td>Organizational Theory and Behavior (3)</td>
<td></td>
</tr>
<tr>
<td>*TECH A453</td>
<td>Capstone Project</td>
<td>3</td>
</tr>
</tbody>
</table>

4. Complete a minimum of 6 credits upper division electives. **6**

5. A minimum of 120 credits is required for the Bachelor of Science, Technology degree, of which a minimum of 42 credits must be upper division.

**BACHELOR OF SCIENCE, TECHNOLOGY**

**BUSINESS EMPHASIS**

**PROGRAM DESCRIPTION AND OUTCOMES**

The BST Business Emphasis offers students a focused program of study drawing required courses from economics and accounting and incorporating selective courses from business administration, computer information systems, or logistics. While the emphasis requires a minimum of 9 additional credits, the Business emphasis allows students to pursue more depth in their business skills. Upon completion of this program, graduates will be able to:

- 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.

Students are encouraged to complete ECON A201, ENGL A212, and MATH A107 as General Education Requirements. Students are advised to complete at least 18 credits of upper division work in the fulfillment of General Education Requirements, Ethics, and Natural Sciences/Quantitative Skills requirements.

**Required Support Courses (18-22 credits)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethics</td>
<td>*PHIL A301 recommended</td>
<td>3</td>
</tr>
<tr>
<td>*ECON A201</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>*ECON A202</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>*ENGL A312</td>
<td>Advanced Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>*MATH A108</td>
<td>Trigonometry (3)</td>
<td>3-6</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*MATH A109</td>
<td>Precalculus (6)</td>
<td></td>
</tr>
<tr>
<td>*MATH A272</td>
<td>Applied Calculus (3)</td>
<td>3-4</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*MATH A200</td>
<td>Calculus I (4)</td>
<td></td>
</tr>
</tbody>
</table>

*Note: Courses marked with an (*) fulfill UAA General Education Requirements. No more than 3 credits of ECON A201 and ECON A202 may be used in fulfilling UAA General Education requirements 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:
   - 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:
   - Natural Sciences GER courses
   - Quantitative Skills GER courses
   - Any upper division STAT, MATH, BIOL, CHEM, GEOL, and/or PHYS courses.

   **With faculty advisor approval, choose 9 credits of Natural Sciences or Quantitative Skills courses (in addition to the 10 credit minimum Natural Sciences (7) and Quantitative Skills (3) General Education Requirements) for which prerequisites have been met.

4. Complete the following required BST core courses: (15 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TECH A302</td>
<td>Operational Safety</td>
<td>3</td>
</tr>
<tr>
<td>TECH A305</td>
<td>Technology Management</td>
<td>3</td>
</tr>
<tr>
<td>TECH A433</td>
<td>Project Design, Implementation and Control (3)</td>
<td>3</td>
</tr>
<tr>
<td>Upper-Division Management Course(s) (3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TECH A443</td>
<td>Quality Leadership</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BA A300</td>
<td>Organizational Theory and Behavior (3)</td>
<td></td>
</tr>
<tr>
<td>*TECH A453</td>
<td>Capstone Project</td>
<td>3</td>
</tr>
</tbody>
</table>

5. Complete a minimum of 6 credits upper division electives 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
Angela Dirks, Assistant Professor, AHAD@uaa.alaska.edu
Kelly Smith, Instructor, AFKJS@uaa.alaska.edu

TELECOMMUNICATIONS, ELECTRONICS AND COMPUTER TECHNOLOGY
University Center (UC), Room 120, (907) 786-6423
www.uaa.alaska.edu/ctc/computers/tele/index.cfm

The Telecommunications, Electronics and Computer Technology Department (TECT) provides entry-level skills and career education to meet the demand for well-trained technicians in the computer electronics, telecommunications and electronics industries. The TECT Department offers an Occupational Endorsement Certificate in Cisco Certified Network Associate (CCNA) and two Undergraduate Certificates in the specialized areas of Telecommunications and Electronics Systems (TES) and Computer and Networking Technology (CNT). Both certificates require three (3) full-time semesters to complete. An Associate of Applied Science degree in Telecommunications Electronics and Computer Technology can be earned by completing additional required technical and general education courses.

Graduates from the TECT program can be employed as skilled technical support workers in fields including communications, microchip manufacturing, and computer support and repair in private industry as well as municipal, state, and federal agencies.

Both the Anchorage campus and the Matanuska-Susitna campus offer the program and are collaborative sites for the Fairbanks-based, statewide Information Technology Specialist (ITS), which offers a certificate and an associate degree. Students should consult the TECT faculty for assistance with curriculum planning toward certifications such as A+, Net+, CCNA, ICSA Customer Service, Microsoft Certified Professional, and other industry-recognized standards.

OCCUPATIONAL ENDORSEMENT CERTIFICATE:
CISCO-CERTIFIED NETWORK ASSOCIATE (CCNA)

CERTIFICATE DESCRIPTION AND OUTCOMES
At the completion of this 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. Competence in entry-level tasks of planning, design, installation, operation and troubleshooting Ethernet and TCP/IP networks.

ADMISSION REQUIREMENTS
See Occupational Endorsement Certificate admissions in Chapter 7 of this catalog.

ADVISING
Students should consult the TECT faculty for assistance with curriculum planning toward certifications.

GENERAL UNIVERSITY REQUIREMENTS
See general university requirements for Occupational Endorsement Certificates at the beginning of this chapter.

MAJOR REQUIREMENTS
1. Complete the following courses:
   - CNT A160 PC Operating Systems 3
   - CNT A162 PC Building, Upgrading & Architecture 3
   - CNT A165 Customer Service Fundamentals 1
   - CNT A170 Cisco Academy Network Fundamentals 4
   - CNT A180 PC Interfacing, Peripherals, Storage & A+ 4
   - CNT A183 Local Area Networks & Net+ 3
   - CNT A261 Cisco Academy Router Fundamentals 4
   - CNT A270 Cisco Academy Intermediate Routing and Switching 4
   - CNT A271 Cisco Academy WAN Management 3

2. Complete 6 credits from the following courses:
   - CNT A262 Computer Technical Support (2)
   - CNT A264 Introduction to Information Security (3)
   - CNT A272 Cisco Wireless Networking (3)
   - CNT A290 Selected Topics in Information Technology (1-3)

3. Complete 5 credits from the following courses:
   - CNT A240 Windows System Essentials (2)
   - CNT A241 Administering And Supporting Windows Workstations and Servers (3)
   - CNT A280 Server Operating Systems (3)

UNDERGRADUATE CERTIFICATE, COMPUTER AND NETWORKING TECHNOLOGY
CERTIFICATE DESCRIPTION AND OUTCOMES
This 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. Good customer service skills.
8. Proficiency in Cisco switch and VLAN installation and configuration.

ADMISSION REQUIREMENTS
See Undergraduate Certificate Admissions in Chapter 7 of this catalog.

ADVISING
Students should consult the TECT faculty for assistance with curriculum planning toward certifications.

GENERAL UNIVERSITY REQUIREMENTS
See general university requirements for Undergraduate Certificates at the beginning of this chapter.

MAJOR REQUIREMENTS
1. Complete the following requirements (29 credits):
   - CNT A170 Cisco Academy Network Fundamentals 4
   - CNT A261 Cisco Academy Router Fundamentals 4
   - CNT A270 Cisco Academy Intermediate Routing and Switching 4
   - CNT A271 Cisco Academy WAN Management 3

2. Complete 6 credits from the following courses:
   - CNT A262 Computer Technical Support (2)
   - CNT A264 Introduction to Information Security (3)
   - CNT A272 Cisco Wireless Networking (3)
   - CNT A290 Selected Topics in Information Technology (1-3)

3. Complete 5 credits from the following courses:
   - CNT A240 Windows System Essentials (2)
   - CNT A241 Administering And Supporting Windows Workstations and Servers (3)
   - CNT A280 Server Operating Systems (3)
1. Complete the following requirements (36 credits):
   - ET A262 Advanced Communications 3
   - CNT A163 Introduction to Networking 1
   - CNT A164 Network Cabling 1
   - CNT A165 Customer Service Fundamentals 1

2. Complete 3 credits from the following courses:
   - CNT A163 Network Cabling 1
   - CNT A164 Network Cabling 1
   - CNT A165 Customer Service Fundamentals 1

3. Complete 3 credits from the following:
   - CNT A163 Network Cabling 1
   - CNT A164 Network Cabling 1
   - CNT A165 Customer Service Fundamentals 1

   Written communications GER (3)
   (Note: English A111 is required for the AAS degree)

4. A total of 46 credits is required for the certificate.

ASSOCIATE OF APPLIED SCIENCE,
TELECOMMUNICATIONS, ELECTRONICS AND
COMPUTER TECHNOLOGY

DEGREE DESCRIPTION AND OUTCOMES
The Computer and Networking Technology track of this associate degree program prepares students to demonstrate:
1. Proficiency in electronic theory, equipment maintenance and troubleshooting.
2. Proficiency in electronic communications and telecommunications.
3. Competence in installation configuration and troubleshooting computer system security.
4. Proficiency in Cisco switch and VLAN installation and configuration.
5. Proficiency in Cisco router installation and configuration in multi-protocol internetworks.
7. Competence in installation configuration and troubleshooting Microsoft operating systems.
8. Competence in configuration and maintaining network and computer system security.
9. Good customer service skills.

ADMISSION REQUIREMENTS
See Certificates and Associate Degree Programs Admission Requirements at the beginning of this chapter.

GENERAL UNIVERSITY REQUIREMENTS
See general university requirements for Undergraduate Certificates at the beginning of this chapter.

MAJOR REQUIREMENTS
1. Complete the following requirements (36 credits):
   - ET A262 Advanced Communications 3
   - CNT A163 Introduction to Networking 1
   - CNT A164 Network Cabling 1
   - CNT A165 Customer Service Fundamentals 1

   Written communications GER (3)
   (Note: English A111 is required for the AAS degree)

2. Complete 3 credits from the following courses:
   - ET A262 Advanced Communications 3
   - CNT A163 Introduction to Networking 1
   - CNT A164 Network Cabling 1
   - CNT A165 Customer Service Fundamentals 1

3. Complete 3 credits from the following:
   - ET A262 Advanced Communications 3
   - CNT A163 Introduction to Networking 1
   - CNT A164 Network Cabling 1
   - CNT A165 Customer Service Fundamentals 1

   Written communications GER (3)
   (Note: English A111 is required for the AAS degree)

4. A total of 42 credits is required for the certificate.

ASSOCIATE OF APPLIED SCIENCE,
TELECOMMUNICATIONS, ELECTRONICS AND
COMPUTER TECHNOLOGY

DEGREE DESCRIPTION AND OUTCOMES
The Computer and Networking Technology track of this associate degree program prepares students to demonstrate:
1. Proficiency in electronic theory, equipment maintenance and troubleshooting.
2. Proficiency in electronic communications and telecommunications.
3. Competence in installation configuration and troubleshooting computer system security.
4. Proficiency in Cisco switch and VLAN installation and configuration.
5. Proficiency in Cisco router installation and configuration in multi-protocol internetworks.
7. Competence in installation configuration and troubleshooting Microsoft operating systems.
8. Competence in configuration and maintaining network and computer system security.
9. Good customer service skills.

ADMISSION REQUIREMENTS
See Certificates and Associate Degree Programs Admission Requirements at the beginning of this chapter.

GENERAL UNIVERSITY REQUIREMENTS
See general university requirements for Undergraduate Certificates at the beginning of this chapter.
GENERAL COURSE REQUIREMENTS
Complete the General Course Requirements for AAS degrees listed at the beginning of this chapter.

MAJOR REQUIREMENTS
Complete one of the following tracks:

COMPUTER AND NETWORKING TRACK (52 credits)
1. Complete the following requirements (29 credits):
   - CNT A160 PC Operating System 3
   - CNT A162 PC Building, Upgrading & Architecture 3
   - CNT A165 Customer Service Fundamentals 1
   - CNT A170 Cisco Academy Network Fundamentals 4
   - CNT A180 PC Interfacing, Peripherals, Storage & A+ 4
   - CNT A183 Local Area Networks & Net+ 3
   - CNT A261 Cisco Academy Router Fundamentals 4
   - CNT A270 Cisco Academy Intermediate Routing and Switching 4
   - CNT A271 Cisco Academy WAN Management 3
2. Complete 9 credits from the following courses: 9
   - CNT A262 Computer Technical Support (2)
   - CNT A264 Introduction to Information Security (3)
   - CNT A272 Cisco Wireless Networking (3)
   - CNT A276 Independent Project (3)
   - CNT A282 Work Study (3)
   - CNT A290 Selected Topics in Information Technology (1-3)
3. Complete 8 credits from the following courses: 8
   - CNT A240 Windows System Essentials (2)
   - CNT A241 Administarting and Supporting Windows Workstations and Servers (3)
   - CNT A242 Windows Network Infrastructure Administration (3)
   - CNT A280 Server Operating Systems (3)
4. Complete 3 credits from the following courses: 3
   - CIS A185 Introduction to Programming Business Applications (3)
   - CS A101 Introduction to Computer Science (3)
   - CS A109 Computer Programming (Languages Vary) (3)
   - CS A110 Java Programming (3)
   - CS A111 Visual Basic.NET Programming(3)
5. Complete 3 credits from the following courses: 3
   - CIOS A113 Operating Systems: MS Windows (1)
   - CIOS A117 Logic Concepts for Computer Technology (1)
   - CIOS A120A Bookkeeping Software Application I: Quickbooks (1)
   - CIOS A130A Word Processing I: MS Word (1)
   - CIOS A130B Word Processing I: WordPerfect (1)
   - CIOS A135A Spreadsheets I: MS Excel (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 (1-3)

TELECOMMUNICATIONS AND ELECTRONICS
SYSTEMS TRACK (45 CREDITS)
1. Complete the following requirements (39 Credits):
   - ET A160 D.C. Electrical Systems 3
   - ET A161 D.C. Lab 1
   - ET A162 A.C. Electrical Systems 3
   - ET A163 A.C. Lab 1
   - ET A164 Introduction to Semiconductors 1
   - ET A165 Introduction to Digital Devices 1
   - ET A166 Technical Calculations and Applications 2
   - ET A180 Semiconductors Devices 4
   - ET A181 Advanced Digital Devices 2
   - ET A182 Applied ICs 2
   - ET A183 Data Communications 1
   - ET A184 Telecommunications 2
   - ET A185 Transmitters and Receivers 3
   - ET A260 Instrumentation & Control Processes 3
   - ET A261 Electronic System Troubleshooting 2
   - ET A262 Advanced Communications 3
   - ET A280 Programmable Logic Controllers 3
   - CNT A163 Introduction to Networking 1
   - CNT A164 Network Cabling 1
   - CNT A165 Customer Service Fundamentals 1

2. Complete 3 credits from the following: 3
   - ET A276 Individual Technical Project (3)
   - ET A282 Industry Workplace Experience (3)
3. Complete 3 credits from the following: 3
   - CIOS A113 Operating Systems: MS Windows (1)
   - CIOS A117 Logic Concepts for Computer Technology (1)
   - CIOS A120A Bookkeeping Software Application I: Quickbooks (1)
   - CIOS A130A Word Processing I: MS Word (1)
   - CIOS A130B Word Processing I: WordPerfect (1)
   - CIOS A135A Spreadsheets I: MS Excel (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)

4. A total of 60 or 67 credits is required for the degree.

FACULTY
Ted Myers, Assistant Professor, AFTAM@uaa.alaska.edu
Ray Noble, Associate Professor, AFRON@uaa.alaska.edu
Brian Williams, Assistant Professor, AFBKWI@uaa.alaska.edu

WELDING & NONDESTRUCTIVE TESTING TECHNOLOGY
Anchorage
Gordon Hartlieb Hall (GHH), Room 111, (907) 786-6475
www.uaa.alaska.edu/ctc/programs/cdt/welding

Kenai
www.kpc.alaska.edu/academics/cert_welding.html

The Welding and Nondestructive Testing Technology program prepares students for employment in welding and/or nondestructive examination as entry-level technicians. A variety of career opportunities are available to welding technicians and nondestructive examination technicians. Both of these fields are utilized in construction, manufacturing, and transportation industries throughout the world.

The Welding and Nondestructive Testing (NDT) program offers an Associate of Applied Science (AAS) degree in Welding and Nondestructive Testing Technology. Welding and NDT are combined in the AAS degree. Kenai Peninsula College also offers an Undergraduate Certificate in Welding Technology as described in this catalog section.

Industrial welding technician students develop manual skills in four main welding processes and three thermal cutting processes, as well as gain a wide range of technical knowledge in welding application, procedure/welder qualification, reading plans and specifications, and applied metallurgy. Welder qualification tests are administered as prescribed in AWS D1.1, API Standard 1104, or ASME IX welding codes.
Nondestructive Testing technician students examine metallic components or weldments to locate and evaluate discontinuities by learning to apply liquid penetrant (PT), magnetic particle (MT), eddy current (ET), radiographic (RT) and ultrasonic (UT) test methods. Student qualification in each NDT method is based on general, specific and practical examinations administered as prescribed in the American Society for Nondestructive Testing (ASNT) Recommended Practice No. SNT-TC-1A.

UNDERGRADUATE CERTIFICATES

ADMISSION REQUIREMENTS
See the Undergraduate Certificate admissions in Chapter 7 of this catalog.

GENERAL UNIVERSITY REQUIREMENTS
Complete the General University Requirements for Undergraduate Certificates at the beginning of this chapter.

ADVISING
Students should consult the Anchorage or Kenai WELD faculty for assistance with course planning towards certifications.

ACADEMIC PROGRESS REQUIREMENTS
Students must complete certificate course requirements with a minimum cumulative GPA of 2.0.

UNDERGRADUATE CERTIFICATE, INDUSTRIAL WELDING TECHNOLOGY

CERTIFICATE DESCRIPTION AND OUTCOMES
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.

At the completion of the program, students are able to demonstrate:
1. Entry-level technical skills in welding.
2. Hazard assessment and best safety practices to avoid exposing themselves or others to risk of injury and avoiding damage to equipment.

CERTIFICATE REQUIREMENTS

1. Complete the following required courses (24 credits):
   - 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 Arc Welding (FCAW) (4)
   - WELD A174 Gas Tungsten Arc Welding (GTAW) (4)
   - WELD A287 Welding Metallurgy Applications (5)
2. Complete one of the following courses (2 - 4 credits): 2-4
   - WELD A117 Basic Pipefitting (4)
   - WELD A118 Welding Fabrication and Manufacturing (4)
   - WELD A190 Selected Topics in Welding Technology (2-4)
   - TECH A295 Technical Internship (advisor approved) (2-4)
3. Complete one of the following courses (4 credits):
   - WELD A114 Welding of High Strength Steels (4)
   - WELD A121 Pipe Welding Vertical-Down (SMAW) (4)
   - WELD A122 Pipe Welding Vertical-Up (SMAW) (4)
4. Pass three (3) separate all-position welder qualification tests.
5. A total of 30-32 credits is required for the Undergraduate Certificate in Industrial Welding Technology.

UNDERGRADUATE CERTIFICATE, NONDESTRUCTIVE TESTING TECHNOLOGY

CERTIFICATE DESCRIPTION AND OUTCOMES
Nondestructive Testing Technology 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.

At the completion of the program, students are able to demonstrate:
1. Entry-level technical skills in nondestructive examination.
2. Technical knowledge of the interrelationship between welding and inspection processes.
3. Hazard assessment and best safety practices to avoid exposing themselves or others to risk of injury and avoiding damage to equipment.

CERTIFICATE REQUIREMENTS

1. Complete the following welding courses: 4
   - WELD A112 Shielded Metal Arc Welding (SMAW) (4)
   - WELD A161 Gas Metal Arc Welding (GMAW) (4)
   - WELD A174 Gas Tungsten Arc Welding (GTAW) (4)
2. Complete the following required courses:
   - ENGL A111 Methods of Written Communication (3)
   - MATH A105 Intermediate Algebra (3)
   - WELD A261 Ultrasonic Testing (4)
   - WELD A262 General Nondestructive Testing (3)
   - WELD A263 Radiographic Testing Safety (2)
   - WELD A264 Radiographic Testing (3)
   - WELD A281 Welding Inspection and Code Review (4)
   - WELD A287 Welding Metallurgy Applications (5)
3. Complete one of the following courses: 1-4
   - TECH A295 Technical Internship (advisor approved) (1-4)
4. Pass two (2) separate NDT method qualification tests.
5. A total of 32 - 35 credits is required for the Undergraduate Certificate in Nondestructive Testing Technology.

GRADUATION REQUIREMENTS
Students must pass three (3) separate all-position welder qualification tests for a certificate in Welding Technology. Students must pass two (2) NDT method qualification tests for a certificate in Nondestructive Testing Technology. Qualification tests are administered near the end of each applicable course.

UNDERGRADUATE CERTIFICATE, WELDING TECHNOLOGY

This certificate is offered only at Kenai Peninsula College.

CERTIFICATE DESCRIPTION AND OUTCOMES
The one year certificate in welding technology provides a student with specific training for structural and pipe welding certification. Students gain comprehensive training in the latest welding technology, blueprint reading, layout, and fabrication. Graduates of this program will be prepared for employment as structural or pipe welders, and will have a solid welding background for many mechanical trades.

NOTE: Experienced welders have the option of bypassing the first semester courses by successfully completing written and practical examinations on first semester work.
GENERAL UNIVERSITY REQUIREMENTS
Complete the General University and the General Course Requirements for certificates located at the beginning of this chapter.

CERTIFICATE REQUIREMENTS
1. Complete the following requirements:
   - MATH A105 Intermediate Algebra 3
   - PRPE A108 Introduction to College Writing (3) 3
   or
   - ENGL A111 Methods of Written Communication (3)
   or
   - COMM A111 Fundamentals of Oral Communication (3)
   - WELD A102 Gas Welding 2
   - WELD A103 Arc Welding 4
   - WELD A104 Arc Welding: Low-Hydrogen Electrodes 4
   - WELD A105 Pipe Welding 4
   - WELD A106 Pipe Certification 4
   - PETR A155 Blueprint Reading 3
2. Complete one of the following (4 credits):
   - WELD A108 Wire Welding (4)
   - WELD A109 TIG Welding (4)
3. All students must pass structural and pipe certification tests before receiving a certificate in Welding Technology.
4. A total of 31 credits is required for the Undergraduate Certificate.

FACULTY
Fritz Miller, Associate Professor Welding Technology ifffwm@uaa.alaska.edu
Drew O'Brien, Assistant Professor Mechanical Technology ifdo@uaa.alaska.edu

ASSOCIATE OF APPLIED SCIENCE, WELDING AND NONDESTRUCTIVE TESTING TECHNOLOGY

DEGREE DESCRIPTION AND OUTCOMES
This associate degree prepares students with the technical and administrative skills required in today’s metal fabrication and inspection environments. Graduates of this program will be able to apply specifications and codes to complete specific job tasks. At the completion of the program, students are able to demonstrate:
1. Entry-level technical skills in welding and nondestructive examination.
2. Technical knowledge of the interrelationship between welding and inspection processes.
3. Hazard assessment and best safety practices to avoid exposing themselves or others to risk of injury and avoiding damage to equipment.
4. Communicate effectively with other employees, customers, and management.

ADMISSION REQUIREMENTS
See the Associate of Applied Science Degree admissions in Chapter 7 of this catalog.

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.

MAJOR REQUIREMENTS
1. Complete the following required courses:
   - ENGL A111 Methods of Written Communication 3
   - ENGL A212 Technical Writing 3
   - MATH A105 Intermediate Algebra 3
   - MATH A105 Intermediate Algebra 3
   - WELD A112 Shielded Metal Arc Welding (SMAW) 4
   - WELD A137 Technical Drawing 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 3
   - 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 A175 Welding Fabrication and Manufacturing (4)
   - WELD A190 Selected Topics in Welding Technology (3)
   - WELD A290 Selected Topics in Nondestructive Testing (3)
3. Pass three (3) separate all-position welder qualification tests.
4. Pass two (2) separate NDT method qualification tests.
5. A total of 61-62 credits is required for the degree.

FACULTY
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Fritz Miller, Kenai, Assistant Professor, IFFWM@uaa.alaska.edu
Eli van Ringelenstein, Anchorage, Instructor, AFEVR@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 creating and working with people often as team members in positions of leadership. Engineers are concerned about people and ways to provide society with improved living standards.

The School of Engineering offers areas of study at the undergraduate level:
- A four-year program leading to a Bachelor of Science in Civil Engineering;
- A four-year program leading to a Bachelor of Science in Engineering;
- 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;
- The first two years of a program in Electrical Engineering; and
- The first two years of a program in Mechanical Engineering.

MINOR DEGREES IN ENGINEERING

The Department of Civil Engineering offers undergraduate Minor degrees in General Engineering, Civil Engineering, Computer Systems Engineering, Electrical Engineering, or Mechanical Engineering.

CIVIL ENGINEERING

deals with environmental control; bridges, buildings and harbor facilities; water resource development and waste disposal; dams, water power, irrigation works and drainage; air, water, highway and railway transportation; construction and management; surveying; city management and developmental planning.

ENGINEERING

The UAA School of Engineering offers a Bachelor of Science in Engineering (BSE) degree with specializations in Computer Systems Engineering, Electrical Engineering, or Mechanical Engineering. Graduates with a BSE degree have a broad range of engineering skills that is often necessary when serving the infrastructure needs of remote rural areas typical of many Alaskan communities. The program emphasizes fundamental engineering principles as a basis for interdisciplinary design, teamwork, and for lifelong learning. Graduates are in a position to take advantage of a wide variety of professional opportunities and are well prepared for an engineering career in a technologically changing world.

GEOMATICS

Geomatics embraces the traditional disciplines of land surveying, mapping, geodesy, photogrammetry, and hydrography, together with the newer disciplines of remote sensing, digital photogrammetry, and spatial or geographic information systems (GIS). Geomaticians help design, map and manage the natural and the man-made resources of the earth. Their skills and efforts are important in project development and environmental protection. They gather, analyze, and manipulate data, map results and help design new developments. The disciplines used in Geomatics are based on advancing technologies and use an integrated approach to the acquisition, analysis, storage, distribution, management, and application of spatially referenced data.

MINOR DEGREES IN ENGINEERING

The School of Engineering offers minor degrees to meet two sets of student needs. The first is a minor degree in General Engineering which is for students that are majoring in a non-engineering baccalaureate degree. The second is an Engineering Specialty minor program which is for students majoring in an engineering baccalaureate degree and, therefore, have completed much of the coursework in the Bachelor of Science in Engineering (BSE) or Civil Engineering (CE) program. Engineering Specialty minor degrees are in civil engineering, computer systems engineering, electrical engineering, or mechanical engineering.

CIVIL ENGINEERING

Engineering Building (ENGR), Room 201, (907) 786-1900 www.engr.uaa.alaska.edu

Civil Engineering is a professional discipline recognized by licensure in each of the 50 States and many other countries. Civil Engineering is a broad branch of engineering dedicated to providing civilization with essential infrastructure and services including bridges, buildings, ports, water resource development, waste disposal, dams, water power, irrigation and drainage works, roads, airports, railways, construction and management services; surveying; and city management and developmental planning.

Civil Engineering students are introduced to principles of mathematics, chemistry, and physics during their first two years of study. The third year of study is largely devoted to courses in applied extensions of the basic sciences to form the foundation for more advanced engineering analysis and design. Students draw upon previous learning in their senior year to focus their studies on sophisticated analyses and creative designs. Throughout the four-year engineering program students take courses in communication, humanities, social sciences, and fine arts to improve their communication skills and to become more aware of their roles and responsibilities in modern society. The UAA Civil Engineering program emphasizes northern region design considerations and provides specialized training appropriate for an engineering career in Alaska and other cold regions of the world.

BACHELOR OF SCIENCE, CIVIL ENGINEERING

The Department of Civil Engineering offers an undergraduate curriculum leading to a Bachelor of Science degree in Civil Engineering. The first two years of the program have application to most other branches of engineering.

ACCREDITATION

The Bachelor of Science degree program in Civil Engineering at UAA is accredited by the Engineering Accreditation Commission of ABET, Inc., which is the foremost accreditor of engineering programs and related fields of study in the US.

PROGRAM OBJECTIVES AND EXPECTED OUTCOMES

The curriculum of the UAA civil engineering program is designed to produce graduates that:

1. Have a basic knowledge of the principles and skills relating to the civil engineering sub-disciplines of water resources, geotechnical, structural, transportation, and environmental engineering;
2. Have an understanding of the principles related to project delivery;
3. Have sufficient technical competence to obtain employment as an entry-level engineer and to be able to progress professionally within the discipline, and are prepared for advanced study;
4. Have a fundamental understanding of the issues related to civil engineering practice in cold regions;
5. Are able to communicate their ideas;
6. Are able to work within a team environment; and
7. Are prepared for and understand the need for continued professional development throughout their careers.

In keeping with the objectives, it is expected that graduates of the UAA Civil Engineering program will have:

1. An ability to apply knowledge of mathematics through differential equations, probability and statistics, calculus-based physics, and general chemistry;
2. An ability to apply knowledge in a minimum of four (4) 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 multi-disciplinary 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, life-long 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. The award will be noted on their permanent University transcript. 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 BS degree in Civil Engineering.
4. Gain approval for and complete a design/research project prior to applying for graduation. An oral presentation of the project results to an appropriate audience will be required. The project proposal and final written report must be approved by the student's academic advisor and the chair of civil engineering.
5. Take and pass the Fundamentals of Engineering Exam in the fall semester of the senior year.
6. Document a minimum of 8 weeks work experience in an engineering or engineering-related position.

ADMISSION REQUIREMENTS
Admission to the civil engineering program is to one of three levels: Pre-Engineering, Engineering Fundamentals, or Civil Engineering Professional. Students admitted to any of the three levels are considered to be degree seeking engineering students. Pre-Engineering students are classified within the university system as "pre-majors". Engineering Fundamentals and Civil Engineering Professional students are classified within the university system as "full majors".

Pre-Engineering
Applicants for admission who have completed only the general Baccalaureate Degree Program Admission Requirements in Chapter 7, Academic Standards and Regulations, are admitted as pre-majors to the Civil Engineering program at the Pre-Engineering level.

Engineering Fundamentals
Applicants for admission who, in addition to the general Baccalaureate Degree Program Admission Requirements, have completed the following list of high school courses (or their university equivalents) with grades of C or better will be admitted as full majors to the civil engineering program at the Engineering Fundamentals level:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algebra</td>
<td>2 years</td>
</tr>
<tr>
<td>Chemistry</td>
<td>1 year</td>
</tr>
<tr>
<td>English</td>
<td>3 years</td>
</tr>
</tbody>
</table>

Civil Engineering Professional
Transfer, change of major, and returning students who are applying for admission to the Civil Engineering program and have completed all of the Engineering Fundamentals Requirements listed under the Civil Engineering Graduation Requirements section with grades of C or better will be admitted to the Civil Engineering program at the Civil Engineering Professional level.

ADVANCEMENT
Pre-Engineering to Engineering Fundamentals
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 Engineering Fundamentals level. Once the Pre-Engineering course work outlined in the student's course plan is completed, students must meet with their advisor to apply for advancement to Engineering Fundamentals status.

Engineering Fundamentals to Civil Engineering Professional
Engineering Fundamentals students who have completed, or are within a semester of completing, the Engineering Fundamentals' requirements must meet with their faculty advisor to apply for advancement to the Civil Engineering Professional status. Applicants who have successfully completed all the Engineering Fundamental requirements will be advanced to the Civil Engineering Professional status. Applicants who are within 9 credits of completing the Engineering Fundamentals requirements will be admitted conditionally to the Civil Engineering Professional status. Students who fail to meet the conditions for advancement will be removed from the civil engineering program.

All applications for advancement within the Civil Engineering program must be submitted to the Civil Engineering department at least thirty days prior to beginning any civil engineering (CE) or engineering science (ES) courses listed as a major requirement for the level for which they are applying.

ADVISING
All undergraduate students are strongly encouraged to meet with their faculty advisor each semester for the purpose of reviewing their academic progress and planning future courses. All civil engineering students are required to meet with their faculty advisors to be advanced within the program and to apply for graduation. It is particularly important for students to meet with their faculty advisor whenever academic difficulties arise.

ACADEMIC PROGRESS
Any given CE or ES course may only be taken when all prerequisites for the course are met with a grade of C or higher.

A student who is unable to earn a grade of C or better in a CE or ES course during his/her initial enrollment may attempt to earn a satisfactory grade one additional time, on a space-available basis. Failure to earn a grade of C or better on the second attempt results in removal from the civil engineering program.

A student who has a semester GPA in engineering courses below 2.0 will be placed on academic warning by the School of Engineering. A student on academic warning that receives a semester GPA in engineering courses of at least 2.0 will be removed from academic warning status by the School. Otherwise, he or she will be removed from the civil engineering program and will not be permitted to attend CE and ES courses.

GRADUATION REQUIREMENTS
In order to receive the Bachelor of Science degree in Civil Engineering, students must complete the following graduation requirements:
A. General University Requirements
Complete the General University Requirements for All Baccalaureate Degrees listed at the beginning of this chapter.

B. General Education Requirements
Complete the General Education Requirements for Baccalaureate Degrees (GER) listed at the beginning of this chapter with the additional requirement that one of the following criteria are met within the courses taken to meet the Social Sciences, Humanities, and Fine Arts GER requirements:

1. Six credits are from courses that are at the 200-level or above.
2. Three credits are from courses that are at the 200-level or above and 6 credits are from a sequence of courses at the 100-level. For example, HIST 101 and HIST 102 is considered to be a 6-credit course sequence.
3. Twelve credits are from two course sequences of 6 credits each at the 100-level.

C. Engineering Fundamentals Requirements
Complete these required courses with a C or higher (61 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM A105 General Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM A105L General Chemistry I Lab</td>
<td>1</td>
</tr>
<tr>
<td>CHEM A106 General Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM A106L General Chemistry II Lab</td>
<td>1</td>
</tr>
<tr>
<td>COMM A111, A235, A237, or A241</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A111 Methods of Written Communications</td>
<td>3</td>
</tr>
<tr>
<td>ENGL A212 Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>ES A103 Engineering Graphics</td>
<td>3</td>
</tr>
<tr>
<td>ES A111 Engineering Science</td>
<td>3</td>
</tr>
<tr>
<td>ES A201 Computer Techniques</td>
<td>3</td>
</tr>
<tr>
<td>ES A209 Engineering Statics</td>
<td>3</td>
</tr>
<tr>
<td>ES A210 Engineering Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>ES A302 Engineering Data Analysis</td>
<td>3</td>
</tr>
<tr>
<td>GEO A155 Fundamentals of Surveying</td>
<td>3</td>
</tr>
<tr>
<td>MATH A200 Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH A201 Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH A202 Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH A302 Ordinary Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>PHYS A211 General Physics I</td>
<td>3</td>
</tr>
<tr>
<td>PHYS A211L General Physics I Lab</td>
<td>1</td>
</tr>
<tr>
<td>PHYS A212 General Physics II</td>
<td>3</td>
</tr>
<tr>
<td>PHYS A212L General Physics II Lab</td>
<td>1</td>
</tr>
</tbody>
</table>

D. Civil Engineering Professional Requirements

1. Satisfactorily complete these required courses with a GPA of 2.0. Courses with an asterisk (*) are prerequisite courses and must be completed with a grade of C or better (47 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE A334* Properties of Materials</td>
<td>3</td>
</tr>
<tr>
<td>CE A344 Water Resources Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CE A402 Transportation Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CE A403 Arctic Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CE A422 Foundation Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CE A431* Structural Analysis</td>
<td>4</td>
</tr>
<tr>
<td>CE A452 Steel Design</td>
<td>3</td>
</tr>
<tr>
<td>CE A433 Concrete Design</td>
<td>3</td>
</tr>
<tr>
<td>CE A435* Soil Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>CE A438 Design of Engineering Systems</td>
<td>3</td>
</tr>
<tr>
<td>CE A441 Sanitary Engineering</td>
<td>3</td>
</tr>
<tr>
<td>ES A309 Elements of Electrical Engineering</td>
<td>3</td>
</tr>
<tr>
<td>ES A351* Mechanics of Materials</td>
<td>3</td>
</tr>
<tr>
<td>ES A341* Fluid Mechanics</td>
<td>4</td>
</tr>
<tr>
<td>ES A346 Basic Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>ESM A450 Economic Analysis and Operations</td>
<td>3</td>
</tr>
</tbody>
</table>

2. A Natural Science elective (minimum 3 credits) must be taken in addition to the 7-credit Natural Sciences General Education Requirement and may be selected from the following list:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL A115/L Fundamentals of Biology I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL A271/L Principles of Ecology</td>
<td>4</td>
</tr>
<tr>
<td>CHEM A450 Environmental Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>GEOL A111 Physical Geology</td>
<td>4</td>
</tr>
<tr>
<td>GEOL/ BIOL A178 Fundamentals of Oceanography</td>
<td>3</td>
</tr>
<tr>
<td>PHYS A303 Modern Physics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS A314 Electromagnetics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS A320 Simulation of Physical Systems</td>
<td>3</td>
</tr>
<tr>
<td>PHYS A456 Nonlinear Dynamics and Chaos</td>
<td>3</td>
</tr>
</tbody>
</table>

**Note: GEOL A111 is the recommended course.**

3. Six credits of technical elective courses are required that may be chosen from the following list of courses. These electives are intended to improve students’ knowledge and skills relating to site characterization, problem identification, criteria development, and project design in the civil engineering sub-disciplines of water resources, geotechnical, structural, transportation, and environmental engineering. Graduate courses may not be applied to both a baccalaureate and masters degree.

Water Resources Engineering

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE A662 Surface Water Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>CE A663 Ground Water Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>CE A674 Waves, Tides, and Ocean Process</td>
<td>3</td>
</tr>
<tr>
<td>CE A677 Coastal Measurements and Analysis</td>
<td>3</td>
</tr>
<tr>
<td>CE A682 Ice Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CE A683 Arctic Hydrology &amp; Hydraulic</td>
<td>3</td>
</tr>
<tr>
<td>CE A684 Arctic Utility Distribution</td>
<td>3</td>
</tr>
</tbody>
</table>

Geotechnical Engineering

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE A676 Coastal Processes</td>
<td>3</td>
</tr>
<tr>
<td>CE A681 Frozen Ground Engineering</td>
<td>3</td>
</tr>
</tbody>
</table>

Structural Engineering

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE A432 Steel Design</td>
<td>3</td>
</tr>
<tr>
<td>CE A433 Rein forced Concrete Design**</td>
<td>3</td>
</tr>
<tr>
<td>CE A434 Timber Design</td>
<td>3</td>
</tr>
<tr>
<td>CE A631 Structural Finite Elements</td>
<td>3</td>
</tr>
<tr>
<td>CE A633 Structural Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>CE A634 Earthquake Engineering</td>
<td>3</td>
</tr>
</tbody>
</table>

**Note: Either CE A432 or CE A433 may be chosen as a technical elective, if not applied to satisfy the Civil Engineering Professional requirements described above.**

Transportation Engineering

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE A404 Highway Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CE A675 Design of Ports and Harbors</td>
<td>3</td>
</tr>
<tr>
<td>GEO A456 Geomatics and Civil Design</td>
<td>3</td>
</tr>
</tbody>
</table>

Environmental Engineering

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AEST A601 Aquatic Processes Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>AEST A602 Water Quality Management</td>
<td>3</td>
</tr>
<tr>
<td>AEST A603 Solid Waste Management</td>
<td>3</td>
</tr>
<tr>
<td>AEST A608 Air Pollution</td>
<td>3</td>
</tr>
<tr>
<td>AEST A613 Remediation</td>
<td>3</td>
</tr>
<tr>
<td>CE A442 Environmental System Design</td>
<td>3</td>
</tr>
<tr>
<td>CE A600 Fundamentals of Environmental Science and Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CE A605 Chemical and Physical Water and Wastewater Treatment Processes</td>
<td>3</td>
</tr>
<tr>
<td>CE A606 Biological Treatment Processes</td>
<td>3</td>
</tr>
</tbody>
</table>

4. A total of 132 credits is required for the degree, of which 42 credits must be upper division (300-, 400-, or 600-level).

5. All Civil Engineering students are strongly encouraged to take the Fundamentals of Engineering Examination in their senior year as an initial step toward professional registration. Civil Engineering students are also encouraged to consider minors in Mathematics or Physics and graduation with departmental honors.
Faculty
He Liu, Associate Professor, AFHL@uaa.alaska.edu
Nyireg McDonald, Assistant Professor, AFNVM@uaa.alaska.edu
John Olofsson, Professor, AFJAO@uaa.alaska.edu
T. Bart Quintus, Professor, AFQB@uaa.alaska.edu
Orson Smith, C.E., Professor/Chair, AFOPS@uaa.alaska.edu
Zhaohuai (Ioey) Yang, Assistant Professor, AFZY@uaa.alaska.edu
Hanmele Zubeck, Professor, AFHKZ@uaa.alaska.edu

Electrical Engineering
Engineering Building (ENGR), Room 201, (907) 786-1900
www.engr.uaa.alaska.edu

Electrical engineering encompasses the areas of computer applications and design, electrical power transmission and distribution, telecommunications, and electronics. The electrical engineer designs and oversees the construction, installation, and maintenance of electrical systems providing light, heat, and power. Engineers design the communications of telephone, radio, and television as well as the transistor and integrated circuits used in these systems. People trained in computer engineering automate businesses, factories, pipelines, and refineries; and design control systems and computers which guide trains, planes, and space vehicles. Even the test devices and tools of investigation—in medicine, in physics, in geology and in other sciences—are today largely electronic.

Because electrical engineering is based on mathematics, chemistry, and physics, students are introduced to the basic principles in these areas during their first two years of study. They are also exposed to a variety of introductory courses in engineering science and to courses in communication, the humanities, social sciences, and/or fine arts.

Two-Year Program Electrical Engineering

The School of Engineering offers a program of studies that allow the completion of the first two years of a 4-year program leading to the Bachelor of Science degree in Electrical Engineering. The program is coordinated with the University of Alaska Fairbanks (UAF) College of Science, Engineering and Mathematics. It allows students to transfer into the Electrical Engineering program at UAF as third year students with no loss of credit.

Admission Requirements

Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations. In addition, students entering the undergraduate engineering program must have completed the following high school courses with grades of C or better:

- Algebra: 2 years
- Chemistry: 1 year
- English: 3 years
- Physics: 1 year
- Trigonometry: 1/2 year

It is recommended that students graduating from high school without satisfactorily completing the courses noted above enroll in the necessary courses to make up deficiencies during the summer session. Only those students admitted to the undergraduate engineering program may take courses offered by the School of Engineering at the 200-level or above. Students not admitted to the program may petition the School of Engineering to be admitted to individual courses.

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.

Academic Progress

All prerequisites for engineering courses must be completed with a grade of C or higher.

A student who is unable to earn a satisfactory grade in an engineering course during their initial enrollment may attempt to earn a satisfactory grade one additional time on a space-available basis.

A student who has a semester GPA in engineering courses below 2.00 will be placed on academic warning by the School of Engineering. If a student on academic warning status receives a semester GPA for engineering courses of at least 2.00, that student will be removed from academic warning status by the School. Otherwise, they will be disqualified from further study in the School of Engineering and will not be permitted to attend engineering courses.

Program Requirements

In order to complete the first two years of a 4-year program leading to the degree of Bachelor of Science in Electrical Engineering at UAF, students must complete the following courses:

- CHEM A105 General Chemistry I 3
- CHEM A105L General Chemistry I Lab 1
- CHEM A106 General Chemistry II 3
- CHEM A106L General Chemistry II Lab 1
- COMM A111 Fund. of Oral Communication (3) 3
- COMM A235 Small Group Communication (3) or
- COMM A237 Interpersonal Communication (3) or
- COMM A241 Public Speaking (3)
- EE A102 Introduction to Electrical Engineering 3
- EE A203 Fund. of Electrical Engineering I 4
- EE A204 Fund. of Electrical Engineering II 4
- ENGL A111 Methods of Written Communication 3
- ENGL A211 Academic Writing About Literature (3) 3
- ENGL A213 Writing in the Social and Natural Sci. (3)
- ES A111 Engineering Science 3
- ES A201 Computer Techniques 3
- ES A209 Engineering Statics 3
- ES A210 Engineering Dynamics 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 Lab 1
- PHYS A212 General Physics II 3
- PHYS A212L General Physics II Lab 1
- Plus 6 credits of General Education Requirement courses in the areas of Humanities, Social Sciences, and/or Fine Arts 6

Note: The required courses do not include ES A103 (Engineering Graphics with AutoCAD). However, this course is considered to be valuable to students and they are encouraged to take the course if their schedules permit.
ENGINEERING

The Bachelor of Science in Engineering (BSE) program is a design oriented curriculum that incorporates topics that span the foundations of engineering disciplines. BSE students select courses for a specialization track that best suits their needs. Thus, the BSE curriculum can custom fit a student’s education with the needs of the community and industry. The three tracks of specialization are Computer Systems Engineering, Electrical Engineering, or Mechanical Engineering.

The Computer Systems Engineering (CSE) emphasis track focuses on applied computer theory and networking. Students take courses such as signals, systems, computer hardware design, assembly programming, and electronic device design.

The Electrical Engineering (EE) emphasis track focuses on applied circuit design and theory. Students take courses in electrical signals and systems, circuit design, and communication systems.

The Mechanical Engineering (ME) emphasis track focuses on heat transfer and machine design. Students take courses in heat transfer, HVAC (Heating, Ventilation, and Air Conditioning), and machine design.

PROGRAM OBJECTIVES AND OUTCOMES

Objectives for BSE graduates include: 1) application of engineering design and analysis principles; 2) incorporation of non-technical constraints and opportunities (e.g., aesthetic, social, ethical, etc.) in their analyses and designs; 3) undertaking of entry level positions in industry; 4) undertaking of advanced studies in a graduate emphasis program; 5) understanding the interdisciplinary nature of engineering works as it relates to energy, materials, and environment; 6) application of technical and lifelong learning skills to effectively address present and future infrastructure needs of society; and 7) abiding by the ethical responsibilities of engineers.

Outcomes for BSE graduates include the ability to: 1) apply knowledge of mathematics through differential equations, probability and statistics, calculus based physics, and general chemistry; 2) design and conduct experiments; 3) analyze and interpret data; 4) design a system, component, or process to meet desired needs; 5) function on multi-disciplinary teams; 6) identify, formulate, and solve engineering problems; 7) understand professional and ethical responsibility; 8) communicate effectively; 9) understand the impact of engineering solutions in a global and societal context; 10) recognize the need for, and an ability, to engage in life-long learning; 11) acknowledge contemporary issues in professional practice; and 12) apply the techniques, skills, and modern engineering tools necessary for engineering practice.

ADMISSION REQUIREMENTS

Complete the Baccalaureate Degree Programs Admission Requirements described in Chapter 7. In addition, in order to be approved for Engineering “Major” status, students entering the undergraduate engineering program should have completed the following high school courses with grades of C or better:

- Algebra: 2 years
- English: 3 years
- Chemistry: 1 year
- Physics: 1 year
- Trigonometry: 1 1/2 year

If an applicant to the School of Engineering BSE program does not satisfy one or more of the above requirements, the student may be accepted into the BSE program with Engineering “Pre-Major” status. Students with either “Pre-Major” or “Major” status are considered enrolled in the BSE program.

ADVANCEMENT FROM PRE-MAJOR TO MAJOR STATUS

Pre-major BSE students must work with their assigned advisor to develop a course plan to make up the high school course requirements for advancement to major status in the BSE program. Once the course work outlined in the student’s course plan for advancement is completed, the student must meet with their advisor to apply for advancement to major status. Advancement to major status is subject to approval by the advisor and department head.

CURRICULUM

The total required credits for the BSE degree is 132 credits for Computer Systems or Electrical Engineering emphasis, and 131 credits for the Mechanical Engineering emphasis. There are four main categories of required credits.

<table>
<thead>
<tr>
<th>Category</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Curriculum</td>
<td>76</td>
</tr>
<tr>
<td>Engineering Emphasis Track Courses</td>
<td>40 or 41</td>
</tr>
<tr>
<td>Advanced Math Elective</td>
<td>3</td>
</tr>
<tr>
<td>Advanced Engineering/Science Electives</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>131 or 132</strong></td>
</tr>
</tbody>
</table>

During the first two years (freshman and sophomore) of the BSE degree program, the student completes a set of core courses of 76 credits (61 Major credits and 15 General Education Requirements). These courses cover basic sciences, mathematics, writing and communications (speech), and other general education requirement (GER) courses. This provides the student with a broad and solid background in the topics necessary to build a specialization in a field of engineering.

The engineering emphasis track courses are taken mostly in the 3rd and 4th (junior and senior) years. Each track has a series of required courses totaling either 40 credits (Mechanical Engineering track) or 41 credits (Computer Systems and Electrical Engineering). In addition, the student selects an additional 12 credits of advanced engineering or science electives, and a 3 credit advanced mathematics elective.

Engineering design is introduced early in the curriculum and is emphasized throughout the program. In addition to the seminar series, a three course introductory Engineering Practices series is a required part of the curriculum. It is an outstanding customized coordination of courses that specifically teaches engineering students what they most need to know early in the curriculum. These courses help students become more successful in all of their subsequent courses and to be more effective as practicing engineers. Topics include applied mathematics, computer applications, experimental data gathering and analysis, collaborative teamwork, and report preparation and presentation. Also, a senior capstone design course is required.

Since the BSE program allows for the selection of more electives than the traditional BS engineering programs, students can custom design their curriculum to specialize in the areas of engineering most applicable for their plans. So, students can prepare themselves to specifically meet the needs of specific companies, and state and federal agencies.

Professional registration is emphasized throughout the program. Students attend three professional seminar courses that expose them to multiple experts from education and industry speaking about their field of expertise. All students are encouraged to take the Fundamental of Engineering examination before graduation.
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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.

MATHEMATICS MINOR
Upon completion of the BSE degree, the requirements for obtaining a Minor in Mathematics are also satisfied with any of the three emphasis tracks. Students are encouraged to apply for the mathematics minor with the BSE degree when applying for graduation.

ACADEMIC PROGRESS
All prerequisites for engineering courses must be completed with a grade of C or higher. A student that has a cumulative semester GPA in engineering courses below 2.00 will be placed on academic warning by the School of Engineering. If a student on academic warning status receives a semester GPA for engineering courses of at least 2.00, that student will be removed from academic warning status by the School of Engineering. Otherwise, the student will be dropped from the BSE program and must reapply in order to continue in the BSE program. Re-admittance requires a letter from the student requesting re-admittance with an explanation of the reasons why that is subject to approval by the department head.

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. All GER requirements (a minimum of 37 total credits in 8 different categories) are built into the required courses for the BSE degree. There are 15 GER credits in three different categories that the student may select.

- Fine Arts 3
- Humanities 6
- Social Sciences 6

C. MAJOR REQUIREMENTS

1. Complete the following core courses (61 Credits):
   - CHEM A105 General Chemistry I 3
   - CHEM A105L General Chemistry I Lab 1
   - COMM A111 Fundamentals of Oral Communications 3
   - ENGL A111 Methods of Written Communication 3
   - ENGR A212 Technical Writing 3
   - ENGR A151 Engineering Practices I 3
   - ENGR A161 Engineering Practices II 3
   - ENGR A192 Engineering Seminar I 1
   - ENGR A251 Engineering Practices III 3
   - ENGR A292 Engineering Seminar II 1
   - ENGR A392 Engineering Seminar III 1
   - ENGR A438 Engineering Systems Design 3
   - ES A208 Engineering Mechanics 4
   - ES A302 Engineering Data Analysis 3
   - ESM A450 Economic Analysis & 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 Lab 1
   - PHYS A212 General Physics II 3
   - PHYS A212L General Physics II Lab 1

2. Choose one of the following specializations:
   - Computer Systems Engineering (41 credits)
     Complete the following required courses:
     - CS A201 Programming Concepts I 3
     - CS A202 Programming Concepts II 3
     - CS A221 Computer Organization & Assembly Programming 3
     - CS A320 Operating Systems 3
     - CS A330 Algorithms and Data Structures 3
     - CSE A445 Computer Design & Interfacing 4
     - EE A203 Fundamentals of Electrical Engineering I 4
     - EE A204 Fundamentals of Electrical Engineering II 4
     - CS/EE A241 Computer Hardware Concepts 4
     - EE A314 Electromagnetics 3
     - EE A314L Electromagnetics Laboratory I 1
     - EE A351 Signals & Systems 3
     - EE A465 Telecommunications 3
   - Electrical Engineering (41 credits)
     Complete the following required courses:
     - CS A201 Programming Concepts I 3
     - CS A202 Programming Concepts II 3
     - CS A221 Computer Organization & Assembly Programming 3
     - EE A203 Fundamentals of Electrical Engineering I 4
     - EE A204 Fundamentals of Electrical Engineering II 4
     - CS/EE A241 Computer Hardware Concepts 4
     - EE/PHYS A314 Electromagnetics 3
     - EE/PHYS A314L Electromagnetics Laboratory I 1
     - EE/PHYS A324 Electromagnetics II 3
     - EE/PHYS A324L Electromagnetics Laboratory II 1
     - EE A351 Signals & Systems 3
     - EE A353 Circuit Theory 3
     - EE A441 Integrated Circuit Design 3
     - EE A465 Telecommunications 3
   - Mechanical Engineering (40 credits)
     Complete the following required courses:
     - CHEM A106 General Chemistry II 3
     - CHEM A106L General Chemistry II Laboratory 1
     - ES A309 Elements of Electrical Engineering 3
     - ES A331 Mechanics of Materials 3
     - ES A341 Fluid Mechanics 4
     - ES A346 Basic Thermodynamics 3
     - ME A302 Mechanical Design I 4
     - EE/ME A308 Instrumentation and Measurement 3
     - ME A313 Mechanical Engineering Thermodynamics 3
     - ME A334 Elements of Material Science 3
     - ME A403 Mechanical Design II 3
     - ME A414 Thermal System Design 3
     - ME A441 Heat & Mass Transfer 3

3. Advanced Electives
   BSE students are required to take 12 credits of advanced engineering/science electives from an approved list of electives for the particular emphasis area. Also, a 3 credit advanced mathematics elective is required that is selected from a single list common for all emphasis areas. Many elective courses require prerequisite courses that are also elective courses. Thus, in selecting elective courses students are strongly advised to work with their advisor to develop a cohesive set of elective courses. Choice of engineering electives is subject to approval by the student’s advisor and the department head.

Advanced Mathematics Electives (3 credits)
BSE students are required to take one course from the following list of advanced mathematical elective courses:
- MATH A310 Numerical Methods (3)
- MATH A314 Linear Algebra (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 A410  Introduction to Complex Analysis (3)
MATH A422  Partial Differential Equations (3)

**Advanced Engineering & Science Electives (12 credits)**
BSE students are required to take 12 credits from one of the following lists of approved advanced engineering and science elective courses.

A.  **COMPUTER SYSTEMS ENGINEERING EMPHASIS ELECTIVES**

   CS A304  Object-Oriented Analysis & Modeling (3)
   CS A331  Programming Language Concepts (3)
   CS A342  Networks (3)
   CS A351  Automata, Algorithms and Complexity (3)
   CS A360  Database Systems (3)
   CS A385  Computer Graphics and Multimedia (3)
   CS A401  Software Engineering (3)
   CS A405  Artificial Intelligence (3)
   CS A413  Computer and Data Security (3)
   CSE A451  Digital Signal Processing (3)
   CSE A465  Network Security (3)
   EE/ME A308  Instrumentation & Measurement (3)
   EE/PHYS A324  Electromagnetics II (3)
   EE/PHYS A324L  Electromagnetics Lab II (1)
   EE A353  Circuit Theory I (3)
   EE A407  Power Distribution and Control (3)
   EE A441  Integrated Circuit Design (3)
   EE/ME A471  Automatic Control (3)
   ES A411  Northern Design (3)
   MATH A422  Partial Differential Equations (3)
   PHYS A303  Modern Physics (3)
   PHYS A456  Non-Linear Dynamics and Chaos (3)

B.  **ELECTRICAL ENGINEERING EMPHASIS ELECTIVES**

   CS A342  Networks (3)
   CS A401  Software Engineering (3)
   CS A413  Computer and Data Security (3)
   CSE A445  Computer Design & Interfacing (4)
   CSE A451  Digital Signal Processing (3)
   CSE A465  Network Security (3)
   EE/ME A308  Instrumentation & Measurement (3)
   EE A407  Power Distribution and Control (3)
   EE/ME A471  Automatic Control (3)
   ES A411  Northern Design (3)
   PHYS A303  Modern Physics (3)

   **Only computer simulations, no hardware lab except for field trips.**

C.  **MECHANICAL ENGINEERING EMPHASIS ELECTIVES**

   CE A442  Environmental Systems Design (3)
   CE A603  Arctic Engineering (3)
   EQE A600  Fundamentals of Environmental Science & Engineering (3)
   EQE A604  Environmental Quality Evaluation (3)
   EQE A608  Fundamentals of Air Pollution (3)
   EE/ME A408  Dynamics of Systems (3)
   EE/ME A471  Automatic Control (3)
   ES A411  Northern Design (3)
   ME A664  Corrosion Processes & Engineering (3)
   ME A665  Arctic Heat & Mass Transfer (3)
   ME A687  Arctic Materials Engineering (3)

   **4. A total of 131 (Mechanical) or 132 credits (Computer Systems or Electrical) is required for the degree, of which 42 credits must be upper division.**

**ACCReditATION**

All necessary steps will be taken for successful accreditation by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Teaching (ABET).

---

**FACULTY**

Grant Baker, Professor/Chair, AFGCBB@uaa.alaska.edu
John Berger, Associate Professor, afjrb@uaa.alaska.edu
Joe Mixsell, Associate Professor, afjcm1@uaa.alaska.edu
Jens Munk, Associate Professor, afjm@uaa.alaska.edu

**GEOMATICS**

**Engineering Building (ENGR), Room 209, (907) 786-1972**
www.engr.uaa.alaska.edu

The Department of Geomatics offers two degrees and a certificate: a two-year Associate of Applied Science degree in Geomatics; a four-year Bachelor of Science degree in Geomatics; and a Certificate in Geographic Information Systems (Certificate in GIS). Students seeking the baccalaureate degree may graduate in one of two emphasis areas: Surveying or Geographic Information Systems (GIS). Students seeking continuing education for technical or professional enhancement or a concentrated area of study in Geographic Information Systems should consider the 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 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 Associate of Applied Science degree 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 degree prepares students for a wide variety of professional-level opportunities. Since Alaska poses unique Geomatic challenges, the curriculum emphasizes northern principles and practices, making UAA graduates highly recruited in the Alaska marketplace and eligible for employment worldwide. Students will find employment in private industry, government, and municipal agencies. Geomatics 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, geomaticians work on State and Native land claims, mining claims, fishing leases, petroleum reserves, forest selections, transportation corridors, private developments, government and military projects. In Alaska and elsewhere, geomaticians work in land surveying, land development and design, mapping and tax assessment.
the defense industry, environmental engineering assessment and management, public safety and welfare, medicine, transportation, agriculture, business, and natural sciences.

Professional predictors indicate that employment opportunities will be strong for the various geomatics specialties in Alaska and the Pacific Rim well into the 21st century. While enrolled in the program, students are eligible for cooperative employment programs with government agencies and with private industry during the summer and for intern programs during the school year.

The Department of Geomatics accommodates a wide variety of student objectives from entry level to professional preparation and encourages the non-traditional 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 (GIS) should enroll in the Bachelor of Science degree program. For the most effective planning, Bachelor degree candidates should declare their intent by the second semester of their Geomatics studies.

**ACCREDITATION**

The Bachelor of Science degree program in Geomatics at UAA is accredited by the Applied Science Committee of the Accreditation Board for Engineering and Technology (ASAC/ABET).

**ADVISING**

All undergraduate students are encouraged to meet with their academic advisor each semester for the purpose of reviewing their academic progress and planning future courses. It is particularly important for students to meet with their advisor whenever academic difficulties arise.

Students are encouraged to consult the faculty in the Department of Geomatics for assistance in designing their course of study to ensure that all prerequisites have been met and that university and major degree requirements are understood and followed.

**PREREQUISITES**

All prerequisites for Geomatics courses must be completed with a grade of C or higher.

**PREPARATION**

The University offers courses to help students without this preparation to meet the skill level required in the Geomatics program. Insufficient preparation will increase the number of semesters required to complete either degree.

Students seeking the Certificate in Geographic Information Systems, the Associate of Applied Science or Bachelor of Science degree in Geomatics should prepare for entrance into the program by completing the following high school courses:

<table>
<thead>
<tr>
<th>Mathematics</th>
<th>Science</th>
<th>English Composition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algebra II</td>
<td>Trigonometry</td>
<td>Skill level as demonstrated by ACT, SAT or approved placement test to qualify for enrollment in ENGL A111</td>
</tr>
<tr>
<td>Trigonometry</td>
<td>Physics</td>
<td></td>
</tr>
</tbody>
</table>

**UNDERGRADUATE CERTIFICATE, GEOGRAPHIC INFORMATION SYSTEMS**

**ADMISSION REQUIREMENTS**

Satisfy the Admission to Certificate and Associate Degree Programs Requirements in Chapter 7, Academic Standards and Regulations.

**COURSE REQUIREMENTS**

Certain courses require prerequisites or faculty permission. Contact (907) 786-1972 for further information.

**MAJOR REQUIREMENTS**

In order to receive a 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:
   - 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 Data (3)

2. Complete 9 credits from the following elective courses:
   - GEO A490 Selected Advanced Topics in Geomatics (3)
   - GIS A295 Internship in Geographic Information Systems I (3)
   - GIS A405 Internship in Geographic Information Systems II (3)
   - GIS A369 Land Information Systems (3)
   - GIS A370 GIS and Remote Sensing for Natural Resources (3)
   - GIS A375 GIS and Public Health (3)
   - GIS A433 GIS and the Marine Environment (3)
   - GIS A468 Integration of Geomatic Technologies (3)
   - GIS A470 GIS for Facility Management and Transportation Systems (3)
   - GIS A490 Selected Advanced Topics in GIS (3)

3. A maximum of 3 credits of Internship (GIS A295 or A495) and 3 credits of Advanced Topics in Geomatics (GEO A490) or Advanced Topics in GIS (GIS A490) can be counted toward the Certificate in GIS. Faculty approval of the GEO A490 or GIS A490 topic is necessary for application of the course to the Certificate program.

4. A total of 32 credits is required for the Certificate in GIS.

**ASSOCIATE OF APPLIED SCIENCE, GEOMATICS**

**ADMISSION REQUIREMENTS**

Satisfy the Admission to Certificate and Associate Degree Programs Requirements in Chapter 7, Academic Standards and Regulations.

**GENERAL UNIVERSITY REQUIREMENTS**

Complete the Associate of Applied Science General Degree Requirements located at the beginning of this chapter. Some of the major requirements will also fulfill Associate of Applied Science degree general requirements. Students should coordinate choices carefully with their academic advisor in the Department of Geomatics.
ACADEMIC PROGRESS

Students must complete all major requirement courses with a grade of C or higher. A student who is unable to earn a satisfactory grade in the major requirement courses during their initial enrollment may attempt to earn a satisfactory grade one additional time, on a space available basis.

Failure to earn a grade of C or better on the second attempt results in removal from the Geomatics program.

MAJOR REQUIREMENTS

1. Complete 4 credits in physics:
   - PHYS A123 Basic Physics I (3)
   - PHYS A123L Basic Physics I Laboratory (1)
   or
   - PHYS A211 General Physics I (3)
   - PHYS A211L General Physics I Laboratory (1)

2. Complete the following required courses:
   - ENGL A212 Technical Writing 3
   - ES A201 Computer Techniques 3
   - MATH A200 Calculus I 4
   - GEO A137 Principles of Mapping 3
   - GEO A146 Surveying Computations 3
   - GEO A155 Fundamentals of Surveying 3
   - GEO A157 Analytical and Digital Cartography 3
   - GEO A166 Advanced Surveying 4
   - GEO A167 Remote Sensing and Image Analysis 4
   - GEO A248 Digital Terrain Cartography 3
   - GEO A256 Municipal and Civil Geomatics 4
   - GEO A257 Elements of Photogrammetry 3
   - GEO A267 Boundary Law I 4
   - GIS A268 Elements of Geographic Information Systems (GIS) 4

3. Electives to total of 60 credits.
4. A total of 60 credits is required for this degree.

BACHELOR OF SCIENCE, GEOMATICS

ADMISSION REQUIREMENTS

Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations.

GRADUATION REQUIREMENTS

A. GENERAL UNIVERSITY REQUIREMENTS

Complete the General University Requirements for All Baccalaureate Degrees at the beginning of this chapter.

B. GENERAL EDUCATION REQUIREMENTS

Complete the General Education Requirements for Baccalaureate Degrees at the beginning of this chapter.

ACADEMIC PROGRESS

Students must complete all courses under major requirements with a grade of C or higher. A student who is unable to earn a satisfactory grade in the major requirement courses during their initial enrollment may attempt to earn a satisfactory grade one additional time, on a space available basis.

Failure to earn a grade of C or better on the second attempt results in removal from the Geomatics program.

C. MAJOR REQUIREMENTS

1. Complete 8 credits in physics from one of the following sequences:
   - PHYS A123 Basic Physics I (3)
   - PHYS A123L Basic Physics I Laboratory (1)
   - PHYS A124 Basic Physics II (3)
   - PHYS A124L Basic Physics II Laboratory (1)

2. Complete the following required courses:
   - ENGL A212 Technical Writing 3
   - ES A201 Computer Techniques 3
   - MATH A200 Calculus I 4
   - MATH A201 Calculus II 4
   - MATH A202 Calculus III 4

3. Complete one of the following:
   - MATH A302 Ordinary Differential Equations (3)
   - MATH A314 Linear Algebra (3)
   - STAT A307 Probability (3)

4. Complete all of the following:
   - GEO A137 Principles of Mapping 3
   - GEO A146 Surveying Computations 3
   - GEO A155 Fundamentals of Surveying 3
   - GEO A157 Analytical and Digital Cartography 3
   - GEO A166 Advanced Surveying 4
   - GEO A167 Remote Sensing and Image Analysis 4
   - GEO A248 Digital Terrain Cartography 3
   - GEO A256 Municipal and Civil Geomatics 4
   - GEO A257 Elements of Photogrammetry 3
   - GEO A267 Boundary Law I 4
   - GEO A255 Land Development and Design 3
   - GEO A259 Geodesy and Map Projections 3
   - GEO A265 Geomatic Adjustment and Analysis 4
   - GEO A457 Boundary Law II 4
   - GEO A460 Geomatics Design Project 3
   - GEO A466 Geopositioning 4
   - GIS A268 Elements of Geographic Information Systems (GIS) 4
   - GIS A366 Spatial Information Analysis & Modeling 3

5. Complete at least 15 credits in one of the emphasis areas.

Surveying Emphasis

a. Complete the following:
   - GEO A358 Programming for Digital Cartography 3
   - GEO A433 Hydrographic Surveying 3

b. Complete 9 credits from the following:
   - GEO A456 Geomatics and Civil Design (3)
   - GEO A459 Geodetic Geomatics (3)
   - GEO A467 Analytical and Digital Photogrammetry (3)
   - GEO A490 Selected Advanced Topics in Geomatics (1-6)
   - GIS A369 Land Information Systems (3)

Geographic Information Systems (GIS) Emphasis

a. Complete the following:
   - GIS A458 Design and Management of Spatial Data 3

b. Complete 12 credits from the following:
   - GIS A367 GIS and Remote Sensing (3)
   - GIS A369 Land Information Systems (3)
   - GIS A370 GIS and Remote Sensing for Natural Resources (3)
   - GIS A375 GIS and Public Health (3)
   - GIS A433 GIS and the Marine Environment (3)
   - GIS A468 Integration of Geomatics Technologies (3)
   - GIS A470 Calculus I 4
   - GIS A490 Selected Advanced Topics in GIS (1-6)

6. A total of 131 credits is required for the degree of which 42 must be upper division.
FACULTY
Don Davis Jr., Professor/Chair, AFDD@uaa.alaska.edu
Steven Buchanan, Instructor, AFSB1@uaa.alaska.edu
Robert Curley, Associate Professor, AFRAC@uaa.alaska.edu

MECHANICAL ENGINEERING
Engineering Building (ENGR), Room 201, (907) 786-1900
www.engr.uaa.alaska.edu/

Mechanical engineers conceive, plan, design and direct the manufacturing, distribution and operation of a wide variety of devices, machines and systems for energy conversion, environmental control, materials processing, transportation, materials handling and other purposes. Mechanical engineers are engaged in creative design, applied research, development and management.

Because mechanical engineering is based on mathematics, chemistry, and physics, students are introduced to the basic principles in these areas during their first two years of study. They are also exposed to a variety of introductory courses in engineering science and to courses in communication, the humanities, social sciences and/or fine arts.

TWO-YEAR PROGRAM MECHANICAL ENGINEERING
The School of Engineering offers a program of studies that allow the completion of the first two years of a four-year program leading to the Bachelor of Science degree in Mechanical Engineering. The program is coordinated with the University of Alaska Fairbanks (UAF) College of Science, Engineering and Mathematics. It allows students to transfer into the Mechanical Engineering program at UAF as 3rd year students with no loss of credit.

ADMISSION REQUIREMENTS
Complete the Admission to Baccalaureate Programs Requirements in Chapter 7, Academic Standards and Regulations. In addition, students entering the undergraduate engineering program must have completed the following high school courses with grades of C or better:

- Algebra 2 years
- English 3 years
- Chemistry 1 year
- Physics 1 year
- Trigonometry 1/2 year

It is recommended that students graduating from high school without satisfactorily completing the courses noted above enroll in the necessary courses to make up deficiencies during the summer session.

Only those students admitted to the undergraduate engineering program may take courses offered by the School of Engineering at the 200-level or above. Students not admitted to the program may petition the School of Engineering to be admitted to individual courses.

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.

ACADEMIC PROGRESS
All prerequisites for engineering courses must be completed with a grade of C or higher.

A student who is unable to earn a satisfactory grade in an engineering course during their initial enrollment may attempt to earn a satisfactory grade one additional time on a space-available basis.

A student who has a semester grade point average (GPA) in engineering courses below 2.00 will be placed on academic warning by the School of Engineering. If a student on academic warning status receives a semester GPA for engineering courses of at least 2.00, that student will be removed from academic warning status by the School. Otherwise, they will be disqualified from further study in the School of Engineering and will not be permitted to attend engineering courses.

PROGRAM REQUIREMENTS
In order to complete the first two years of a four-year program leading to the degree of Bachelor of Science in Mechanical Engineering at UAF, students must complete the following courses:

- CHEM A105 General Chemistry I 3
- CHEM A105L General Chemistry I Lab 1
- CHEM A106 General Chemistry II 3
- CHEM A106L General Chemistry II Lab 1
- COMM A111 Fundamentals Of Oral Communication (3) 3
- or
- COMM A235 Small Group Communication (3)
- or
- COMM A237 Interpersonal Communication (3)
- or
- COMM A241 Public Speaking (3)
- ENGL A111 Methods Of Written Communication 3
- ENGL A211 Academic Writing About Literature (3) 3
- or
- ENGL A213 Writing in the Social and Natural Sciences (3)
- ES A111 Engineering Science 3
- ES A201 Computer Techniques 3
- ES A209 Engineering Statics 3
- ES A210 Engineering Dynamics 3
- ES A331 Mechanics of Materials 4
- ES A346 Basic Thermodynamics 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 Lab 1
- PHYS A212 General Physics II 3
- PHYS A212L General Physics II Lab 1
- or
- plus 9 credits of General Education Requirement courses in the areas of Humanities, Social Sciences and/or Fine Arts. 9

Note: The required courses do not include ES A103 (Engineering Graphics with AutoCAD). However, this course is considered to be valuable to student and they are encouraged to take the course if their schedules permit.

FACULTY
Grant Baker, Professor/Chair, AFGCB@uaa.alaska.edu

MINOR PROGRAMS IN THE SCHOOL OF ENGINEERING
The School of Engineering offers minor programs to meet two sets of student needs. The first is a minor program in General Engineering which is for students that are majoring in a non-engineering baccalaureate degree. This program offers foundation coursework in core engineering topics.

The second is an Engineering Specialty minor program which is for students majoring in an engineering baccalaureate degree and, therefore, have completed much of the coursework in the Bachelor of Science in Engineering (BSE) or Civil Engineering (CE) program.
Students within the engineering program may choose to pursue an Engineering Specialty minor in civil engineering, computer systems engineering, electrical engineering, or mechanical engineering.

Students enrolling in either minor program must satisfy all prerequisite requirements for the courses required for the chosen minor. Non-engineering majors, such as students in the sciences or mathematics, will likely be better positioned to meet the prerequisite requirements in the General Engineering minor program. Students majoring in engineering disciplines will likely be better positioned to meet the prerequisite requirements for courses in the Engineering Specialty minor programs.

**COURSE REQUIREMENTS FOR MINOR PROGRAMS**

A Minor Program of study must consist of a minimum of 18 credit hours. At least 6 credits must be upper division. Students must earn a cumulative GPA of at least 2.0 (C) in the minor. A minor may only be issued simultaneously with a baccalaureate degree. See Chapter 10 of the UAA Catalog for general information about minor degree requirements.

The course requirements for each of the engineering minor degrees are listed below. In cases where students have unique backgrounds or interests, course selection may be adapted accordingly through consultation with the engineering faculty advisors.

**A. GENERAL ENGINEERING MINOR PROGRAM**

The following courses are required:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR A151</td>
<td>Engineering Practices I</td>
<td>3</td>
</tr>
<tr>
<td>ENGR A161</td>
<td>Engineering Practices II</td>
<td>3</td>
</tr>
<tr>
<td>ES A208</td>
<td>Engineering Mechanics</td>
<td>4</td>
</tr>
</tbody>
</table>

In addition, at least three (3) courses must be selected from the following list:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ES A309</td>
<td>Elements of Electrical Engineering</td>
<td>3</td>
</tr>
<tr>
<td>ES A331</td>
<td>Mechanics of Materials</td>
<td>3</td>
</tr>
<tr>
<td>ES A341</td>
<td>Fluids Mechanics</td>
<td>4</td>
</tr>
<tr>
<td>ES A346</td>
<td>Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>ESM A450</td>
<td>Engineering Economics</td>
<td>3</td>
</tr>
<tr>
<td>ME/EE A308</td>
<td>Instrumentation &amp; Measurement</td>
<td>3</td>
</tr>
<tr>
<td>ME A334</td>
<td>Elements of Material Science</td>
<td>3</td>
</tr>
</tbody>
</table>

**B. ENGINEERING SPECIALTY MINOR PROGRAMS**

**MINOR, CIVIL ENGINEERING**

A minimum of 18 credits must be selected from:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE A334</td>
<td>Properties of Materials</td>
<td>3</td>
</tr>
<tr>
<td>CE A344</td>
<td>Water Resources Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CE A402</td>
<td>Transportation Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CE A404</td>
<td>Highway Engineering</td>
<td>4</td>
</tr>
<tr>
<td>CE A422</td>
<td>Foundation Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CE A431</td>
<td>Structural Analysis</td>
<td>4</td>
</tr>
<tr>
<td>CE A432</td>
<td>Steel Design</td>
<td>3</td>
</tr>
<tr>
<td>CE A433</td>
<td>Reinforced Concrete Design</td>
<td>3</td>
</tr>
<tr>
<td>CE A434</td>
<td>Timber Design</td>
<td>3</td>
</tr>
<tr>
<td>CE A435</td>
<td>Soil Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>CE A441</td>
<td>Introduction to Environmental</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Engineering</td>
<td></td>
</tr>
<tr>
<td>CE A442</td>
<td>Environmental Systems Design</td>
<td>3</td>
</tr>
</tbody>
</table>

**MINOR, COMPUTER SYSTEMS ENGINEERING**

A minimum of 18 credits must be selected from:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS A320</td>
<td>Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>CS A342</td>
<td>Networks</td>
<td>3</td>
</tr>
<tr>
<td>CS A405</td>
<td>Artificial Intelligence</td>
<td>3</td>
</tr>
<tr>
<td>CS A413</td>
<td>Computer and Data Security</td>
<td>3</td>
</tr>
<tr>
<td>CSE A445</td>
<td>Computer Design and Interfacing</td>
<td>4</td>
</tr>
<tr>
<td>CSE A451</td>
<td>Digital Signal Processing</td>
<td>3</td>
</tr>
<tr>
<td>CSE A465</td>
<td>Network Security</td>
<td>3</td>
</tr>
</tbody>
</table>

**MINOR, ELECTRICAL ENGINEERING**

A minimum of 18 credits must be selected from:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS/EE A241</td>
<td>Computer Hardware Concepts</td>
<td>4</td>
</tr>
<tr>
<td>EE A204</td>
<td>Fundamentals of Electrical Engineering</td>
<td>4</td>
</tr>
<tr>
<td>EE A208</td>
<td>Fundamentals of Electrical Engineering</td>
<td>4</td>
</tr>
<tr>
<td>EE/ME A308</td>
<td>Instrumentation &amp; Measurement</td>
<td>3</td>
</tr>
<tr>
<td>EE A314</td>
<td>Electromagnetics</td>
<td>3</td>
</tr>
<tr>
<td>EE A344/L</td>
<td>Electromagnetics Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>EE A345</td>
<td>Electromagnetics</td>
<td>3</td>
</tr>
<tr>
<td>EE A324/L</td>
<td>Electromagnetics Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>EE A353</td>
<td>Circuit Theory</td>
<td>3</td>
</tr>
<tr>
<td>EE A407</td>
<td>Power Distribution</td>
<td>3</td>
</tr>
<tr>
<td>EE A441</td>
<td>Integrated Circuit Design</td>
<td>3</td>
</tr>
<tr>
<td>EE A465</td>
<td>Telecommunications</td>
<td>3</td>
</tr>
<tr>
<td>EE/ME A471</td>
<td>Automatic Control</td>
<td>3</td>
</tr>
</tbody>
</table>

**MINOR, MECHANICAL ENGINEERING**

A minimum of 18 credits must be selected from:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ES A341</td>
<td>Fluid Mechanics</td>
<td>4</td>
</tr>
<tr>
<td>ES A346</td>
<td>Basic Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>ME A302</td>
<td>Mechanical Design</td>
<td>4</td>
</tr>
<tr>
<td>ME/EE A308</td>
<td>Instrumentation &amp; Measurement</td>
<td>3</td>
</tr>
<tr>
<td>ME A313</td>
<td>Mechanical Engineering</td>
<td>3</td>
</tr>
<tr>
<td>ME A334</td>
<td>Elements of Material Science</td>
<td>3</td>
</tr>
<tr>
<td>ME A403</td>
<td>Mechanical Design II</td>
<td>3</td>
</tr>
<tr>
<td>ME A408</td>
<td>Dynamics of Systems</td>
<td>3</td>
</tr>
<tr>
<td>ME A414</td>
<td>Thermal System Design</td>
<td>3</td>
</tr>
<tr>
<td>ME A441</td>
<td>Heat and Mass Transfer</td>
<td>3</td>
</tr>
<tr>
<td>ME/EE A471</td>
<td>Automatic Control</td>
<td>3</td>
</tr>
<tr>
<td>ME A664</td>
<td>Corrosion Processes and Engineering</td>
<td>3</td>
</tr>
<tr>
<td>ME A685</td>
<td>Arctic Heat and Mass Transfer</td>
<td>3</td>
</tr>
<tr>
<td>ME A687</td>
<td>Arctic Materials Engineering</td>
<td>3</td>
</tr>
</tbody>
</table>

Note #1: MATH A200, MATH A201, MATH A202, MATH A302, PHYS A211, PHYS A212; CHEM A105, and CHEM A106 are required prerequisites for most of the minor programs listed. Students should plan and review the requirements for their specific minor program to determine exactly what prerequisites will be required.

Note #2: An “*” indicates a recommended set of courses for the minor.

Note #3: BSE or CE majors may pursue a BSE Engineering Specialty minor but may not pursue the BSE General Engineering minor.
The mission of the University Honors College is to be a catalyst for scholarly excellence in undergraduate education. The College advances, coordinates, and administers active learning and undergraduate research opportunities for students across the campus. Through its multi-disciplinary academic and student support programs, the College serves as a locus for inquiry, discovery, leadership and engagement.

The College houses the Office of Undergraduate Research and Scholarship, and three University Honors Programs: the University Honors Core Program, the Natural and Complex Systems Program, and the Forty-Ninth State Fellows Program. Students enrolled in these programs are also enrolled in the disciplinary school or college in which they complete their degree programs. University Honors students may pursue any major or minor they wish at the University, and foundation University Honors courses will satisfy General Education Requirements.

Students, who complete the requirements of their disciplinary school or college, and the G.P.A. and program requirements of University Honors College, will graduate with the designation of University Honors Scholar on their transcripts and diplomas.

University Honors offers smaller classes with excellent faculty, guided individual research, personalized academic advising and mentoring, special leadership and internship opportunities, community involvement, and enhanced scholarship prospects. Honors courses will approach the course subject matter with more intensity and rigor than is demanded of typical courses. Students will also participate in a range of honors activities together, designed to enhance intellectual and personal opportunities. Intensive advising by college faculty and staff is an important element of University Honors, and Honors students are required to meet regularly with advisors.

**ACADEMIC PROGRAMS**

There are various options that students can select within the University Honors College: the Honors Core Program, the Natural and Complex Systems Program, and the Forty-Ninth State Fellows Program. The Honors Core Program requirements, taken by all Honors students, include courses in humanities, social science and community service. All Honors courses have an emphasis on critical thinking and analytical reading, taking on challenging activities through interdisciplinary projects, and preparing students for participating in independent research in their disciplines.

The Natural and Complex Systems (NCS) Program includes additional courses that focus on scientific, research-based projects that integrate student work across the Natural, Physical, Engineering, Mathematical, and Computer Sciences. This option is open to honors students in all disciplines but is targeted particularly toward students in science-oriented degrees. Honors students may take courses in the NCS Program if they meet the course prerequisites.

The Forty-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 Natural and Complex Systems Program, and the Forty-Ninth State Fellows Program each year. All baccalaureate degree-seeking students who are motivated to pursue honors level work are encouraged to apply.

In addition to the University Honors College, several 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 College Office (RH 119). Supporting documents include (1) high school transcripts and SAT or ACT scores for incoming freshmen, (2) university transcripts and GPA for transfer students, (3) an essay on personal goals, and (4) a completed reference form from two previous teachers (either high school or college). Application packets may be obtained from the University Honors College office.
3. In general, students applying to the University Honors College from high school or transferring into the program with previous college-level work must have at least a 3.0 GPA, and show strong evidence of ability to reach and maintain a 3.5 GPA level at UAA within a reasonable time. However, the initial GPA entrance requirement should be interpreted as a general guideline, and not as an absolute criterion; all students who believe that they can succeed and benefit in an honors program are encouraged to apply.
4. Admission to the University Honors College will be determined by the Honors College Admission Committee. Admission is based on an overall evaluation of the student's probability of success in the College, and not on any single criterion or formula. The Committee may ask the applicant for additional information and/or suggest an interview. Applicants will be ranked, and admitted on a space-available basis. In some cases the Committee may initially grant conditional admission, which will be changed to formal admission if the student demonstrates ability to do honors work.

**REQUIREMENTS TO GRADUATE AS A "UNIVERSITY HONORS SCHOLAR"**

1. Students must meet all General University Requirements, General Education Requirements, School/College requirements, and major requirements as printed in the UAA catalog.
2. Students officially accepted into the University Honors College can use HNRS A192 to satisfy 3 credits of General Education Requirement in Humanities, and HNRS A292 to satisfy 3 credits of General Education Requirement in Social Science once they have completed the Honors Foundation Courses as listed below.
3. Students must complete the following University Honors Core Curriculum requirements (16 credits) with a grade of C or higher:

   **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 6
     - A. HNRS A490 Senior Honors Seminar
       (6 credits over two semesters) or
B. A course proposed by the student, and approved by the Honors College Dean (3 credits minimum; may be an existing course or independent study) plus Senior thesis or project (3 credits minimum; either departmental thesis/project, or HNRS A499 Honors Thesis)

or

C. An upper division course listed in the catalog as a specific departmental honors requirement (3 credits minimum) and Senior thesis or project (3 credits minimum; either departmental thesis/project, or HNRS A499 Honors Thesis)

or

D. Six-credit thesis/project (either departmental thesis/project, and/or HNRS A499 Honors Thesis). Total University Honors Program credits required (9 core + 7 upper division): 16

3. Students must have earned a cumulative grade point average of 3.5 or higher, as defined under Graduation with Honors in Chapter 7 of this catalog.

4. As part of the advising/mentoring process, Honors students' progress will be evaluated every semester. Students whose performance indicates potential difficulties in meeting the Honors graduation requirements will be counseled on how to correct these difficulties, but if performance improvements do not result, the student may be removed from the College.

NATURAL AND COMPLEX SYSTEMS (NCS) PROGRAM
The Natural and Complex Systems Program focuses on scientific, research-based projects that integrate student work across the Natural, Physical, Engineering, Mathematical and Computer Sciences. Students admitted to the Natural and Complex Systems Program receive the designation "University Honors Scholar: Natural and Complex Systems" on their transcripts upon successful completion of the program requirements.

ADMISSION TO THE NATURAL AND COMPLEX SYSTEMS PROGRAM
The NCS Program is open to students in all disciplines who have been admitted to the University Honors College. Honors students may take courses in the NCS Program if they meet the course prerequisites. Students wanting to enroll in this program should contact the University Honors College office for permission to register.

REQUIREMENTS TO GRADUATE AS A "UNIVERSITY HONORS SCHOLAR: NATURAL AND COMPLEX SYSTEMS"
1. Students must meet all General University Requirements, General Education Requirements, School/College requirements, and major requirements as printed in the UAA catalog.

2. Students officially accepted into the University Honors College can use HNRS A192 to satisfy 3 credits of General Education Requirement in Humanities, and HNRS A292 to satisfy 3 credits of General Education Requirement in Social Science once they have completed the Honors Foundation courses as listed below.

3. Students must complete the following University Honors Core requirements and the Natural and Complex Systems Program requirements with a grade of C or higher (22 credits):

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

4. Students must have earned a cumulative grade point average of 3.5 or higher, as defined under Graduation with Honors in Chapter 7 of this catalog.

5. As part of the advising/mentoring process, Honors students' progress will be evaluated every semester. Students whose performance indicates potential difficulties in meeting the Honors graduation requirements will be counseled on how to correct these difficulties, but if performance improvements do not result, the student may be removed from the college.

FORTY-NINTH STATE FELLOWS PROGRAM
The Forty-Ninth State Fellows Program offers a limited number of students the opportunity to participate in an intensive, intellectually challenging four-year undergraduate program to develop new Alaskan leaders. Forty-Ninth State Fellows study the roots of liberty in Western civilization, the founding and development of American political institutions, and the challenges of self-government in Alaska, to become knowledgeable about American and Alaskan history, politics, and cultural diversity, and familiar with the application of leadership skills and ideas.

In addition to their common curriculum, Forty-Ninth State Fellows enjoy many activities together, including opportunities for summer internships, membership in civic organizations, lectures and colloquia, weekly tutorials, and special events. Intensive advising by program faculty and staff is an important element of the program, and Fellows are required to meet regularly with advisors.

Forty-Ninth State Fellows may pursue any major they wish at the University. They take selected courses together in economics, history, and political science, as well as the required courses for the University Honors Core. Many of these courses satisfy General Education requirements (GER) at UAA and/or requirements for those pursuing degrees in the College of Arts and Sciences. Students admitted to study as Forty-Ninth State Fellows receive the designation “Forty-Ninth State University Honors Scholar” on their transcripts upon successful completion of the option requirements.

ADMISSION TO THE FORTY-NINTH STATE FELLOWS PROGRAM
1. Admission to the Forty-Ninth State Fellows Program is limited each year to a small group of baccalaureate degree-seeking students. At the time of application, students are considered for admission to both the University Honors College and the Forty-Ninth State Fellows Program. Students should meet the general criteria for admission to University Honors (Admission to University Honors College #3).

2. Students must submit a completed Forty-Ninth State Fellows Program application, including supporting documents, to the University Honors College Office (RH 119). Supporting documents include (1) high school transcripts and SAT or ACT scores for incoming freshmen, (2) high school and university transcripts and GPA for transfer students, (3) a letter of application explaining their background and interests, and why they want to be Forty-Ninth State Fellows and members of the University Honors College, (4) a short paper or essay (750-1000 words) addressing a contemporary social, political, or economic problem in Alaska, and (5) three letters of reference commenting on their academic ability.
and promise, one of which must be from an unrelated adult outside of high school who can speak to their skills and potential. Application forms may be obtained from the University Honors College office or website.

3. Admission to the Forty-Ninth State Fellows Program will be determined by the Forty-Ninth State Admission Committee. The Committee may ask the applicant for additional information and/or request an interview. Applicants will be ranked and admitted on a space-available basis.

REQUIREMENTS TO GRADUATE AS A “FORTY-NINTH STATE UNIVERSITY HONORS SCHOLAR”

1. Students must meet all General University Requirements, General Education Requirements, School/College requirements, and major requirements as printed in the UAA catalog.

2. Students also must complete all requirements to graduate in the University Honors College as a “University Honors Scholar,” including Honors Core Program (see above), GPA requirements and completion of an Honors Senior Thesis.

3. Students must complete the following Forty-Ninth State Fellows curriculum requirements with a grade of C or higher:

First-year Forty-Ninth State Fellows Program Requirements:
- HIST A101 Western Civilization I* 3
- HIST A102 Western Civilization II* 3
- 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
- HIST A131 History of United States I* 3
- HIST A132 History of United States II* 3
- HNRS A291 Sophomore Honors Tutorial (fall) 1
- HNRS A291 Sophomore Honors Tutorial (spring) 1
- PS A330 The American Political Tradition 3

Third-year Forty-Ninth State Fellows Program Requirements:
- HIST A341 History of Alaska* 3
- HNRS A391 Junior Honors Tutorial 1
- PS A332 History of Political Philosophy I: Classical* 3
- PS A333 History of Political Philosophy II: Modern* 3

Fourth-year Forty-Ninth State Fellows Program Requirements:
- PS A345 Alaska Government and Politics 3

* 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 General Education requirements 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.

FACULTY

University Honors draws its faculty from across the schools and colleges.

Ronald Spatz, Dean/Professor, AFRMS1@uaa.alaska.edu
Julie Decker, Instructor, julied@alaskalife.net
Janet Emerman, Clinical Associate Professor, AFJLE@uaa.alaska.edu
Larry Foster, Associate Professor, AFLMF@uaa.alaska.edu
Mari Hahn, Assistant Professor, AFMH@uaa.alaska.edu
Steve Haycox, Forty-Ninth State Faculty Director/Professor, AFSWH@uaa.alaska.edu
Lee Huskey, Professor, AFLH@uaa.alaska.edu
William A. Jacobs, Professor Emeritus, AFWa@uaa.alaska.edu
Elizabeth James, Assistant Professor, AFjE@uaa.alaska.edu
Stephen Jackstadt, Professor, AFSCJ@uaa.alaska.edu
Steve Johnson, Associate Professor, AFSLJ1@uaa.alaska.edu
John Kennish, Professor, AFJK@uaa.alaska.edu
Claudia Lampman, Professor, AFCBL@uaa.alaska.edu
Randy Magen, Associate Professor, AFRHM1@uaa.alaska.edu
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Darren Prokop, Associate Professor, AFDJP1@uaa.alaska.edu
Don Rearden, Assistant Professor, AFDJR@uaa.alaska.edu
Quintin Reuer, Associate Professor, AFQR@uaa.alaska.edu
Katie Ringsmuth, Term Assistant Professor
Frank von Hippel, Associate Professor, AFFVH@uaa.alaska.edu
POST-BACCALAUREATE CERTIFICATE PROGRAMS

Post-Baccalaureate Certificates
Study
Admissions
Application and Admission Status
Related Post-Baccalaureate Policies
Formal Acceptance to Post-Baccalaureate Certificate programs
Non-Degree-Seeking Students
Full-Time/Part-Time Status
Catalog Year
Good Standing
Removal from Post-Baccalaureate Certificate-Seeking Status
Academic Appeals
Reinstatement
Post-Baccalaureate Certificate Advisor
Responsibilities of the Post-Baccalaureate Certificate Advisor/Committee
Official Studies Plan
Determining Program Requirements
Post-Baccalaureate Certificate University Requirements
Application for Graduation
Individual Program Listings
Post-Baccalaureate Certificate Programs

Post-Baccalaureate Certificates

Study

Post-Baccalaureate certificate programs present a cohesive sequence of related courses designed to provide continuing education past the baccalaureate level. Upon completion of a certificate, students will have acquired an area of specialization or an interdisciplinary perspective, or will have completed requirements for professional certifications awarded by agencies outside the university. Post-Baccalaureate certificates are designed with a majority of undergraduate course work.

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 Enrollment Services.

Admission Requirements for Post-Baccalaureate Certificates

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

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

Applicants with transcripts from institutions outside the United States or Canada must submit official transcripts and English translations as well as an official statement of educational equivalency from a recommended international credentials evaluation service. A list of evaluation services may be obtained from Enrollment Services. Fees depend upon the agency performing the evaluation. The evaluation service will require a separate transcript and copy of the English translation.

Applicants whose native language is not English or whose baccalaureate degree was conferred by an institution where English was not the language of instruction must also submit scores from the Test of English as a Foreign Language (TOEFL). TOEFL scores may be waived if the applicant has been a long-term resident of the United States or of another English-speaking country and demonstrates fluency in reading, writing, and speaking in English.

Applications, official transcripts, and required test scores (if any) must be submitted to Enrollment Services. 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, Enrollment Services 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 nine (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 (on-going) admissions, that 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 July 1, and all required application materials by August 1.

International Post-Baccalaureate Certificate Students

International 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 (Test of English as a Foreign Language) score of at least 550 for the paper-based test or 213 for the computer-based test.
2. A statement of financial support for the anticipated period of study and evidence of availability of funds such as a bank statement.
3. An English translation of all required documents.
4. Students who earned their baccalaureate degree outside the United States or Canada must submit an official statement from a recommended international credentials evaluation service stating that their degree is the equivalent of a U.S. bachelor degree. A list of evaluation services may be obtained from Enrollment Services. 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 Enrollment Services for details.
APPLICATION AND ADMISSION STATUS FOR POST-BACCALAUREATE CERTIFICATE-SEEKING STUDENTS:
TERMS AND DEFINITIONS

APPLICATION STATUS

Incomplete Application
An incomplete application is one that is not accompanied by all required documents; generally, an application is considered incomplete until all required official transcripts and test scores have been received.

Pending Application
A pending application has met University requirements and is awaiting departmental recommendation for admission.

Postponed Application
Students may postpone their applications to a future semester by notifying Enrollment Services prior to the end of the semester for which they originally applied.

Withdrawn Before Admission
Students must complete or postpone their admission by the end of the semester for which they have applied. At the end of each semester, all applications still incomplete or not postponed will be withdrawn. Students whose applications have been withdrawn must reapply for admission if they later choose to attend UAA.

ADMISSION STATUS

Complete Admission
All required documents have been received and all admission standards met.

Incomplete Admission
Students who expect to receive their baccalaureate degree from a regionally accredited institution within two semesters (three if including summer) may apply for admission. Formal acceptance becomes final only after the baccalaureate degree is completed and conferred, and all other admission requirements are met.

Provisional Admission
University admission requirements have been met, but the students still need to complete one or more department-specified provisions.

Postponed Admission
Students may postpone their admission to a future semester by notifying Enrollment Services 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 Enrollment Services 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 Enrollment Services.

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 not used for any other degree or certificate. The student must meet all Post-Baccalaureate Certificate University Requirements, School or College Requirements, and Program Requirements; fulfilling all University, College, and Program Requirements may require more than the minimum 16 additional resident credits. If the 16 additional credits and other requirements have been earned for each additional post-baccalaureate certificate, two or more post-baccalaureate certificates may be awarded simultaneously.

FORMAL ACCEPTANCE TO POST-BACCALAUREATE CERTIFICATE PROGRAMS

Once all required admission documents have been received by Enrollment Services, 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 Enrollment Services of the decision. Enrollment Services 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 course work may be completed in the student’s program before program admission. Non-degree-seeking students do not qualify for federal or state financial aid benefits nor do they qualify to receive a Form I-20 Certificate of Eligibility for Nonimmigrant (F-1) Student Status. (See Chapter 7, Academic Standards and Regulations, for further information.)
Full-Time/Part-Time Status for Post-Baccalaureate Certificate-Seeking Students

A student who has been admitted to a UAA post-baccalaureate certificate program and is enrolled at UAA for 12 or more credits is classified as full-time. Courses count toward full-time status only if they are applicable to the certificate program. A post-baccalaureate certificate student enrolled at UAA for fewer than 12 credits is classified as part-time.

Audited courses, Continuing Education Units (CEU’s), and Continuous Registration are not included in the computation of the student’s full-time or part-time status.

Catalog Year for Post-Baccalaureate Certificate Programs

Students may elect to graduate under the requirements of the catalog in effect at the time of formal acceptance to a post-baccalaureate certificate program, or the catalog in effect at the time of graduation.

If the requirements for a post-baccalaureate certificate program as specified in the entry-level catalog are not met within seven (7) 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 2.5 (C) cumulative GPA in courses on their official Certificate Studies Plan are considered in good standing.

Removal from Post-Baccalaureate Certificate-Seeking Status

A student’s academic status may be changed to non-degree-seeking if the requirements to remove provisional admission or if minimum academic standards are not met.

A student who fails to maintain Good Standing in courses applicable to his/her certificate program, for reasons specified in writing, is not making satisfactory progress toward completing the program requirements and may be removed from certificate-seeking status. Each school or college has procedures to deal with appeals arising from removal from certificate-seeking status.

Academic Appeals

Students have the right to appeal academic actions (See Academic Dispute Resolution Procedures in the UAA Fact 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 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 graduate 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 Enrollment Services.
6. Review and approve any changes to the official Certificate Studies Plan, directing timely submission of the revised plan to Enrollment Services.
7. Review and approve any required capstone experience or project according to procedures established by the individual program.
8. Administer and assess a comprehensive exam, if required.

Official Studies Plan for Post-Baccalaureate Certificates

The official Certificate Studies Plan formally establishes the specific program requirements which, upon satisfactory completion, entitle the student to receive the post-baccalaureate certificate. The program plan is based upon the catalog requirements for the certificate program to which the student is accepted. The plan becomes official once it is approved by the Dean or designee and is filed with Enrollment Services. Students are expected to complete all requirements listed on their official Certificate Studies Plan, as well as all Post-Baccalaureate Certificate University Requirements. Any revision to the plan must be submitted to Enrollment Services through the certificate advisor/committee.

Determining Program Requirements

A post-baccalaureate certificate student’s program is based upon the catalog requirements for the relevant certificate program which are in effect at the time the student was accepted to the program.

Post-Baccalaureate Certificate University Requirements

University requirements for all post-baccalaureate certificates are as follows:

1. The student must complete at least 24 approved semester credits not counted toward any awarded degree.
2. The student must complete all requirements established by the program.
3. A GPA of at least 2.5 (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 not used toward any other degree or certificate 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 nine (9) credits applicable to the student’s certificate program are earned at UAA after acceptance into the program.

9. Courses taken through credit by examination, or graded Credit/No Credit (CR/NC) do not count toward certificate requirements. They may, however, be used to satisfy prerequisites or to establish competency in a subject, thus allowing the advisor or committee to waive certain courses in an established program, as long as the total credits in the certificate program remain the same.

10. If the requirements for a post-baccalaureate certificate as specified in the entry-level catalog are not met within seven (7) years of formal acceptance into the program, admission expires and the student must reapply for admission and meet the admission and graduation requirements in effect at the time of readmission or graduation.

11. All credits counted toward the post-baccalaureate certificate, including transfer credits, must be earned within the consecutive seven-year period prior to graduation.

APPLICATION FOR GRADUATION
Post-Baccalaureate certificate students must submit an Application for Graduation, signed by the academic advisor and accompanied by the required fee, to Enrollment Services. Application for Graduation deadlines are March 1 for summer graduation, May 1 for fall graduation, and September 15 for spring graduation. Applications received after the deadline will be processed for the following semester. Students who apply for graduation but do not complete degree requirements by the end of the semester must re-apply for graduation. The application fee must be paid with each Application for Graduation.

COLLEGE OF EDUCATION
Professional Studies Building (PSB), Suite 209, (907) 786-4401
http://coe.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 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. 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.
The College of Education has three academic departments:

1. The Department of Teaching and Learning with programs in 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, and language pathology. (907) 786-6317
3. The Department of Educational Leadership with programs in educational programs. (907) 786-4450

**Professional Field Practice**

Prior to permitting the candidate to enter the final stage of preparation, which is characterized by participation in an internship, a faculty committee will evaluate the candidate’s performance in the program. Admission into this final phase of professional preparation is a faculty decision and is separate from entry into the post-baccalaureate program. Difficulties including inadequate academic performance, unprofessional behavior, unsatisfactory field reports, or other factors, may result in denial of entry to the internship. Performance in the internship is closely monitored, with stated minimum competencies and the development of individual objectives. Since this is the practice and application phase of professional development, it is assumed that candidates will demonstrate appropriate professional dispositions with respect to their professional actions, attitude, and performance.

**Field Placements**

Fingerprinting/criminal history background clearance is required to participate in internships and may be required to participate in other field experiences. Failure to receive clearance will result in denial of or removal from field placements.

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.

Candidates who have taken all or part of an approved program at another university must take at least nine (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**

http://coe.uaa.alaska.edu/pace

The Office of Professional and Continuing Education (PACE) facilitates professional development opportunities for educators and other service professionals. PACE works collaboratively with UAA academic units and partner organizations to provide responsive service and support for 500-level courses, workshops, conferences, institutes, and academies. Committed to addressing the community’s immediate and changing professional development needs, PACE works closely with school districts, professional societies, and private and government agencies.

**Early Childhood**

Professional Studies Building (PSB), Suite 220, (907) 786-4481

http://coe.uaa.alaska.edu/earlychildhood

**Post-Baccalaureate-Certificate, Early Childhood Pre-K-Third Grade (with Teacher Certification)**

Those students who already have a baccalaureate degree may obtain an Early Childhood Pre-K - 3rd Grade Post-Baccalaureate Certificate by completing the following requirements.

**Program Descriptions and Outcomes**

The Post-Baccalaureate Certificate in Early Childhood Pre-K-Third Grade prepares professionals who already have baccalaureate degrees to work with young children from birth through eight years in preschool/primary school settings. All programs are developed to meet the National Association for the Education of Young Children guidelines for personnel preparation.

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 preschool educational programs.

Student outcomes for the program are based on the Standards for Alaska’s Teachers located at: [www.ed.state.ak.us/standards](http://www.ed.state.ak.us/standards). Standards are also based on the professional preparation standards of the National Association for the Education of Young Children (NAEYC):

1. Promoting child development and learning.
2. Building family and community relationships.
3. Observing, documenting, and assessing support young children and families.
4. Teaching and learning.
5. Becoming a professional.
ADMISSION REQUIREMENTS

ADMISSION TO THE UNIVERSITY OF ALASKA ANCHORAGE: EARLY CHILDHOOD PRE-K-3RD GRADE POST-BACCALAUREATE CERTIFICATE

See information on Post-Baccalaureate Certificate programs at the beginning of this chapter. Complete the UAA Undergraduate Application for Admission, available on the UAA website at: www.uaa.alaska.edu/admissions.

ADMISSION TO THE DEPARTMENT OF TEACHING AND LEARNING, COLLEGE OF EDUCATION: EARLY CHILDHOOD PRE-K-3RD GRADE POST-BACCALAUREATE CERTIFICATE

Admission to the Department of Teaching and Learning is a prerequisite for all early childhood course work. In order to be admitted to the College of Education as an Early Childhood Pre-K-3rd 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 exam and the Praxis II: Elementary Content Knowledge exam. 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-3rd Grade Post-Baccalaureate Certificate Program candidate.
2. Submit an application form for admission to methods and internship by February 20.
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 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 exam and negative TB skin test. These services are available free at the UAA Student Health Center for current UAA students.
9. Maintain health insurance throughout internship. Candidates may purchase this insurance through UAA.

Note: Qualified applicants are accepted on a space-available basis. Admission to the Department of Teaching and Learning does not guarantee admission to the internship.

ACADEMIC PROGRESS

All Early Childhood Pre-K-3rd Grade Post-Baccalaureate Certificate courses must be completed with a grade of C or higher in order to obtain an institutional recommendation for teacher certification.

GRADUATION REQUIREMENTS

Candidates must complete the following graduation requirements:

A. GENERAL UNIVERSITY REQUIREMENTS FOR POST-BACCALAUREATE CERTIFICATES

Complete the General University Requirements for Post-Baccalaureate Certificates listed at the beginning of this chapter.

B. MAJOR REQUIREMENTS

1. Complete the following foundation area course work (28 credits):
   - Field experience in early childhood programs may be required as part of the courses. Fingerprinting and a background check may be required to participate in field experiences.
   - EDSE A212 Human Development and Learning (3)
   - EDSE A212L Human Development and Learning Lab (1) or
   - PSY A245 Child Development (3)
   - PSY A245L Child Development Lab (1)
   - EDEC A242 Family, Community Partnerships (3)
   - EDEC A301 Observation and Documentation in Early Childhood (4)
   - EDEC A303 Young Children in Inclusive Settings (3)
   - EDEC A308 Literature for Young Children (3)
   - EDFN A300 Philosophical and Social Context of American Education (3)
   - EDFN A301 Foundations Literacy and Language Development (3)
   - EDFN A302 Foundations of Educational Technology (2)
   - MATH A205 Communicating Mathematical Ideas (3)

2. Complete the following method courses (16 credits):
   - Concurrent enrollment in an internship required. See Admission to Internship.
   - EDEC A403 Mathematics and Science in Early Childhood (3)
   - EDEC A404 Literacy for Young Children (3)
   - EDEC A492 Senior Seminar in Early Childhood (2)
   - EDEL A427 Teaching Social Studies in Elementary Schools (2)
   - EDEL A429 Teaching Health Education in Elementary Schools (2)
   - EDEL A431 Creative Expression: Music, Art, and Drama for Elementary Teachers (3)
   - EDEL A432 Physical Education for Elementary Classroom Teachers (1)

3. Complete the following internships (nine (9) credits):
   - Fingerprinting/criminal history background clearance required prior to participating in internships.
   - EDEC A495C Internship I, Primary (3)
   - EDEC A495D Internship II, Primary (6)

4. Satisfaction of all major requirements, totaling 53 credits, must be demonstrated through course work completed either before or after the award of the student’s first baccalaureate degree. However a minimum of 33 approved credits, including EDEC A495C and EDEC A495D, must be completed after the award of the baccalaureate degree.
Note: If the candidate is seeking certification in the State of Alaska, the candidate must complete a State approved Alaska Studies course (HIST A341 Alaska History or ANTH 200 Natives of Alaska is recommended).

INSTITUTIONAL RECOMMENDATION - PRE-K-3RD 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-3rd Grade Post-Baccalaureate Certificate courses.
3. Passing scores on the Praxis I and II exams.
4. College of Education's educational technology assessment satisfactorily completed.
5. Internships satisfactorily completed.

ELEMENRTARY EDUCATION
Professional Studies Building (PSB), Suite 224, (907) 786-4412
http://coe.uaa.alaska.edu/elementary

POST-BACCALAUREATE CERTIFICATE, ELEMENTARY EDUCATION
(with Teacher Certification)
Those students who already have a baccalaureate degree may obtain an Elementary Education Post-Baccalaureate Certificate by completing the following requirements.

Student outcomes for the program are based on the Standards for Alaska’s Teachers located at: www.eed.state.ak.us/standards and the Association for Childhood Education International (ACEI) standards located at www.acei.org.

ADMISSION REQUIREMENTS
ADMISSION TO THE UNIVERSITY OF ALASKA ANCHORAGE: ELEMENTARY EDUCATION POST-BACCALAUREATE CERTIFICATE
See information on Post-Baccalaureate Certificate programs at the beginning of this chapter. Complete the UAA Undergraduate Application for Admission, available on the UAA website at: www.uaa.alaska.edu/admissions.

ADMISSION TO THE DEPARTMENT OF TEACHING AND LEARNING, COLLEGE OF EDUCATION: ELEMENTARY EDUCATION POST-BACCALAUREATE CERTIFICATE
Admission to the Department of Teaching and Learning is a prerequisite for all education course work with the exception of EDFN A101 Introduction to Education and EDFN A300 Philosophical and Social Context of American Education. In order to be admitted to the Department of Teaching and Learning as an Elementary Education Post-Baccalaureate Certificate candidate, applicants must meet the following requirements.
1. Complete a Department of Teaching and Learning, College of Education, application for admission to the Elementary Education Post-Baccalaureate Certificate Program by one of the following dates: March 1, August 1, or November 1. (Please be aware that the admission deadlines for UAA may vary from those of the Department of Teaching and Learning. For financial aid purposes, applicants must adhere to the deadlines established for the UAA Undergraduate Application for Admission.)
2. Have a cumulative grade point average of 3.0 for the baccalaureate degree.
3. Successfully complete the Praxis I exam and Praxis II: Elementary Content Knowledge exam. With the exception of EDFN A101 Introduction to Education and EDFN A300 Philosophical and Social Context of American Education, students may not enroll in education courses without passing these exams at the level established by the College of Education. Contact the College of Education for current passing scores.
4. Have a current negative TB skin test. Free tests are available at the UAA Student Health Center for current UAA students.
Note: Admission to the Department of Teaching and Learning is competitive. Qualified applicants are accepted on a space-available basis.

ADMISSION TO INTERNSHIP
The Admission Committee has the responsibility of determining a candidate’s readiness to enroll in and continue progress in methods and the internship. The candidate must realize that standards set forth below constitute minimum preparation, and it may be the judgment of the Committee that the candidate needs further work to develop content, methodology, or classroom experience.
1. Meet all the requirements for and be admitted to the Department of Teaching and Learning as an Elementary Education Post-Baccalaureate Certificate candidate.
2. Submit an application form for admission to methods and internship by February 20.
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 exam and negative TB skin test. These services are available free at the UAA Student Health Center for current UAA students.
9. Maintain health insurance throughout internship. Students may purchase this insurance through UAA.
Note: Qualified applicants are accepted on a space-available basis. Admission to the Department of Teaching and Learning does not guarantee admission to the internship.

ACADEMIC PROGRESS
All Elementary Education Post-Baccalaureate Certificate courses must be completed with a grade of C or higher in order to obtain an institutional recommendation for elementary teacher certification.

GRADUATION REQUIREMENTS
Candidates must complete the following graduation requirements:

A. GENERAL UNIVERSITY REQUIREMENTS FOR POST-BACCALAUREATE CERTIFICATES
Complete the General University Requirements for Post-Baccalaureate Certificates listed at the beginning of this chapter.

B. 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. Fingerprinting and a background check may be required to participate in field experiences.
5. Internships satisfactorily completed.

4. College of Education's educational technology assessment

3. Passing scores on the Praxis I and II exams.

2. Cumulative GPA of 3.0 in the Elementary Education

1. All course requirements completed with a grade of C or higher.

Following are the requirements for an institutional recommendation.

**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 3.0 in the Elementary Education Post-Baccalaureate Certificate courses.

3. Passing scores on the Praxis I and II exams.

4. College of Education’s educational technology assessment satisfactorily completed.

5. Internships satisfactorily completed.
GRADUATE PROGRAMS

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Medical School (WWAMI Program)

Graduate Degree Program Descriptions
GRADUATE STUDY

Graduate education is an integral part of the University of Alaska Anchorage and is coordinated through the Graduate School. The Dean of the Graduate School has responsibility for leadership and oversight of graduate programs.

The University offers graduate certificates and Master’s Degrees. Students may also pursue graduate studies at UAA that apply toward doctoral degrees offered by other institutions. Some or all course work and research may be completed at UAA while the doctoral degree is granted by another university.

Students who have completed UAA graduate programs possess the knowledge and skill necessary to succeed in furthering their education, and to excel in their chosen professions. Whether the degree is required for advancement, personal and professional growth, or for other goals, students may expect the challenges and rewards of high quality graduate education.

Upon successful completion of their graduate programs, students will have demonstrated mastery of their disciplines and will have participated in independent scholarship. Appropriate exit requirements allow students to express the knowledge they have acquired in formats designed for their respective programs.

To ensure the most beneficial educational experience, students’ academic preparation and likelihood of success in their programs are carefully assessed and validated. Admission requirements provide an opportunity for students to document their credentials and demonstrate readiness for graduate studies. If an entrance exam is required, the nature of that exam is determined by the appropriate discipline. As they progress in their studies, students can expect discipline-specific advising from mentors in their programs.

Graduate students are subject to relevant policies contained in the complete UAA catalog, as well as individual program requirements.

ADMISSIONS

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

All students intending to register for one (1) or more courses must apply for admission. Applications for admission are available online via www.uaa.alaska.edu/admissions or from Enrollment Services.

ADMISSION REQUIREMENTS FOR MASTER’S DEGREES

To qualify for admission to graduate programs, a student must have earned a baccalaureate degree from a regionally accredited institution in the United States, or a foreign equivalent. Students who expect to receive their baccalaureate degrees within two semesters may also apply for graduate admission; see Incomplete Admission later in this section. Admission is granted to applicants who have received their baccalaureate degree and whose credentials indicate an ability to pursue graduate work. Applicants must either have a cumulative grade point average of 3.00 (B average on a 4.00 scale) or meet the grade point average (GPA) requirements of the specific graduate program to which they are applying.

All graduate students must submit official transcripts showing completion and conferral of all baccalaureate degrees and any transcripts reflecting graduate level courses. Transcripts are to be requested by the student and must be submitted in an officially sealed envelope. (Exception: Students do not need to request transcripts from any University of Alaska campus.) Individual graduate programs may also require additional transcripts and/or specific entrance exams such as the Graduate Record Exam (GRE) or the Miller Analogies Test (MAT). See individual program requirements later in this chapter for details.

Applicants with transcripts from institutions outside the United States or Canada must submit official transcripts and English translations, as well as an official statement of educational equivalency from a recommended international credentials evaluation service. A list of evaluation services may be obtained from Enrollment Services. Fees depend upon the agency performing the evaluation. The evaluation service will require a separate transcript and copy of the English translation.

Applicants whose native language is not English, or whose baccalaureate degree was conferred by an institution where English was not the language of instruction, must also submit scores from the Test of English as a Foreign Language (TOEFL). TOEFL scores may be waived if the applicant has been a long-term resident of the United States or of another English-speaking country and demonstrates fluency in reading, writing, listening, and speaking in English.

Applications, official transcripts, and required test scores (if any) must be submitted to Enrollment Services. 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, Enrollment Services will forward each student’s admission packet to the Dean, Department Chair, or designee for consideration.

Each graduate program has individual admission standards and document requirements. Additional information such as writing samples, goal statements, letters of recommendation, research proposals, and/or interviews may be required by specific programs. When required, these materials must be submitted directly to the Department Chair or designee.

Deadlines for submission of materials vary by program. Please note that, for programs with rolling (on-going) 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 July 1, and all required application materials by August 1;
- For Spring admission: all required application forms no later than November 1, and all required application materials by December 1.

No more than nine (9) credits may be completed in the student’s graduate program before program admission. See individual program listings for further details.
INTERNATIONAL GRADUATE STUDENTS
International 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 graduate program, international students must submit the following:

1. An official TOEFL (Test of English as a Foreign Language) score of at least 550 for the paper-based test or 213 for the computer-based test.
2. A statement of financial support for the anticipated period of study and evidence of availability of funds such as a bank statement.
3. An English translation of all required documents.
4. Students who earned their baccalaureate degree outside the United States or Canada must submit an official statement from a recommended international credentials evaluation service stating that their degree is the equivalent of a U.S. bachelor degree. A list of evaluation services may be obtained from Enrollment Services. 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 Enrollment Services for details.

APPLICATION AND ADMISSION STATUS FOR MASTER’S DEGREE-SEEKING STUDENTS:
TERMS AND DEFINITIONS

APPLICATION STATUS

Incomplete Application
An incomplete application is one that is not accompanied by all required documents; generally, an application is considered incomplete until all required official transcripts and test scores have been received.

Pending Application
A pending application has met University requirements and is awaiting departmental recommendation for admission.

Postponed Application
Students may postpone their applications to a future semester by notifying Enrollment Services prior to the end of the semester for which they originally applied.

Withdrawn Before Admission
Students must complete or postpone their admission by the end of the semester for which they have applied. At the end of each semester, all applications still incomplete or not postponed will be withdrawn. Students whose applications have been withdrawn must reapply for admission if they later choose to attend UAA.

ADMISSION STATUS

Complete Admission
All required documents have been received and all admission standards met.

Incomplete Admission
Students who expect to receive their baccalaureate degree from a regionally accredited institution within two semesters (three if including summer) may apply for graduate admission. Formal acceptance becomes final only after the baccalaureate degree is completed and conferred, and all other admission requirements are met. All admission requirements must be satisfied prior to advancement to candidacy.

Provisional Admission
Students who show potential for success in graduate studies but do not meet all the admission requirements for a program may be provisionally admitted. Provisions are established and monitored by the Dean or designee, and faculty of the program. If the provisions are not met within specified deadlines, the student may be removed from graduate degree-seeking status. All terms of provisional admission must be satisfied prior to advancement to candidacy.

Postponed Admission
Students may postpone their admission to a future semester by notifying Enrollment Services prior to the end of the semester for which they originally applied.

Withdrawn After Admission
Admission will be withdrawn when students do not attend classes during, or have not postponed their admission by, the end of their admission semester. Students whose admissions have been withdrawn must apply for re-admission if they later choose to attend UAA.

RELATED MASTER’S DEGREE POLICIES

TRANSFER CREDITS
Up to nine semester credits or the equivalent earned at a regionally accredited institution and not previously used to obtain any other degree may be transferred to UAA and accepted toward a Master’s Degree. Acceptance of transfer credits toward program requirements is at the discretion of the individual program.

Course work used to obtain a Graduate Certificate at another institution, if accepted for inclusion in the Graduate Studies Plan, may be used to satisfy requirements for a Master’s degree.

CHANGE OF MAJOR OR EMPHASIS AREA
Students who wish to change majors or emphasis areas within the same degree and school or college may submit a Graduate Change of Major or Emphasis Area form to Enrollment Services. Students will be expected to meet all admission and program requirements of their new major or emphasis area. Students who change major or emphasis areas after being advanced to candidacy must submit a revised official Graduate Studies Plan to Enrollment Services through their advisor/committee.

CHANGE OF DEGREE
Graduate students who wish to change degree programs must formally apply for admission to the new program through Enrollment Services and pay the appropriate fee. This applies both to changes between schools/colleges and to different degrees within the same school or college (such as a change from the MFA in Creative Writing to the MA in English). Students will be expected to meet all admission and program requirements of the new major or emphasis area.

CONCURRENT DEGREES
Students may pursue concurrent degrees as long as they have formally applied and been accepted to each program through Enrollment Services.
Students may be admitted to or complete Graduate Certificate requirements as they pursue a Master's Degree. Course work used to obtain a Graduate Certificate, if accepted for inclusion in the Graduate Studies Plan, may be used to satisfy requirements for a Master's Degree.

**ADDITIONAL MASTER’S DEGREES**

Students who have received a Master’s Degree or Doctoral Degree from a regionally accredited college or university may earn a UAA Master's Degree by completing a minimum 21 resident credits not used for any other previous degree. The student must meet all the University Requirements for Master's Degrees, School or College Requirements, and Program Requirements. Fulfilling all University, College, and Program Requirements may require more than the minimum 21 credits beyond the previous graduate degree. If the 21 additional credits and other requirements have been earned for each additional degree, two or more degrees may be awarded simultaneously.

**FORMAL ACCEPTANCE TO MASTER’S DEGREE PROGRAMS**

Once all required admission documents have been received by Enrollment Services, 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 Enrollment Services of the decision. Enrollment Services sends the official Certificate of Admission directly to the applicant. Acceptance does not establish candidacy in a graduate program (see Advancement to Candidacy).

**NON-DEGREE-SEEKING STUDENTS**

Non-degree-seeking students who wish to register for graduate courses must have the Department Chair's or faculty member's signature. Registration as a non-degree-seeking student implies no commitment by the University to the student's later admission to a degree program. Up to nine (9) semester credits of graduate level course work may be completed in the student's graduate program before program admission. Non-degree-seeking students do not qualify for Federal or state financial aid benefits nor do they qualify to receive a Form I-20 Certificate of Eligibility for Nonimmigrant (F-1) Student Status. (See Chapter 7, Academic Standards and Regulations, for further information.)

**FULL-TIME/PART-TIME STATUS FOR MASTER’S DEGREE PROGRAMS**

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

Audited courses, Continuing Education Units (CEUs), and Continuous Registration are not included in the computation of the student's full-time or part-time status.

**CATALOG YEAR FOR MASTER’S DEGREE PROGRAMS**

Students may elect to graduate under the requirements of the catalog in effect at the time of formal acceptance to a Master’s Degree program, or the catalog in effect at the time of graduation. If the requirements for a Master’s Degree as specified in the entry-level catalog are not met within seven (7) years of formal acceptance into the program, admission expires and the student must reapply for admission and meet the current admission and graduation requirements in effect at the time of readmission or graduation.

All credits counted toward the degree, including transfer credit, must be earned within the consecutive seven-year period prior to graduation.

**CONTINUOUS REGISTRATION**

Continuous Registration is expected every fall and spring semester, from admission through graduation, until all requirements for the degree are completed.

To make continuous progress in their graduate program, students have the following options:

- Registering for at least one (1) graduate level credit applicable to their graduate degree, or
- Paying the continuous registration fee to remain active in the graduate program although not registered in any courses.

Students are also expected to register or pay the continuous registration fee for the summer if they use university facilities or consult with faculty during the summer. Please contact the individual graduate program for departmental policy/requirements concerning continuous registration. The continuous registration fee may be paid during each semester’s late registration period or in Enrollment Services up until the end of late registration. Students not making continuous progress or not on an approved leave of absence (see Leave of Absence policy) may be removed from Master’s Degree-seeking status.

**LEAVE OF ABSENCE**

While graduate students are expected to make continuous progress toward completion of their graduate programs, there are instances where continuous registration is not possible. Students who need to temporarily suspend their studies must apply for a leave of absence through their advisor and committee chair. If the leave is approved, the student is placed on inactive status. Inactive status does not negate the policy which requires that all credits counted toward the degree, including transfer credits, be earned within a consecutive seven-year period prior to graduation. Students who fail to make continuous progress (see Continuous Registration) or to obtain an approved leave of absence may be removed from Master’s Degree-seeking status.

**GOOD STANDING FOR MASTER’S DEGREE-SEEKING STUDENTS**

Any graduate student who maintains a 3.00 (B) GPA in all course work that meets the student’s graduate program requirements and who is not on probation is considered to be in good standing. For students admitted to candidacy, course work consists of those courses identified on the official Graduate Studies Plan.

**PROBATION**

A graduate student whose GPA falls below 3.00 (B) in courses applicable to his/her graduate program, or a graduate student who for reasons specified in writing, is not making continuous satisfactory progress toward completing the program requirements, will be placed on probation. If the requirements to remove probation are not satisfied within one (1) semester (excluding summer), the student will be removed from Master’s Degree-seeking status. Each school or college has developed written procedures to deal with appeals arising from removal from Master’s Degree-seeking status.

**REMOVAL FROM MASTER’S DEGREE-SEEKING STATUS**

A graduate student’s academic status may be changed to non-degree-seeking if the requirements to remove provisional admission or probation are not satisfied, or if minimum academic standards are not met. In some cases, students may be removed from Master’s Degree-seeking status without having first been placed on probation (see Non-Degree-Seeking Students).
ACADEMIC APPEALS
Students have the right to appeal academic actions (See Academic Dispute Resolution Procedures in the current UAA Fact Finder/Student Handbook for information).

REINSTATEMENT TO MASTER’S DEGREE-SEEKING STATUS
Graduate students who have been removed from Master’s Degree-seeking status for failing to meet academic standards may apply for reinstatement to a graduate program after one (1) calendar year from the semester in which they were removed from Master’s Degree-seeking status. When re-applying to graduate studies, it is the student’s responsibility to demonstrate ability to succeed in the graduate program.

Graduate students who have been removed from Master’s Degree-seeking status for not making continuous progress (see Continuous Registration) must re-apply for graduate study and pay the appropriate fee.

Reinstated graduate students must re-apply for candidacy and may be required to meet the program requirements which are in effect at the time of reinstatement.

GRADUATE ADVISOR
The Dean or designee, in conjunction with the appropriate department chair of the school or college offering the graduate program appoints a Graduate Advisor for each student accepted to a graduate program. The Graduate Advisor and the departmental chair will be from the same program.

GRADUATE STUDIES COMMITTEE
For graduate programs with a thesis, independent scholarship, or research project, the advisor and the student select a Graduate Studies Committee as part of the process of advancement to candidacy. The committee must consist of at least three UAA faculty, including the chair, who shall normally be a full-time faculty member. One (1) faculty committee member may be from a discipline outside the student's school or college. Additional members who are not UAA faculty, but have the appropriate professional credentials, may be included with the approval of the Dean or designee. The committee chair and the student. The committee members and chair must agree to serve and must be approved by the Dean or designee. Any changes to the committee structure require the approval of the Dean or designee, and the committee chair.

RESPONSIBILITIES OF GRADUATE ADVISOR/COMMITTEE
The division of responsibility between the advisor and/or committee is determined at the program level. The graduate advisor and/or committee will do the following:

1. Review the graduate student’s official Graduate Studies Plan, ensuring that it includes: University Requirements for Master’s Degrees; all courses required for the degree; research culminating in a thesis, independent scholarship or project, if required; a written or oral comprehensive examination, independent scholarship evaluation, or thesis or project defense; any special program requirements; and arrangements to remove any deficiencies in the student’s academic background.
2. Approve the official Graduate Studies Plan and Application for Candidacy at the time of Advancement to Candidacy.
3. Monitor the student’s progress and timely completion of all requirements in the official Graduate Studies Plan (see Continuous Registration).
4. Monitor the timely submission of the official Graduate Studies Plan and other documents to Enrollment Services.
5. Review and approve any changes to the official Graduate Studies Plan, directing timely submission of the revised plan to The Office for Research and Graduate Studies which will forward the original amended document to Enrollment Services.
6. Review and approve the thesis, independent scholarship, or research project, including initial proposals, according to procedures established by the individual graduate program.
7. Review, and approve requests for temporary leaves of absence, which, if approved, will result in the student being placed on inactive status.
8. Administer and assess the comprehensive exam, administer independent scholarship evaluation, or thesis or project defense.

OFFICIAL GRADUATE STUDIES PLAN
The official Graduate Studies Plan formally establishes the specific program requirements which will, upon satisfactory completion, entitle the student to receive the Master’s Degree. The plan is based upon the catalog requirements for the graduate degree program to which the student has been accepted. The plan becomes official once it is approved by the Dean of the Graduate School or designee and is filed with Enrollment Services. Students are expected to complete all requirements listed on their official Graduate Studies Plan, as well as all University Requirements for Master’s Degrees. Any revision to the plan will need to be submitted to the Office for Research and Graduate Studies through the graduate advisor/committee.

ADVANCEMENT TO CANDIDACY
After demonstrating an ability to succeed in graduate study as defined by the relevant graduate program, the student may apply for advancement to candidacy. Advancement to candidacy status is a prerequisite to graduation and is determined by the Dean 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.

To be approved for candidacy a student must:

• Be in good standing as defined in the good standing policy.
• Demonstrate competence in the methods and techniques of the discipline.
• Receive approval of the independent scholarship, thesis or research project proposal from the student’s Graduate Studies Committee.
• Satisfy all prerequisites and remove all academic deficiencies.
• Satisfy all terms of a provisional admission.
• Submit an approved, official Graduate Studies Plan.

UNIVERSITY REQUIREMENTS FOR MASTER’S DEGREES
To complete a Master’s degree, a student must complete the University Requirements for Master’s Degrees, School or College Requirements, and Program Requirements. A graduate student’s program is based upon the catalog requirements for the relevant graduate degree which are in effect at the time the student is accepted. University requirements for all graduate degrees are as follows:

1. A student must be admitted to the degree program and establish an approved Graduate Studies Plan.
2. No more than nine (9) credits may be completed in the student’s graduate program before program admission. See individual program listings for further details.
3. The student must complete at least 30 approved semester credits beyond the baccalaureate degree. At least 24 credits in each graduate degree must consist of courses other than thesis, independent scholarship (independent study courses), and/or a research project.
4. Up to nine (9) semester credits not used toward any other degree (graduate or undergraduate) may be transferred to UAA from an accredited institution and counted toward a Master’s degree. Acceptance of transfer credit toward program requirements is at the discretion of the individual program faculty.
GRADUATE PROGRAMS

5. Individual Program Deans or designees may allow credit earned at other universities within the UA system, excluding thesis credit and credits used toward another degree, to be transferred to UAA, as long as at least nine (9) credits applicable to the student’s program are earned at UAA after acceptance into the program.

6. A GPA of at least 3.00 (B) must be earned in courses identified in the official Graduate Studies Plan.

7. Only 400- and 600-level courses approved by the graduate student’s graduate advisor, Dean or designee, and graduate studies committee, may be counted toward graduate program requirements.

8. In 400-level courses, a minimum grade of B is required for the course to count toward the program requirements.

9. Courses at the 500-level are for professional development and are not applicable toward any degree.

10. In 600-level courses, a grade of C is minimally acceptable, provided the student maintains a cumulative GPA of 3.00 (B) in all courses applicable to the graduate program. At least 21 credits must be taken at the graduate level (600) for any Master’s Degree, including thesis, independent scholarship, or research credits. For performance comparison only, in 600-level courses a grade of P (Pass) is equivalent to a B or higher, but does not enter into the GPA calculation.

11. Courses taken as credit by examination, or graded Credit/No Credit (CR/NC) do not count toward graduate program requirements. They may, however, be used to satisfy prerequisites or to establish competency in a subject, thus allowing the advisor/committee to waive certain courses in an established program, as long as the total credits in the program remain the same.

12. If the requirements for a Master’s Degree as specified in the entry-year catalog are not met within seven (7) years of formal acceptance into the program, admission expires and the student must reapply for admission and meet the admission and graduation requirements in effect at the time of readmission or graduation.

13. All credits counted toward the degree, including transfer credits, must be earned within the consecutive seven-year period prior to graduation.

14. Students are expected to be continuously registered throughout their graduate program (see Continuous Registration).

15. The student must complete all requirements established by the program and must pass a written or oral comprehensive examination, independent scholarship evaluation, thesis, or project defense. The thesis or research project must be approved by all thesis committee members to be considered as passing the requirement.

16. When an oral comprehensive examination, thesis defense, or independent scholarship evaluation is required, the student may select an outside reviewer approved by the Dean or designee of the program to participate in the oral comprehensive examination to assure that the examination, defense, or scholarship evaluation is fair and appropriate. The outside reviewer is a faculty member from another department in the university, or other qualified individual in the area in which the student is seeking a degree.

17. Thesis format must meet general UAA requirements for format as determined by the UAA Consortium Library.

APPLICATION FOR GRADUATION

Graduate students must submit an Application for Graduation, signed by the academic advisor and accompanied by the required fee, to Enrollment Services. Application for Graduation deadlines are March 1 for summer graduation, May 1 for fall graduation, and September 15 for spring graduation.

Applications received after the deadline will be processed for the following semester. Students who apply for graduation but do not complete degree requirements by the end of the semester must apply for graduation. The application fee must be paid with each Application for Graduation.

INTERDISCIPLINARY STUDIES DEGREE

A student who has received a baccalaureate degree from a regionally accredited institution and whose credentials indicate the ability to pursue graduate work may develop an interdisciplinary studies degree program (MA or MS). He/she may apply and meet all requirements for graduate admission specifying 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 his/her program credits from one existing graduate degree program. Courses must come from two or more disciplines (i.e., subjects). A minimum of 21 credits must be drawn from existing approved 600-level courses. No more than nine (9) credits of directed study, independent study, individual research, or thesis may be included in an Interdisciplinary Studies degree. In addition to the requirements noted above, students must comply with the following procedures:

1. The student submits a UAA Graduate Application for Admission (Interdisciplinary Studies Major) with the appropriate fee to Enrollment Services.

2. The student invites a faculty member to chair their graduate studies committee and to serve as the student’s Graduate Advisor. The chair shall normally be a full-time faculty member. The chair must agree to serve and must be approved by the appropriate Dean(s) or designee(s).

3. The student proposes a Graduate Studies Committee of at least three faculty members from the appropriate academic disciplines. The committee members and chair must represent all concentration areas of nine (9) credits or more. The committee members must agree to serve and be approved by the appropriate Dean(s) or designee(s).

4. The student develops a proposed Interdisciplinary Studies Plan specifying the degree (MA or MS) and title or concentration. In developing this proposal, the student should review all graduate degree policies and procedures. To receive an Interdisciplinary Studies Master’s Degree from UAA, the student must incorporate into their proposal all University Requirements for Master’s Degrees, and any school or college requirements applicable. All such requirements must be satisfied prior to conferral of the degree.

5. The student presents the proposal to the committee and chair for preliminary review and approval. If the committee and chair support the proposal, it will be forwarded to the appropriate Dean(s) or designee(s). If the proposal and committee structure are approved, the proposal is then submitted to the Graduate School.

6. Upon receipt of the proposal and all required admission information, the Graduate School forwards the student's admission packet to the Dean of the Graduate School for final approval. The proposal and committee structure, when approved by the Dean of the Graduate School, becomes the student's official Graduate Studies Plan. A copy of the Graduate Studies Plan will be kept in the Graduate School.

7. The Graduate Studies Plan and complete admission packet will then be forwarded to the specific graduate programs for an acceptance decision. Acceptance is determined by the Dean and/or faculty of the affected graduate programs, who then inform Enrollment Services of their decision. Enrollment Services sends the official Certificate of Admission directly to the student. Acceptance does not establish candidacy in the program.

8. Once accepted to graduate study, the students work with their advisors and committees to ensure that satisfactory progress is made toward completing degree requirements. After demonstrating an ability to succeed in graduate study, as defined by the committee and advisor, the student may apply for Advancement to Candidacy status (see Continuous Registration and Advancement to Candidacy).

GRADUATE CERTIFICATES

A graduate-level certificate program is a coherent sequence of related graduate courses. These programs are designed to provide graduate education past the baccalaureate level and/or to enhance the education of students who have already completed a Master’s Degree. Students will complete a linked series of courses, which may include a capstone experience or project that focuses their intellectual experience. Upon completion of a certificate, students will have acquired an area of specialization or an interdisciplinary perspective. Further, success in a graduate-level certificate program should prepare students to better accomplish the goals of their discipline.
ADMISSIONS
(907) 786-1480
www.uaa.alaska.edu/admissions
All students intending to register for one (1) or more courses must apply for admission. Applications for admission are available from Enrollment Services or online via www.uaa.alaska.edu/admissions.

ADMISSION REQUIREMENTS FOR GRADUATE CERTIFICATES

To qualify for admission to graduate certificate programs, a student must have earned a Baccalaureate or Master’s Degree from a regionally accredited institution in the United States or a foreign equivalent. Students who expect to receive their Baccalaureate or Master’s Degree within two semesters may also apply for graduate admission; see Incomplete Admission later in this section. Admission is granted to applicants who have received their Baccalaureate or Master’s Degree and whose credentials indicate their ability to pursue graduate work. In general, applicants must either have a cumulative GPA of 3.00 (B average on a 4.00 scale) or meet the GPA requirements of the specific graduate certificate program to which they are applying.

All graduate students must submit official transcripts showing completion and conferral of all baccalaureate and/or graduate degrees and any transcripts reflecting graduate level courses. Transcripts are to be requested by the student and must be submitted in an officially sealed envelope. (Exception: Students do not need to request transcripts from any University of Alaska campus.) Individual programs may also require additional transcripts and/or specific entrance exams such as the GRE or the Miller Analogies Test. See individual program requirements later in this chapter for details.

Applicants with transcripts from institutions outside the United States or Canada must submit official transcripts and English translations as well as an official statement of educational equivalency from a recommended international credentials evaluation service. A list of evaluation services may be obtained from Enrollment Services. Fees depend upon the agency performing the evaluation. The evaluation service will require a separate transcript and copy of the English translation.

Applicants whose native language is not English or whose baccalaureate degree was conferred by an institution where English was not the language of instruction must also submit scores from the Test of English as a Foreign Language (TOEFL). TOEFL scores may be waived if the applicant has been a long-term resident of the United States or of another English-speaking country and demonstrates fluency in reading, writing, and speaking in English.

Applications, official transcripts, and required test scores (if any) must be submitted to Enrollment Services. 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, Enrollment Services will forward each student's admission packet to the Dean, Department Chair, or designee for consideration.

Each graduate certificate program has individual admission standards and document requirements. All of these materials become the property of UAA and are only released or copied for use within the University of Alaska system. Additional information such as writing samples, goal statements, letters of recommendation, research proposals, and/or interviews may be required by specific programs. When required, these materials must be submitted directly to the Department Chair or designee.

Deadlines for submission of materials vary by program. No more than one third of the credits may be completed in the student’s certificate program before application for admission. See individual program listings for information.

INTERNATIONAL GRADUATE CERTIFICATE STUDENTS

International 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 graduate program, international students must submit the following:

1. An official TOEFL (Test of English as a Foreign Language) score of at least 550 for the paper-based test or 213 for the computer-based test.
2. A statement of financial support for the anticipated period of study and evidence of availability of funds such as a bank statement.
3. An English translation of all required documents.
4. Students who earned their baccalaureate degree outside the United States or Canada must submit an official statement from a recommended international credentials evaluation service stating that their degree is the equivalent of a U.S. bachelor degree. A list of evaluation services may be obtained from Enrollment Services. 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 Enrollment Services for details.

APPLICATION AND ADMISSION STATUS FOR GRADUATE CERTIFICATE-SEEKING STUDENTS: TERMS AND DEFINITIONS

APPLICATION STATUS

Incomplete Application
An incomplete application is one that is not accompanied by all required documents; generally, an application is considered incomplete until all required official transcripts and test scores have been received.

Pending Application
A pending application has met University requirements and is awaiting departmental recommendation for admission.

Postponed Application
Students may postpone their applications to a future semester by notifying Enrollment Services 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.
GRADUATE PROGRAMS

Incomplete Admission
Students who expect to receive their Baccalaureate or Master’s Degree from a regionally accredited institution within two semesters (three if including summer) may apply for graduate admission. Formal acceptance becomes final only after the Baccalaureate or Master’s Degree is completed and conferred, and all other admission requirements are met. All admission requirements must be satisfied prior to advancement to candidacy.

Provisional Admission
Students who show potential for success in graduate studies but do not meet all the admission requirements for a program may be provisionally admitted. Provisions are established and monitored by the Dean or designee, and faculty of the program. If the provisions are not met within specified deadlines, the student may be removed from graduate certificate-seeking status. All terms of provisional admission must be satisfied prior to advancement to candidacy.

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 chose to attend UAA.

Related Graduate Certificate Policies

Graduate Certificate Transfer Credits
Up to one third of the credits (semester) or the equivalent earned at a regionally accredited institution and not previously used to obtain any undergraduate degree or certificate may be transferred to UAA and accepted toward a graduate certificate. Acceptance of transfer credits toward program requirements is at the discretion of the individual program.

Change of Graduate Certificates
Graduate students who wish to change certificate programs must formally apply for admission to the new certificate program through Enrollment Services 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 Enrollment Services.

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 in residence at UAA and after admission to the certificate program. Credits previously used for any undergraduate certificate or degree may not be used to satisfy graduate certificate program requirements. Multiple graduate certificates may be awarded only if they differ by at least one third of their credit requirements.

Formal Acceptance to Graduate Certificate Programs
Once all required admission documents have been received by Enrollment Services, 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 Enrollment Services of the decision. Enrollment Services sends the official Certificate of Admission directly to the applicant. Acceptance to a graduate certificate program does not guarantee later admission to other graduate certificates or degrees.

Non Degree-Seeking Students
Non-degree-seeking students who wish to register for graduate courses must have the Department Chair’s or faculty member’s signature. Registration as a non-degree-seeking student implies no commitment by the University to the student’s later admission to a graduate certificate program. Up to one third of the credits of graduate certificate course work may be completed in the student’s graduate certificate program before program admission. Non-degree-seeking students do not qualify for Federal or state financial aid benefits nor do they qualify to receive a Form I-20 Certificate of Eligibility for Nonimmigrant (F-1) Student Status.

Full-Time/Part-Time Status for Graduate Certificate-Seeking Students
A student who has been admitted to a UAA graduate certificate program and is enrolled at UAA for nine (9) or more 600-level credits is classified as full-time. Courses at the 400-level will count toward full-time status only if they are applicable to the graduate certificate program. A graduate certificate student enrolled at UAA for fewer than nine (9) credits is classified as part-time.

Audited courses, Continuing Education Units (CEUs), and professional development courses (500 level) are not included in the computation of the student’s full-time or part-time status.

Catalog Year for Graduate Certificate Programs
Students may elect to graduate under the requirements of the catalog in effect at the time of formal acceptance to a graduate certificate program, or the catalog in effect at the time of graduation.

If the requirements for a graduate certificate program as specified in the entry-level catalog are not met within seven (7) years of formal acceptance into the program, admission expires and the student must reapply for admission and meet the admission and graduation requirements in effect at the time of readmission or graduation.

All credits counted toward the certificate, including transfer credit, must be earned within the consecutive seven-year period prior to graduation.

Good Standing for Graduate Certificate-Seeking Students
A graduate certificate-seeking student who maintains a 3.00 (B) cumulative GPA in courses on their official Graduate Certificate Studies Plan is considered in good standing.
REMOVAL FROM GRADUATE CERTIFICATE-SEEKING STATUS

A graduate certificate student's academic status may be changed to non-degree-seeking if the requirements to remove provisional admission are not satisfied, or if minimum academic standards are not met.

A graduate certificate student whose cumulative GPA falls below 3.00 (B) in courses applicable to his/her graduate certificate program, or a graduate certificate student who, for reasons specified in writing, is not making satisfactory progress toward completing the program requirements may be removed from graduate certificate-seeking status. Each school or college has developed procedures to deal with appeals arising from removal from graduate certificate-seeking status.

ACADEMIC APPEALS

Students have the right to appeal academic actions (See Academic Dispute Resolution Procedure in the UAA Fact Finder/Student Handbook for information).

REINSTATEMENT TO GRADUATE CERTIFICATE-SEEKING STATUS

Graduate students who have been removed from graduate certificate-seeking status for not making satisfactory progress must reapply for a graduate certificate program and pay the appropriate fee.

GRADUATE CERTIFICATE ADVISOR

The Dean or designee of the appropriate school or college offering the graduate certificate program appoints an advisor for each student accepted to the program.

RESPONSIBILITIES OF THE GRADUATE CERTIFICATE ADVISOR/COMMITTEE

The division of responsibility between the advisor and/or committee is determined at the program level. The graduate certificate advisor and/or committee will do the following:

1. Review the student's graduate certificate studies plan, ensuring that it includes: the Graduate Certificate University Requirements; all courses required for the certificate; any special program requirements; and a capstone experience or project, if required.
2. Arrange to remove any deficiencies in the student's admission or academic background.
3. Approve the official Graduate Certificate Studies Plan.
4. Monitor the student's progress and timely completion of all requirements.
5. Monitor the timely submission of the official Graduate Certificate Studies Plan and other documents to Enrollment Services.
6. Review and approve any changes to the official Graduate Certificate Studies Plan, directing timely submission of the revised program plan to Enrollment Services.
7. Review and approve the capstone experience or project according to procedures established by the individual program.
8. Administer and assess a comprehensive exam, if required.

OFFICIAL GRADUATE CERTIFICATE STUDIES PLAN

The official Graduate Certificate Studies Plan formally establishes the specific program requirements which will, upon satisfactory completion, entitle the student to receive the graduate certificate. The program plan is based upon the catalog requirements for the graduate certificate program to which the student has been accepted. The plan becomes official once it is approved by the Dean or designee and is filed with Enrollment Services. Students are expected to complete all requirements listed on the official Graduate Certificate Studies Plan, as well as all Graduate Certificate University Requirements and College Requirements for the program. Any revision to the plan will need to be submitted to Enrollment Services through the graduate certificate advisor/committee.

DETERMINING PROGRAM REQUIREMENTS

A graduate certificate student's program is based upon the catalog requirements for the relevant graduate certificate program which are in effect at the time the student was accepted to the program.

GRADUATE CERTIFICATE UNIVERSITY REQUIREMENTS

University Requirements for all graduate certificates are as follows:

1. A student must be admitted to the certificate program and establish an approved Graduate Studies Plan. Students must fulfill all General University Requirements, College Requirements and Graduate Certificate Program Requirements.
2. The student must complete at least 12 approved semester credits not counted toward the baccalaureate degree.
3. The student must complete all requirements established by the program.
4. A GPA of at least 3.00 (B) must be earned in courses identified on the official Graduate Certificate Studies Plan.
5. Only 400- and 600-level courses approved by the student's graduate certificate advisor/committee and the Dean or designee, may be counted toward graduate certificate requirements.
6. In 400-level courses, a minimum grade of B is required for the course to count toward the certificate program requirements.
7. In 500-level courses are for professional development and are not applicable toward any certificate, even by petition.
8. In 600-level courses, a grade of C is minimally acceptable, provided the student maintains a cumulative GPA of 3.00 (B) in all courses applicable to the graduate certificate program. At least two thirds of the credits required for the certificate must be taken at the graduate level (600). For performance comparison only, in 600-level courses a grade of P (Pass) is equivalent to a B or higher, but does not enter into the GPA calculation.
9. Up to one third of the semester credits used to complete the requirements of a graduate certificate may be transferred to UAA from a regionally accredited institution. Acceptance of transfer credit toward program requirements is at the discretion of the individual program.
10. Individual Program Deans or designees may allow credit earned at other universities in the UA system, to be transferred to UAA, as long as at least six (6) credits applicable to the student's certificate program are earned at UAA after acceptance into the program.
11. Courses taken by correspondence, credit by examination, or graded Credit/No Credit (CR/NC) do not count toward graduate certificate requirements. They may, however, be used to satisfy prerequisites or to establish competency in a subject, thus allowing the advisor or committee to waive certain courses in an established program, as long as the total credits in the graduate certificate program remain the same.
12. If the requirements for a graduate certificate as specified in the entry-level catalog are not met within seven (7) years of formal acceptance into the program, admission expires and the student must reapply for admission and meet the admission and graduation requirements in effect at the time of readmission or graduation.
13. All credits counted toward the graduate certificate, including transfer credits, must be earned within the consecutive seven-year period prior to graduation.
14. Course work used to obtain a graduate certificate or graduate degree, if accepted for inclusion in the Graduate Studies Plan, may be used to satisfy requirements for a graduate certificate. However, at least one third of the certificate credit requirements must not have been used for any other degree or certificate.
GRADUATE PROGRAMS, COLLEGE OF ARTS AND SCIENCES

15. At least one third of the credits used to satisfy graduate certificate requirements must be UAA resident credit completed after acceptance into the program. See the exception for UA system credits in (10) above.

APPLICATION FOR GRADUATION

Graduate certificate students must submit an Application for Graduation, signed by the academic advisor and accompanied by the required fee, to Enrollment Services. Application for Graduation deadlines are March 1 for summer graduation, May 1 for fall graduation, and September 15 for spring. Applications received after the deadline will be processed for the following semester. Students who apply for graduation but do not complete the graduate certificate requirements by the end of the semester must re-apply for graduation. The application fee must be paid with each Application for Graduation.

MEDICAL SCHOOL

WWAMI Program

(907) 786-4789

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. First year classes for Alaskans are held at the University of Alaska Anchorage. Second year students from all five states attend classes at the University of Washington in Seattle. The six-week blocks of clinical experiences, called clerkships, that occupy the 3rd and 4th years can be taken in any of the five states, and an Alaska Track allows most of these to be completed in Alaska.

ELIGIBILITY

Alaskan residents are eligible to apply for admission. They 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). Further, current details can be found at www.uwmedicine.org or by contacting the WWAMI office using the contact information provided below.

ADMISSIONS

Applications are accepted through the American Medical College Application Service (AMCAS). WWAMI applications are submitted to the University of Washington School of Medicine (UWSOM). All applications received by UWSOM from Alaskan residents will be considered for the WWAMI Program in Alaska. Complete application information, including details about the selection procedure can be found at www.uwmedicine.org or by contacting the WWAMI office using the contact information provided below.

For more information concerning this medical school program or the premedical curriculum at UAA, contact the WWAMI Biomedical Office at 786-4789, visit their web site at http://biomed.uaa.alaska.edu or visit Engineering 331.

COLLEGE OF ARTS AND SCIENCES

ANTHROPOLOGY

Beatrice McDonald Hall (BMH), Room 214, (907) 786-6840
http://anthro.uaa.alaska.edu

The MA degree in Anthropology, with emphases in General or Applied Anthropology, is designed to provide a rigorous background in contemporary theory and practice in anthropology, particularly through the use of proseminars, internships, and independent research. The MA degree requires a research-based thesis. Within the MA program, the Applied Anthropology emphasis offers specialized tracks designed to train students in applied aspects of anthropology that may be employment related. The Applied Cultural Anthropology track identifies and assists in resolving current social issues in their cultural dimensions. The Applied Biological Anthropology track encompasses forensic anthropology, medical anthropology, and other practical applications of physical anthropology. The Cultural Resource Management track involves the inventory, assessment, and conservation of archaeological and historical sites and remains, and places of traditional cultural importance, as a part of a larger management framework.

MASTER OF ARTS, ANTHROPOLOGY

ADMISSION REQUIREMENTS

See Admission Requirements for Master’s Degrees at the beginning of this chapter. Deadline for application: February 15th for fall semester admission. Students seeking admission into the Anthropology MA degree program must meet the following requirements (1-3) and must submit the following documents (4-9):

1. Although graduating college or university seniors are invited to apply, no student may be formally admitted to graduate study until the baccalaureate degree has been awarded from an accredited college or university.

2. It is strongly recommended that the student has completed a minimum of 18 credits of undergraduate coursework in Anthropology with a GPA of 3.0. An undergraduate major in anthropology is preferred.

3. Students must have at least a 3.0 overall undergraduate GPA.

4. Completed UAA graduate admissions application form.

5. Official transcripts of college-level work from each institution attended.

6. Graduate Record Examination results (General Test Scores), taken within five years prior to the application date.

7. Three letters of recommendation from professors or other professionals particularly qualified to attest to the applicant’s qualifications for graduate study.

8. A letter of intent, including a brief statement of the applicant’s research and career goals and reasons for pursuing graduate study in Anthropology at UAA.

9. (Optional) An example of a substantial paper or research proposal indicative of the applicant’s potential for graduate study.

Applicants may also be requested to complete a personal interview.

Acceptance is determined by the Anthropology Graduate Admissions Committee and is based on:

1. The prospective student’s overall credentials; and
2. The availability of appropriate faculty for student research interests.

Failure to meet any of the above criteria may result in conditional admission to the MA program. Conditional admission may be conferred on students if important deficiencies are identified in their undergraduate training. Conditionally admitted students are notified of
those deficiencies, and required to rectify them at UAA, normally within a period of one year, before admission to regular status in the program is conferred. In some cases, deficiencies can be made up at another academic institution. Conditional students cannot receive graduate teaching assistantships, research assistantships, or departmental travel/research grants.

Prospective graduate students are strongly advised to contact all potential faculty for research/advisor arrangements at an early stage of their admission process. An attempt is made to assign an initial advisor to students based on interests and other academic criteria.

**ACADEMIC PROGRESS**

To maintain continuous progress toward the MA degree, a student in the graduate program is expected to complete each semester a minimum of 9 credits of course work applicable to the program, with grades of A or B, 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 5 years, unless on an approved leave of absence. Such leaves of absence may not total more than 4 semesters.

**CANDIDACY REQUIREMENTS**

See the beginning of this chapter for Advancement to Candidacy requirements. A student may apply for Advancement to Candidacy by doing the following:

1. Select a Graduate Studies Committee by the end of the first semester of graduate study.
2. Submit an Official Graduate Studies Plan, as described in the UAA catalog, after no more than three semesters of full-time graduate study.
3. Complete at least 24 semester-credits of non-thesis course work 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 A253 or the equivalent, or computer skills such as photogrammetry, SEM image analysis, or GIS analysis will meet this requirement.
5. In addition, a student may be required to demonstrate mastery of a foreign language, if deemed necessary by the Graduate Studies Committee.
6. Pass a written comprehensive examination in anthropology. Normally, this exam is taken before the end of the second year of study, but in any case must be taken by the completion of 30 semester-credits. This exam may be taken twice, but failure to pass the exam a second time will result in removal from the program.
7. Prepare a thesis prospectus for approval by the Graduate Studies Committee.

**GRADUATION REQUIREMENTS**

See University Requirements for Master’s Degrees at the beginning of this chapter.

**PROGRAM REQUIREMENTS**

1. The following courses must be taken with a grade of A or B.
2. At least 21 credits must be taken at the graduate (600) level.
3. No more than six (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 submit a written MA Thesis to the Graduate Studies Committee, conforming to UAA specifications.
6. The student must pass an oral defense of the thesis, open to the university community and the general public.
7. The student must submit an Application for Graduation.
8. One of the following study emphases must be chosen:

**General Anthropology Emphasis**

1. Complete the following:
   - ANTH A602 Proseminar in Cultural Anthropology* 3
   - ANTH A605 Proseminar in Biological Anthropology* 3
   - ANTH A611 Proseminar in Archaeology* 3
   - ANTH A699 Thesis Research 1-6
   - 600 level elective courses 6
   - 400 or 600 level elective courses 9-14
2. A total of 30 credits are required for the degree.

**Applied Anthropology Emphasis**

1. Complete the following:
   - ANTH A615 Advanced Applied Anthropology 3
   - ANTH A630 Advanced Research Methods in Cultural Anthropology* 3
   - ANTH A695 Anthropology Practicum 3
   - ANTH A625 Field Methods in Anthropology (1-8)*
   - ANTH A676 Ethical Issues in Archaeology (3)

*All Proseminar courses must be taken in residence at UAA. These courses may not be taken by Directed Study or by correspondence. Students may not take any Proseminar until formally admitted to the MA Program.

2. Complete one of the following tracks:

**Applied Cultural Anthropology Track**

Complete the following courses (9 credits):
   - ANTH A615 Advanced Applied Anthropology 3
   - ANTH A630 Advanced Research Methods in Cultural Anthropology* 3
   - ANTH A695 Anthropology Practicum 3

**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 A665 Analytical Techniques in Biological Anthropology (3)
   - ANTH A685 Advanced Human Osteology (3)
   - ANTH A686 Advanced Applied Human Osteology (3)
   - ANTH A695 Anthropology Practicum (3)

**Cultural Resource Management Track**

a. Complete the following:
   - ANTH A675 Cultural Resource Management 3
   - ANTH A631 Field Methods in Archaeology (1-8)*
   - ANTH A680 Advanced Analytical Techniques in Archaeology (3)
   - ANTH A676 Ethical Issues in Archaeology (3)
   - ANTH A681 Advanced Museum Studies in Anthropology (3)
   - ANTH A695 Anthropology Practicum (3)
   - *No more than three (3) credits may be applied to this emphasis.

b. Complete six (6) credits from the following:
   - ANTH A631 Field Methods in Archaeology (1-8)*
   - ANTH A680 Advanced Analytical Techniques in Archaeology (3)
   - ANTH A676 Ethical Issues in Archaeology (3)
   - ANTH A681 Advanced Museum Studies in Anthropology (3)
   - ANTH A695 Anthropology Practicum (3)

3. Complete 400-level or 600-level elective courses 6-11
4. A total of 30 credits are required for the degree.

**FACULTY**

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BIOLOGICAL SCIENCES

Engineering Building (ENGR), Room 340, (907) 786-4770
http://biolgy.uaa.alaska.edu
The WWAMI/Biomedical program may be found at
http://biomed.uaa.alaska.edu

The graduate program in Biological Sciences offers a research program of study leading to the Master of Science degree. The MS degree requires a thesis that is the result of research performed either under the supervision of UAA faculty or under the supervision of a qualified and approved affiliate advisor from outside the University community.

MASTER OF SCIENCE, BIOLOGICAL SCIENCES

ADMISSION REQUIREMENTS

See Admission Requirements for Master’s Degrees at the beginning of this chapter.

Students seeking admission into the Biological Sciences MS degree program should meet the following requirements (1-2) and must submit the following documents (3-8):

1. Students must have a bachelor’s degree in biology, chemistry, or equivalent science to be determined by the Biological Sciences Graduate Committee (BSGC). Although graduating college or university seniors are invited to apply, no student may be formally admitted to graduate study until the baccalaureate degree has been awarded from an accredited college or university.
2. Applicants must have at least a 3.0 GPA, OR at least a 70th percentile in two out of the six GRE scores (verbal, quantitative, analytical, and the three subtests of the Subject GRE). Successful applicants ordinarily have no grade lower than a C in undergraduate science courses.
3. Completed UAA graduate application form.
4. Official transcripts of all college-level work.
5. Graduate Record Examination scores (General GRE scores and Biology, Biochemistry or Chemistry Advanced GRE subject scores).
6. Three letters of recommendation.
7. A brief statement of applicant’s research and career goals.
8. A letter of support from a UAA faculty member expressing willingness to accept the applicant into his/her research group, and a statement of available funding or funding opportunities for research support for the student.

Items 3-5 must be submitted to enrollment services; items 6-8 are submitted directly to the Department of Biological Sciences.

Admission deadlines: All materials are due by March 15 for Fall admission, and by November 15 for Spring admission.

Acceptance is determined by the Biological Sciences Graduate Committee (BSGC) and is based on:

1. Prospective student’s overall credentials;
2. Availability of appropriate faculty for research student interests.

Prospective graduate students are strongly advised to contact all potential faculty for research/ advisor arrangements at an early stage of their admission process. Applicants must have a faculty mentor to be accepted into the program. Faculty research interests are available online: http://biology.uaa.alaska.edu.

GRADUATION REQUIREMENTS

See University Requirements for Master’s Degrees at the beginning of this chapter.

PROGRAM REQUIREMENTS

1. Students working toward an MS degree in Biological Sciences must fulfill the following minimum credit requirements:
   600-level Science Credit [does not include 692, 696, 698, 699 credits] 9
   BIOL A692 Graduate Seminar (1) 2 (up to 6)
   BIOL A698/A699 Research and Thesis (1-6) 6
   A minimum of 30 credits is required, of which at least 21 credits must be at the 600-level. Upper division (400-level) credits may be applied to the degree only with approval of the Graduate Study Committee Chair (Research Advisor). Students may take any number of 698/699 credits, even though only the first 6 credits will count toward the 30-credit requirement for the M.S.
2. MS students awarded a Teaching Assistant (TA) stipend are required to teach two laboratory sections per semester (Fall and Spring) per year of stipend support.
3. Each student must select a Graduate Study Committee (GSC) consisting, at a minimum, of three UAA faculty, to be chaired by the student’s Research Advisor. If the Research Advisor is an Affiliate Faculty member, a permanent faculty Co-Chair must also serve on the student’s GSC.
4. By the end of the first semester of graduate work, each graduate student must prepare a Graduate Study Plan for approval by the student’s GSC. The approved Study Plan and any subsequent approved revisions should be submitted to the chair of the BSGC, a copy filed in the Department Office, and the original sent to Records. During the second semester, a written research plan is to be submitted for approval by the student’s GSC. Students must give an oral presentation of their research plan within the second semester of graduate work, which is approved by the GSC.
5. Each student must formally apply for Advancement to Candidacy no later than the third week of the semester in which the student will complete 18 credits of graduate study at UAA. Students may not formally apply if any deficiencies exist as defined by general university requirements and this MS program.
6. After the student completes their research, a research thesis must be written by the student and submitted at least two months prior to graduation for review and approval by the GSC. Thesis format shall be determined by the student and advisor.
7. Students will be expected to schedule a final Thesis Defense Seminar of their research, 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

Pursuit of a doctoral degree is possible in selected areas of biological sciences through a cooperative program with the University of Alaska Fairbanks. For more information, please contact the UAA Department of Biological Sciences or the University of Alaska Fairbanks, Office of Graduate Studies.

FACULTY

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CLINICAL PSYCHOLOGY

Social Sciences Building (SSB), Room 264, (907) 786-1795
http://psych.uaa.alaska.edu

The MS degree in Clinical Psychology is designed to be responsive to the needs of a variety of Alaska mental health service settings and to meet prerequisites for licensing requirements at the master's level in psychology for the state of Alaska. The MS degree allows graduates to pursue either the Licensed Professional Counselor (LPC) or the Licensed Psychological Associate (LPA) license.

The goal of the program is to provide students with a well-rounded education that includes an evidence-based background in the best practices applicable to community mental health settings. The curriculum addresses local behavioral health needs in a context that is culturally sensitive and community focused. An important program goal is the recruitment and retention of non-traditional students.

MASTER OF SCIENCE, CLINICAL PSYCHOLOGY

ADMISSION REQUIREMENTS

1. Application deadline: April 1 for fall admission. This is the only opportunity for program admission each year.
2. Compliance with Admission Requirements for Master’s Degrees as given in the University of Alaska Anchorage catalog.
3. Undergraduate training in statistics, learning and cognition, clinical psychology, and testing and measurements. Examples of UAA courses that meet these requirements are PSY A260, PSY A355 or PSY A445, PSY A425, and PSY A473; alternative courses and/or experiences will also be considered. Students may be admitted without all prerequisites completed, but if so the necessary courses are expected to be taken early in the MS program and are required prior to specific graduate courses.
4. Submission of scores on the general aptitude test of the Graduate Record Exam.
5. Those applicants who do not have a baccalaureate degree in psychology must submit scores for the psychology subject test of the Graduate Record Exam.
6. Submission of a letter of intent describing the applicant's interest and purpose in pursuing the MS degree in Clinical Psychology. The letter should address the reasons why the degree is being sought at this point in the applicant's professional development.
7. Submission of three professional letters of reference that address the applicant's suitability for the program.
8. Submission of Student Disclosure Form and Background Check. Form and procedures obtained from department secretary.
9. Submission of a resume or vita that documents the applicant's vocational and professional experiences, academic achievements, research accomplishments, special projects, recognitions, and other information relevant to the applicant's qualifications for the program.

10. Submit copy of complete application packet to the Psychology program office.

Departmental approval for admission to graduate study is contingent on the applicant's qualifications, interests, and available space.

ADVANCEMENT TO CANDIDACY

1. Meet the general university requirements for advancement to candidacy given earlier in this chapter.
2. Comply with the American Counseling Association (ACA) and the American Psychological Association (APA) ethical guidelines in all program work.
3. Complete the following courses:
   a. PSY A611 Ethics and Professional Practice
   b. PSY A623 Intervention Skills I
   c. PSY A633 Tests and Measurements in Multicultural Context
   d. One additional required course

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 A611 Ethics and Professional Practice 3
   PSY A612 Advanced Human Development in a Cultural Context 3
   PSY A622 Multicultural Psychopathology 3
   PSY A623 Intervention I 3
   PSY A624 Group Therapy 3
   PSY A626 Family Therapy 3
   PSY A627 Community-based Intervention Skills 3
   PSY A633 Tests and Measurements in Multicultural Contexts 3
   PSY A639 Research Methods 3
   PSY A654 Cultural Issues in Psychotherapy 3
   PSY A665 Psychotherapy Practicum 3
   PSY A670 Psychotherapy Internship 6
   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 A699 Thesis (3-6)
2. Elective. Select three (3) credits from the following:
   COUN A632 Career Counseling* (3)
   PSY A631 Cognitive Behavior Therapy (3)
   PSY A638 Child Clinical Psychology (3)
   PSY A685 Quantitative Methods in Psychology (3)
   PSY A689 Advanced Psychological Assessment (3)
3. A total of 48 credits is required for the degree.

PHD, CLINICAL-COMMUNITY PSYCHOLOGY

http://psypsych.ualaska.edu
ayphd@uaa.alaska.edu

The PhD Program in Clinical-Community Psychology with Rural, Indigenous Emphasis is a program jointly delivered and administered by the Departments of Psychology at the University of Alaska Fairbanks and
GRADUATE PROGRAMS, COLLEGE OF ARTS AND SCIENCES

the University of Alaska Anchorage. Although the degree is awarded by UAF, the only doctoral degree granting institution in the UA system, students can complete the entire degree program in residence at UAA. All program courses are co-taught across campuses via video conference and all program components are delivered by faculty at both campuses. The student experience is identical regardless of students’ city of residence (Fairbanks or Anchorage). The program focus includes clinical, community and cross-cultural psychology with an emphasis on indigenous, Alaska Native and American Indian psychology. 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. Accreditation for the program will sought from the American Psychological Association as soon as eligibility has been reached.

APPLICATION

Students apply to the joint PhD program in Clinical-Community Psychology at both UAA and UAF. All applicants submit identical application materials to both institutions; materials are collected and evaluated by the Joint UAA/UAF PhD admissions committee which makes admissions recommendations to the Dean of the UAF Graduate School. Applicants may specify a preference for either campus as a location for their studies. For more information about the application process, visit the program website.

ADMISSION REQUIREMENTS

1. Application deadline: Received by December 15 for the following 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 UAF catalog.
3. Minimum of a bachelor’s degree (BS or BA or B.Ed.); 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 3.0.
5. Minimum 3.0 grade point average in major and in all psychology courses.
6. Course work in the areas of abnormal psychology, statistics, research methods and one of the following: personality, clinical psychology, social psychology or community psychology. All prerequisite course work 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/approcedures.htm, must accompany the application to the program. Lifetime Criminal Background check must be submitted by students invited to a personal interview at least two weeks prior to the interview.

GRADUATION REQUIREMENTS

1. Complete the general university requirements for graduate programs as outlined in the UAF catalog.
2. Complete the Program and Additional Requirements listed below.

PROGRAM REQUIREMENTS

Students must complete 26 required courses (for a total of 70 credits), 18 credits of dissertation, 18 credits of predoctoral internship, and nine (9) credits of electives. Students must accumulate a minimum of 115 credits to graduate and must have completed all required course work. Students entering the program with a Masters Degree in Psychology or related field must complete at least two years of full-time course work, 18 credits of dissertation, and one year of predoctoral internship, all as approved by the student’s advisory committee.

1. Cultural Immersion: During their first year in the PhD program, students must participate in a cultural immersion experience as defined by program faculty. This experience will be coordinated by the Directors of Clinical Training (DCTs) and will also be attended by at least one faculty member per campus who teaches in the PhD program. The experience is not graded but must be completed before students are allowed to register for courses.
2. Complete the following required courses.
   - PSY A601 Clinical/Community/Cross-Cultural Integration Seminar (3 years, 1 credit per year) 3
   - 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 3
   - PSY A653 Practicum Placement - Clinical II 3
   - PSY A657 Quantitative Analysis 3
   - PSY A658 Qualitative Analysis 3
   - PSY A672 Practicum Placement - Community I 3
   - PSY A673 Practicum Placement - Community II 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 18
   - PSY A699D Dissertation 18
3. Electives 9
4. A total of 115 credits is required for the degree.

ADDITIONAL REQUIREMENTS

Clinical-Community Competency

Students must demonstrate clinical-community competency before being allowed to apply for internship. Clinical competency is demonstrated through preparation of a clinical-community portfolio that will be evaluated by an ad hoc committee consisting of four clinically trained faculty members (two per campus) who teach in the doctoral program. Criteria for the portfolio will be clearly defined and samples will be provide for students.
Research Competency
Students must demonstrate research competency before being allowed to register for dissertation credits. Research competency is demonstrated through preparation of a research portfolio that will be evaluated by an ad hoc committee consisting of four research-trained faculty members (two per campus) who teach in the doctoral program. Criteria for the portfolio will be clearly defined and samples will be provided for students.

Advancement To Candidacy
Before students are allowed to register for dissertation credits, they will be reviewed for performance by the joint UAA/UAF PhD committee, using existing university standards and forms for advancement to candidacy. Review will be based on faculty experience with students to date, submitted paperwork and student's progress through the program. Feedback from the review will be provided to the student by her or his advisor. Students must have cleared research and clinical-community competencies before being able to request advancement to candidacy.

Doctoral Dissertation Proposal Defense
Before commencing data collection for a dissertation project, students must defend their proposal to their dissertation committee. The defense must be based on a written dissertation proposal to be distributed to the dissertation committee after approval by the dissertation chair. The defense will be an oral presentation to the committee by the student and will not be a public meeting. For data-collection based dissertations, the proposal must also be approved by the UAA or UAF Institutional Review Board before data collection can commence.

Doctoral Dissertation
A doctoral dissertation must be carried out successfully and approved by a doctoral dissertation committee. The dissertation committee will consist of at least four members. It is recommended that the dissertation chair be on the same campus as the student. There must be at least one committee member from each psychology department at UAF and UAA. Content areas can vary widely, but must be related to clinical, community, or cross-cultural issues and applicable in Alaska settings.

Advancement to Internship
Students must apply to the local Director of Clinical Training (DCT) before being permitted to apply for a predoctoral internship. DCTs will review the students' course work, assure that all prior milestones have been mastered (i.e., clinical-community competency, research competency, doctoral dissertation defense and advancement to candidacy) before approving the student for internship and before writing a letter of support for the student (typically required by all approved internship sites). Lifetime criminal background check must also be completed before students can advance to internship.

Predoctoral Internship
A full-time, one-year predoctoral internship is required. This internship should meet the criteria laid out by the American Psychological Association; selection of an Association of Psychology Postdoctoral and Internship Centers (APPIC)-approved internship is encouraged. Placements in Alaska are preferred, but not required.

Strict compliance with APA Ethical Guidelines is required throughout participation in the degree program. Violations can result in immediate dismissal from the program and failure to graduate. Completion of an annual Disclosure Statement is also required. Affirmative answers may result in dismissal from the program and failure to graduate. The Disclosure Statement may be viewed at http://psyphd.alaska.edu.

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ENGLISH
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MASTER OF ARTS, ENGLISH
The Department of English offers a 36-credit Master of Arts in English with a choice of emphasis: literature or rhetoric. The degree prepares students for a wide variety of jobs in teaching, editing, marketing, and technical communication.

The MA in English with an emphasis in literature is designed to provide a solid ground in the periods and genres of English, American, and world literature. This coursework is supplemented by a menu of specialized studies in women’s writing, critical theory, and cultural studies. The MA with an emphasis in rhetoric is designed to provide a background in the study of linguistic and rhetorical strategies through an examination of the history and analysis of language and rhetoric. This emphasis offers an opportunity for students to focus on technical writing and professional communication.

Regardless of emphasis, students enjoy significant flexibility in designing their degree: the only two required courses are Introduction to Graduate Studies, and Contemporary Critical Theory. Competitive teaching assistantships and research assistantships are available.

ADMISSION REQUIREMENTS
See Admission Requirements for Master’s Degrees at the beginning of this chapter. At the time of application, students must submit the following documents to the Master of Arts program, Department of English:
1. A three-page application essay which addresses the student’s background in English, reasons for applying to Master of Arts program, and learning goals.
2. A recent sample (from within the past five years) of the applicant’s academic or professional writing. (NOTE: If no samples are available, the applicant should address this in the application essay.)
3. Official transcripts for all prior coursework.

An undergraduate GPA of 3.0 is expected. Admission to the program is based upon the evaluation of the entire application packet in conjunction with the applicant’s undergraduate GPA. An applicant who is weak in one area may, at the discretion of the department, be required to take additional coursework at the undergraduate level.

Applicants to the graduate program who are also interested in a teaching assistantship should contact the Department of English for the TA application deadline.

CANDIDACY REQUIREMENTS
See the beginning of this chapter for Advancement to Candidacy requirements. No more than 24 of the credits applied to the degree may have been completed prior to the submission of a candidacy application. In addition, the student must complete two departmental requirements before advancing to candidacy:
- Complete ENGL A601 and A602
- Pass the department’s Graduate Qualifying Examination. This exam, taken when the student has completed no fewer than 15 and no more than 24 credits toward the degree, demonstrates the student’s disciplinary writing skill and preparation to write a successful thesis.

GRADUATION REQUIREMENTS
See University Requirements for Master’s Degrees at the beginning of this chapter.

PROGRAM REQUIREMENTS

LITERATURE EMPHASIS, THESIS OPTION
1. Complete the following before advancing to candidacy:
   ENGL A601    Introduction to Graduate Studies in English
   ENGL A602    Contemporary Critical Theory
   3

2. Complete nine (9) credits in period studies from the following:
   ENGL A607    Studies in American Literature
   ENGL A615    Studies in Medieval Literature
   ENGL A620    Studies in Renaissance Literature
   ENGL A625    Studies in Neoclassical Literature
   ENGL A630    Studies in the Literature of Romanticism
   ENGL A640    Studies in the Victorian Period
   ENGL A642    Studies in the Modernist Period
   9

3. Complete six (6) credits in genre studies from the following:
   ENGL A630    Studies in the Literature of Romanticism
   ENGL A636    Studies in Modern Criticism
   ENGL A651    Studies in Poetry
   ENGL A661    Studies in Fiction
   ENGL A671    Studies in Nonfiction Prose
   ENGL A681    Studies in Drama
   6

4. Complete three (3) credits in specialized studies from the following:
   ENGL A604    Studies in Women’s Literature
   ENGL A606    Studies in the Development of the English Language
   ENGL A676    Studies in Texts and Cultures
   3

   6

6. Complete six (6) credits of English electives (graduate or 400-level undergraduate).
   6

7. A total of 36 credits is required for the degree.

LITERATURE EMPHASIS, NON-THESIS OPTION
1. Complete the following before advancing to candidacy:
   ENGL A601    Introduction to Graduate Studies in English
   ENGL A602    Contemporary Critical Theory
   3

2. Complete nine (9) credits in period studies from the following:
   ENGL A607    Studies in American Literature
   ENGL A615    Studies in Medieval Literature
   ENGL A620    Studies in Renaissance Literature
   ENGL A625    Studies in Neoclassical Literature
   ENGL A630    Studies in the Literature of Romanticism
   ENGL A640    Studies in the Victorian Period
   ENGL A642    Studies in the Modernist Period
   9

3. Complete six (6) credits in genre studies from the following:
   ENGL A630    Studies in the Literature of Romanticism
   ENGL A636    Studies in Modern Criticism
   ENGL A651    Studies in Poetry
   ENGL A661    Studies in Fiction
   ENGL A671    Studies in Nonfiction Prose
   ENGL A681    Studies in Drama
   6

4. Complete three (3) credits in specialized studies from the following:
   ENGL A604    Studies in Women’s Literature
   ENGL A606    Studies in the Development of the English Language
   ENGL A676    Studies in Texts and Cultures
   3

5. Complete three (3) credits of ENGL A698 Individual Research revising a paper from an earlier course to a publishable standard under faculty direction.
   3
6. Complete nine (9) credits of English electives (graduate or 400-level undergraduate).

7. Complete a written exam over coursework.

8. A total of 36 credits is required for the degree.

RHETORIC EMPHASIS, THESIS OPTION

1. Complete the following before advancing to candidacy:
   ENGL A601 Introduction to Graduate Studies in English 3
   ENGL A602 Contemporary Critical Theory 3

2. Complete 12 credits in Composition and Rhetoric:
   ENGL A680 Studies in the History of Rhetoric 3
   ENGL A685 Studies in Rhetorical Strategy 3
   ENGL A687 Composition Theory and Practice 3
   ENGL A688 Topics in Professional Writing 3

3. Complete 9 credits in specialized studies from the following:
   ENGL A604 Studies in Women's Literature (3)
   ENGL A606 Studies in the Development of the English Language (3)
   ENGL A671 Studies in Nonfiction Prose (3)
   ENGL A676 Studies in Texts and Cultures (3)


5. Complete one English elective at the graduate level

6. A total of 36 credits is required for the degree.

RHETORIC EMPHASIS, NON-THESIS OPTION

1. Complete the following before advancing to candidacy:
   ENGL A601 Introduction to Graduate Studies in English 3
   ENGL A602 Contemporary Critical Theory 3

2. Complete 12 credits in Composition and Rhetoric:
   ENGL A680 Studies in the History of Rhetoric 3
   ENGL A685 Studies in Rhetorical Strategy 3
   ENGL A687 Composition Theory and Practice 3
   ENGL A688 Topics in Professional Writing 3

3. Complete nine (9) credits in specialized studies from the following:
   ENGL A604 Studies in Women's Literature (3)
   ENGL A606 Studies in the Development of the English Language (3)
   ENGL A671 Studies in Nonfiction Prose (3)
   ENGL A676 Studies in Texts and Cultures (3)

4. Complete three (3) credits of ENGL A698 Individual Research revising a paper from an earlier course to a publishable standard under faculty direction.

5. Complete six (6) credits of English electives (graduate or 400-level undergraduate).

6. A total of 36 credits is required for the degree.

Note: Most graduate courses are offered on a two-year rotation. Exceptions are ENGL A601 and ENGL A687 (offered every fall semester) and ENGL A602 (offered every spring). A schedule of the planned rotation of graduate courses is available from the English office.

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The MBA graduate should be thoroughly grounded in state-of-the-art understanding of underlying management principles and techniques. Based on a recognition that sound practice requires a thorough understanding of the perspectives and skills which will prepare them for increasingly significant managerial leadership roles in their organizations.

The focus of the program is on management practice, but this focus is based on a recognition that sound practice requires a thorough understanding of underlying management principles and techniques. The MBA graduate should be thoroughly grounded in state-of-the-art management theory and practice, aware of the complex global environment in which modern organizations operate, adaptive to change, articulate, and ethical in dealing with others.

The program serves both full- and part-time students, and classes are generally scheduled for evenings and Saturdays. While most students are from the greater Anchorage area, the program also attracts students from the rest of the United States and from foreign countries, particularly from those on the Pacific Rim.

Students may enter the program in either the fall or spring semester. A limited number of courses are also offered during the summer. Current application deadlines, as well as other detailed program information, may be obtained by contacting the College of Business and Public Policy MBA office.

**ADMISSION REQUIREMENTS**

Applicants must meet both the Admission Requirements for Master’s Degrees and the College of Business and Public Policy requirements outlined below.

Admission to the MBA program is restricted to students holding a baccalaureate degree from an AACSB or regionally accredited university, or foreign equivalent. In general, two formulas using undergraduate performance as measured by the GPA on a 4.00 scale and the score on the Graduate Management Admission Test (GMAT) will be used to assess an applicant’s potential for success in the MBA program:

1. Undergraduate GPA x 200 + GMAT > 1100
2. Upper-division GPA x 200 + GMAT > 1100

GMAT waivers may be considered for applicants meeting any of the following criteria:

1. Hold another Master’s degree from an accredited university.
2. Have a professional designation beyond the Baccalaureate (such as CPA, CFA).
3. Have an undergraduate GPA of 3.0 or higher.

Additional indicators for predicting success in individual cases may be provided through documented performance in extracurricular activities, evidence of creativity and leadership, and a record of accomplishment in business or other professional activity.

Applicants whose native language is not English are required to score at least 550 on the TOEFL exam or otherwise demonstrate competency in English. Students may apply to enter the program at the beginning of either the fall or spring semester. There currently is no specific application deadline, but students should apply before the start of their first semester. In some cases students may be admitted conditionally while their paperwork is completed. Students in conditional admission status are restricted in the number of courses that they can take before being fully admitted.

**GENERAL MANAGEMENT PROGRAM STRUCTURE**

The requirements consist of two parts, foundation courses and advanced courses in business or accounting or relevant experience and expertise in key functional areas of business. Additional foundational coursework may be required.

These foundation courses are:

- **ACCT A601** Accounting Foundations for Executives 3
- **BA A601** Business Statistics and Data Analysis 2
- **BA A603** Fundamentals of Finance 3
- **BA A604** Marketing Management 3
- **BA A606** Fundamentals of Production/Operations Management 2
- **ECON A602** Introduction to Economics for Managers 3
In some cases, students may have fulfilled the core foundation requirements in part through undergraduate courses, or some students holding undergraduate business or accounting degrees may not have covered all of the foundation material in their degree program, or some of their foundation work may be dated in comparison to modern business practice. Thus, foundation requirements will be evaluated on an individual student basis to ensure each student is properly prepared for the more advanced MBA courses. Foundation courses may be waived or added to an individual student's program based on previous preparation.

In addition, entering students are expected to have basic mathematical, computer, and communication skills. Students deficient in basic skills will be required to improve them through independent study, non-credit courses, undergraduate course work, and/or seminars or workshops.

The main body of the MBA curriculum consists of seven core courses (21 credits) and 15 credits of curricular options for a total of 36 credits of advanced course work:

**Core Courses (21 credits):**
- ACCT A650 Seminar in Executive Uses of Accounting 3
- BA A632 Organizational Behavior and Human Resource Management 3
- BA A633 Problem Formulation and Decision Analysis 3
- BA A635 Current Marketing Issues Seminar 3
- BA A636 Financial Decision Making 3
- BA A655 Strategic Management Seminar 3
- CIS A692 Management Information Systems Seminar 3

In certain cases, where warranted by previous education or experience, an MBA core course may be waived and an elective substituted.

**Curricular Options (15 credits):**

**A. Executive Focus (3 credits):** Select at least one course from the following:
- BA A628 Executive Leadership 3
- BA A629 Negotiation & Conflict Management 3
- BA A631 Business Environment Analysis 3
- BA A634 Creating the Successful Organization 3

**B. Elective Coursework (9 credits):**
- Students can personally design an area of concentration from courses offered within the College of Business and Public Policy that focus on: Management Theory and Practice; Marketing; Finance; International Business & Global Economics; Management Information Systems; Logistics; or Public Administration. In addition, elective coursework can be selected from graduate courses offered by other colleges and disciplines and/or graduate courses in programs offered at other accredited universities.

**C. Capstone course requirement (3 credits):**
- Provides the opportunity to integrate acquired knowledge of business administration. Select one course from the following - depending on preferred nature of experience (practical or academic) and application (applied or theoretical):
  - BA A656 Management Project 3
  - BA A686 Management Simulation 3
  - BA A695 Graduate Internship 3
  - BA A698 Individual Research 3

**Thesis Option:**
- BA A699 Thesis 6
- Students (especially those who are considering pursuing a PhD degree) may elect to complete a Master’s thesis.

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www.cbpp.ua.alaska.edu/msgscm

**MASTER OF SCIENCE, GLOBAL SUPPLY CHAIN MANAGEMENT**

The MS GSCM degree is earned through advanced coursework and study at the graduate level. The focus is on management of global supply chain systems with an emphasis on managerial leadership, information technology and international business practices. The degree is comprised of five courses, six credit hours each, to be completed over five consecutive semesters. Time to completion is approximately twenty months for a total of thirty credit hours.

Classes meet exclusively on weekends. Each course requires four weekend meetings per semester. Between weekends, students are engaged in research and online discussions with the instructor and one another. Students apply their coursework to a host company in order to attain hands-on experience and demonstrate value to their hosts.

Classes are kept to a maximum of twenty-five students and each student proceeds through the five courses in the same order as part of a cohort group.

The degree is a stand-alone program that is not subsidized by the State, and therefore normal tuition fees do not apply. Please contact the College of Business & Public Policy at (907) 786-4101 for tuition and pre-application information.

**PROGRAM OUTCOMES**

Graduates of the MS GSCM Program will be able to assess logistical activities and supply chain relationships in a strategic context within international and cross-cultural business environments. They will be able to demonstrate the role of leadership and team building in fostering and enhancing supply chain integration. Graduates will also be able to apply information technology as a means to manage knowledge; and use financial and cost accounting techniques to effectively measure logistical value within and across companies. Finally, graduates will have developed an appreciation for the complex nature of global supply chain management in an increasingly integrated world that is subject to rapid change.
ADMISSION REQUIREMENTS

Applicants must have a minimum of seven years of work experience in some function of logistics or supply chain management and a bachelor’s degree in any discipline. Exceptions to work experience may be made for individuals with a bachelor’s degree in logistics, supply chain management, or a discipline comprised of courses that are closely related to logistics and supply chain management.

In addition, applicants must provide two letters of recommendation, undergraduate degree transcripts, and must complete the Graduate Management Admission Test (GMAT). The minimum acceptable GMAT score is determined by:

\[(\text{Undergraduate GPA} \times 200) + \text{GMAT score} > 1050.\]

Conditional admission may be granted if the GMAT has not been completed, but all other required information has been provided. However, the GMAT must be completed with the minimum acceptable score before the start of the third course in the program.

Applicants whose native language is not English are required to score at least 550 on the TOEFL exam or otherwise demonstrate competency in English.

ACADEMIC PROGRESS

A minimum GPA of 3.00 is required in order to successfully complete the Program. A grade of C is minimally acceptable and must be offset with a grade of A in one of the other courses. After the third grade of C the student will be required to withdraw from the program.

The cohort group format is designed to allow students to: develop a working relationship with one another; undertake group activities and research; and share professional experiences with one another.

The MS GSCM Program is the responsibility of the Logistics Department, which acts as its policy-making body, and as an appeals board. Students are expected to be familiar with and adhere to the MS GSCM Program’s requirements and procedures as well as to the general UAA admissions and graduate degree requirements.

Full program information, including application forms and procedures may be obtained by contacting:

Student Information Office
College of Business & Public Policy
University of Alaska Anchorage
3211 Providence Drive
Anchorage, AK 99508
U.S.A.
Telephone: (907) 786-4101
Facsimile: (907) 786-4119

PROGRAM REQUIREMENTS

1. Complete the following requirements:

   LOG A661 Supply Chain Strategic Planning 6
   LOG A662 Supply Chain Knowledge Management 6
   LOG A663 International Supply Chain Management and Marketing Strategies 6
   LOG A664 Supply Chain Management Leadership 6
   LOG A665 Supply Chain Measurement* 6
   
   *A final research project is required as part of the degree requirements.

2. A total of 30 credits is required for the degree.

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GRADUATE CERTIFICATE, SUPPLY CHAIN MANAGEMENT

University of Alaska Anchorage College of Business and Public Policy is partnering with Boise State University to offer the graduate certificate in Supply Chain Management. The certificate requires three core courses, Logistics, Supply Chain Management, and Supply Chain Measurement; one specialty course, Radio Frequency Identification, Travel and Transportation, or Lean Operations; and a capstone course for a total of 15 credit hours.

Classes are delivered online by expert faculty from one of the partnering institutions. All discussion, assignments, and tests will be handled online. Each university will be allotted seats in each course for a maximum enrollment of 30 students per course. Students will move through the program as a cohort.

The certificate will be offered by each institution at the same cost. Courses from any of the partnering institutions serve as resident credit at UAA. Please contact the College of Business & Public Policy at (907) 786-4101 for tuition and pre-application information.

PROGRAM OUTCOMES

A student who successfully completes the Supply Chain Management Graduate Certificate Program will apply systems thinking and design principles to effectively and efficiently manage global supply chains, demonstrating:

1. An understanding of pressing organizational challenges and environmental constraints.
2. The integration and management of processes across the supply chain.
3. Leadership and management of the principles of supply chain components.
4. Ability to conduct a cogent analysis of the current state of a supply chain system.
5. An understanding of future trends.
6. Implementation of supply chain management principles.
7. Verbal and written communication skills required in supply chain management.
8. Mastery of team skills required to manage effective supply chains.

ADMISSION REQUIREMENTS

Students with a baccalaureate degree who have professional experience in the field of supply chain management and meet all university admission requirements may be admitted to the graduate certificate program.

Students must provide transcripts from all institutions attended, a statement of job interest, a statement of job experience and TOEFL scores (at least 550) for those applicants whose native language is not English.

See the beginning of this chapter for Admission Requirements for Graduate Certificates.

ACADEMIC PROGRESS

A minimum GPA of 3.00 is required in order to successfully complete the certificate. A grade of C is minimally acceptable and must be offset with a grade of A in one of the other courses. After the third course grade of C the student will be required to withdraw from the program.

The cohort format is designed to allow students to develop a working relationship with one another, undertake group activities and research and share professional experiences with one another. The Supply Chain Management Graduate Certificate is the responsibility of the Logistics Department, which acts as its policy-making body and as an appeals board. Students are expected to be familiar with and adhere to the certificate requirements and procedures as well as to the general UAA admissions and graduate certificate requirements provided in this chapter.
The Master of Public Administration (MPA) degree provides students with knowledge and skills needed for professional careers in public service. MPA students learn new techniques and add to their expertise in organizational and program management, policy analysis, and related areas. Emphasis is on policy and administrative issues. Students specialize in one of the following emphasis areas: Public Management, Policy Analysis, Health Administration, or Criminal Justice.

The Public Management emphasis is designed for those working for, or planning to work for, executive agencies of local, state, and federal government; for private, non-profit organizations; and in government relations units of private corporations. It provides basic tools of public management, understanding of the structure and processes of public organizations, and the history and context of the field of public administration.

The Policy Analysis emphasis is intended to provide the professional staffs of executive and legislative departments of local, state, and federal governments with the capability to analyze the effects of a broad range of actual or hypothetical government policies. It emphasizes the application of economic analysis and other quantitative and qualitative methods to Alaska and national policy issues.

The Health Administration emphasis prepares students to function as health administrators in state, local, or federal agencies, non-profit organizations, and private companies that do health-related work. Students develop knowledge and skills necessary for effective public management in the health care area: planning, decision-making, and managing people, money and programs.

The Criminal Justice Emphasis will provide graduates with the theoretical basis for management careers in the field of criminal justice. Students will develop knowledge and skills necessary for effective public management: planning and decision making, managing people, money and programs. These skills will be applicable in a wide spectrum of employment areas in law enforcement and the criminal justice system; and will also prepare graduates seeking to earn a terminal degree in justice administration.

Students who have received the MPA degree may earn a Master of Business Administration (MBA) degree by completing a minimum of 21 resident credits not used for any other previous degree. Specific course requirements are at the discretion of the MBA director and will be reflected in the student’s MBA Program Plan prior to beginning course work toward this second degree.

Students interested in the Master of Public Administration program may accumulate up to 9 credits in the program as a non-degree seeking student before applying for admission to the program. To apply for admission, applicants must meet both the University of Alaska Anchorage Admission Requirements for Master’s Degrees and the Department of Public Administration requirements outlined below.

1. Students applying for admission to the MPA program must submit a 300-500 word statement on their career goals and how the MPA degree relates to them.
2. Applicants must submit a professional resume or vita.
3. In addition, applicants must meet one of the following criteria:
   a. Have a combined undergraduate GPA plus GRE Analytic score totaling 7.0 or higher. The GRE test is not required for students having already earned a Master’s degree from a regionally accredited institution in the United States or a foreign equivalent, provided they have an undergraduate GPA of 3.0.
   b. Have an undergraduate GPA of 3.0 and have taken an introductory course in government (or demonstrate knowledge by taking an approved UAA college level achievement exam)
   c. Complete two (2) PADM core courses with a grade of B or better and complete all PADM core course prerequisites (BA 273, ECON 201 and 202 or ECON 602, and PS 101) or their equivalents.

Detailed admission standards available on our website: www.mpa.alaska.edu.
ACADEMIC PROGRESS
To maintain satisfactory progress toward the degree, a student in the MPA program is expected to complete a minimum of six (6) semester-credits each calendar year, commencing with the first term of enrollment. The six (6) semester credits may consist of either undergraduate prerequisite courses or graduate program courses. Failure to comply with the six (6) credit minimum each calendar year may result in the student being dropped from the program.

GRADUATION REQUIREMENTS
See University Requirements for Master’s Degrees at the beginning of this chapter.

PROGRAM REQUIREMENTS
1. Complete the MPA core courses:
   - ECON A625 Economics and Public Policy 3
   - PADM A601 Introduction to Public Administration 3
   - PADM A602 Seminar in Public Management 3
   - PADM A604 Research Methods in Administration 3
   - PADM A606 The Policymaking Process 3
   - PADM A628 Administration of Financial Resources 3
2. Complete one of the following emphasis areas:
   - **Public Management Emphasis** (15 credits)
     - PADM A603 Management Analysis 3
     - PADM A610 Organizational Theory and Behavior 3
     - PADM A624 Human Resources Administration 3
     - Plus two 600-level electives 6
   - **Policy Analysis Emphasis** (15 credits)
     - Under Revision
     - PADM A632 Policy Analysis 3
     - PADM A688 Program Evaluation and Measurement 3
     - Plus three 600-level electives 9
   - **Health Administration Emphasis** (15 credits)
     - PADM A624 Human Resources Administration 3
     - Plus one 600-level elective 3
     - Choose three courses from the following: 9
       - NS A626 Principles of Epidemiology (3)
       - NS A658 Public Health Policy (3)
       - NS A681 Analysis of Health Services (3)
       - NS A682 Administrative Services (3)
   - **Criminal Justice Emphasis** (15 credits)
     - JUST A625 Seminar in Criminal Violation 3
     - JUST A630 Justice Administration Theory and Practice 3
     - JUST A670 Administrative Law 3
     - Choose one of the following: 3
       - JUST A640 Corrections Theory and Research (3)
       - JUST A650 Policing Theory and Research (3)
     - Plus one 600-level elective 3
3. Candidates for the MPA who do not have public administration work experience must complete one additional course (3 credits):
   - PADM A620 Intern in Public Admin./Policy (1-3)
4. Take the core comprehensive exam after completing the core courses. This exam must be passed before the student may enroll in the capstone course.
5. Complete the capstone project course (3 credits):
   - PADM A699 Public Administrative Capstone 3
6. A total of 36-39 credits is required for the degree.

FACULTY
Steven Aufrecht, Emeritus Professor, AFSEA@uaa.alaska.edu
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Greg Protasel, Associate Professor, AFGJ@uaa.alaska.edu
Sheila Selkregg, Assistant Professor

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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. 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 web site.

Applicants admitted to the M.Ed. work with a three-member committee composed of faculty from the major and related areas. The committee 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. Candidates admitted to a graduate certification or endorsement only program are assigned to a faculty member who serves as an academic advisor.

The College of Education has three academic departments:

1. The Department of Teaching and Learning with programs in 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 adult education and educational leadership (principal and superintendent preparation). (907) 786-4450

PROFESSIONAL AND CONTINUING EDUCATION
http://coe.uaa.alaska.edu/pace

The Office of Professional and Continuing Education (PACE) facilitates professional development opportunities for educators and other service professionals. PACE works collaboratively with UAA academic units and partner organizations to provide responsive service and support for 500-level courses, workshops, conferences, institutes, and academies. Committed to addressing the community’s immediate and changing professional development needs, PACE works closely with school districts, professional societies, and private and government agencies.

MASTER OF ARTS IN TEACHING
http://coe.uaa.alaska.edu/secondary

The Master of Arts in Teaching (MAT) degree is intended to prepare students for a career in teaching. It is an intensive experience for the dedicated graduate student who has both academic preparation in a content area taught in the public schools and significant life experience. The program integrates course work 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 public school classrooms.
- Committed to a life of thoughtful practice.
- Dedicated to working with all children, their families, and support personnel.
- Knowledgeable in the appropriate subject matter and skilled in how to teach it.
- Committed to the highest standards of professional ethics.

Student outcomes for the program are based on the Standards for Alaska's Teachers located at: www.edd.state.ak.us/standards/pdf/teacher.pdf.

ADMISSION REQUIREMENTS

See the beginning of this chapter for Admission Requirements for Master’s Degrees. The application deadline for the MAT is October 1 for applicants seeking spring admission and March 1 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 web site.

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
- Music (K-12)
- Social Studies
- Technology Education
- World Languages (this endorsement is for a specific language)

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 course work 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 show they meet the College of Education qualifications in the following three areas:

1. Academic preparation and demonstrated content knowledge competency in the endorsement area sought.
2. Successful experience with adolescents.
3. Dispositions for teaching, including collaborative skills 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 exam. 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 applicant is recommended for admission based on the preliminary review and admissions interview, a physical exam 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 degree with an expected minimum of a 2.75 G.P.A. in the last 30 credits of the baccalaureate degree or...
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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 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 academic expertise in the endorsement area.

Stage II: Admissions Interview
8. After the preliminary review of the 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.
1. 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. Failure to pass the background check will result in removal from the program.
2. Documentation of a current physical exam.

ACADEMIC PROGRESS
Candidates 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 A649 Capstone Seminar: Inquiry in Teaching and Learning, EDFN A444 Positive Learning Communities in K-6 Classrooms, EDFN A478 Issues in Alaska Native Education, K-12, EDSE A482 Inclusive Classrooms for All Children require a minimum grade of B. Courses with grades less than a C, including those used to demonstrate content knowledge on the “Initial Endorsement Content Preparation Review,” may not be applied to meet certification or endorsement requirements. Satisfactory progress on all standards must be demonstrated in the internship courses to remain in the program.

CANDIDACY REQUIREMENTS
See the beginning of this chapter for Advancement to Candidacy requirements.

GRADUATION REQUIREMENTS
See the beginning of this chapter for University Requirements for Master’s Degrees.

PROGRAM REQUIREMENTS
A. Master of Arts in Teaching – 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

1. Required Foundations Courses
   - EDFN A478 Issues in Alaska Native Education, K-12
   - EDFN A601 Foundations: Philosophy of Education
   - EDFN A602 Foundations: Educational Psychology
   - EDFN A603 Foundations: Educational History and Sociology
   - EDSY A630 Language, Culture, and Teaching in Secondary Schools
   - EDSY A637 Inclusive Teaching and Learning in Secondary Schools
   - EDSY A644 Developing a Community of Learners in Middle/High School
   - EDFN A647 Developing Literacies Across the K-12 Continuum
   - EDSY A648 Developing Literacies in the Secondary Content Areas
   - EDFN A649 Capstone Seminar: Inquiry in Teaching and Learning
   - EDSY A663A Middle/High School English/Language Arts Methods I (3)
   - EDSY A663B Middle/High School English/Language Arts Methods II (2) or
   - EDSY A664A Middle/High School Social Studies Methods I (3)
   - EDSY A664B Middle/High School Social Studies Methods II (2) or
   - EDSY A665A Middle/High School Mathematics Methods I (3)
   - EDSY A665B Middle/High School Mathematics Methods II (2) or
   - EDSY A669A Middle/High School Science Methods I (3)
   - EDSY A669B Middle/High School Science Methods II (2) or
   - EDSY/LANG A667A Middle/High School Second Language Teaching I (3)
   - EDSY/LANG A667B Middle/High School Second Language Teaching II (2) or
   - EDSY/LANG A667A Middle/High School Second Language Teaching I (3)
   - EDSY/LANG A667B Middle/High School Second Language Teaching II (2) or
Program Options

A. Fast Track Option
The Fast Track Option is an intensive three-semester program that allows candidates to complete the MAT as full-time students in 12-18 months. Candidates admitted in the fall take classes “spring-fall-spring.” Candidates admitted in the spring take classes “summer-fall-spring.” The year-long internship is during the fall and spring semesters.

B. Two-Year Option
The Two-Year Option allows candidates to complete the MAT as part-time students over a period of 24-30 months. Depending on admission, candidates take the nine (9) credits of foundations courses either during the spring or summer semester. Beginning in the fall semester when candidates are enrolled in the core courses and/or methods courses, their schedule includes a required field experience component (internship).

C. Alternate Route 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 24-30 months. Please contact the College of Education for further information about this option.

Professional Field Experiences
The Master of Arts in Teaching degree 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.

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. Any of the above courses, if taken as part of an undergraduate program, may be waived for the MAT.
- 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 Alaska's 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.

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 3.0 GPA in the MAT;
3. Achieved passing scores on the Praxis I and II exams;
4. Satisfactorily completed internships; and
5. Met all standards listed in the standards-based “Initial Endorsement Content Preparation Review.”

Master of Education
Within the curriculum of the M.Ed. program are several options, each with its own set of specific requirements. Each is designed to provide the student with advanced preparation in professional education. Some also lead to endorsement or certification. M.Ed. options include:

Program Options

A. Fast Track Option
The Fast Track Option is an intensive three-semester program that allows candidates to complete the MAT as full-time students in 12-18 months. Candidates admitted in the fall take classes “spring-fall-spring.” Candidates admitted in the spring take classes “summer-fall-spring.” The year-long internship is during the fall and spring semesters.

B. Two-Year Option
The Two-Year Option allows candidates to complete the MAT as part-time students over a period of 24-30 months. Depending on admission, candidates take the nine (9) credits of foundations courses either during the spring or summer semester. Beginning in the fall semester when candidates are enrolled in the core courses and/or methods courses, their schedule includes a required field experience component (internship).

C. Alternate Route 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 24-30 months. Please contact the College of Education for further information about this option.
FIELD PLACEMENTS

Fingerprinting/criminal history background clearance is required to participate in advanced practica and internships and may be required to participate in other field experiences. Failure to receive clearance will result in denial of or removal from field placements.

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, admission 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.

Candidates who have taken all or part of an approved program at another university must take at least nine (9) credits of approved education courses at the University of Alaska prior to being admitted to an advanced practicum or internship.

ADMISSION REQUIREMENTS

See the beginning of this chapter for Admission Requirements for Master's Degrees. Applicants applying for the Master of Education must also complete the following:

1. Take the General Test portion of the GRE, or Miller Analogies Test, as required. Contact each academic department for specific tests. Adult Education does not require either test for admission.
2. Prepare materials for a file in the College of Education by completing an application form and submitting other required materials. Information about specific programs is available on the web site. Applicants without appropriate and recent experience in the field may be required to sign up for a supervised practicum prior to admission.
3. Applicant files are reviewed three times each year: May 1, November 1, and April 1. It is the applicant's responsibility to have the file completed and submitted by these dates.
4. An official Graduate Studies Plan must be approved before completion of more than nine (9) credits of course work.

ADMISSION PROCEDURES

When all official transcripts, examination scores, and other required materials are received by Enrollment Services, 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 a Graduate Committee (see admission requirements above). Applicants may be contacted for scheduling personal interviews with the committee after their completed files are received. Written notification of committee action is sent to the applicant. One of the following actions can be expected from the Graduate Committee:

1. Complete admission.
2. Provisional admission with specified provisions.
3. Denial of admission for stated reasons.

Criteria for Admission

Minimum Qualifications:
1. Hold a baccalaureate degree from a regionally accredited institution or foreign equivalent.
2. Have a GPA of 3.00 (on a 4.00 point scale) in the last 30 credits.
3. Graduate Record Examination with a combined verbal and quantitative score of 800 or the Miller Analogies Test with scores at or above the 40th percentile.*

*The M.Ed. in Special Education has different score requirements. Contact the department for further information. The M.Ed in Adult Education does not require the GRE or Miller Analogies Test.

Competitive Qualifications

Applicants who meet the above criteria are considered for program admission on a competitive basis.

CANDIDACY REQUIREMENTS

See the beginning of this chapter for Advancement to Candidacy requirements.

When the student is in the final course work, the Graduate Committee will review the student's progress for admission to candidacy. Candidacy allows the student to enter the final program phase, which may include a
written or oral comprehensive examination and, in some programs, the development of a portfolio, thesis, or investigative project. Candidates must have completed their course work with the minimum of a 3.00 GPA. The M.Ed. - Special Education Program requires a grade of B or better in all EDSE course work. No C grade earned in an undergraduate course can be counted toward a master’s program. In addition, the committee may seek evidence of a candidate’s acceptable performance in written expression.

GRADUATION REQUIREMENTS
See the beginning of this chapter for general university requirements for graduate degrees and master’s level graduation requirements.

Candidates completing the Master of Education degree must also complete the following requirements:

1. At least one year successful contract teaching, with the exception of Adult Education and Counselor Education. For certification purposes, principal candidates must have three years successful contract teaching and the superintendent candidates must have five years (minimum three years as a teacher and one as an administrator).
2. An approved official program plan before completion of nine (9) credits of course work.
3. A minimum of 21 credits in a program at the graduate (600) level.
4. A minimum of 36 credits of approved course work.
5. At least 18 credits must be completed after the semester in which the student was admitted and approved by the graduate committee.
6. Pass a comprehensive written examination* on the education "core" studies and the area of specialization. An oral examination may also be required by the student's committee.

* Adult Education does not require a comprehensive written exam.

Cautionary Note: Graduate courses completed prior to being admitted as a graduate student will not necessarily be applicable toward a specific graduate degree program. Since recency of credits is of concern to the candidate’s committee when developing the graduate program, course work 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. Special Education requires a grade of B 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. All programs, with the exception of Counselor Education, require at least one year of appropriate professional experience related to the student’s course of study. For Principal Type B Certificates, candidates must have three years successful contract teaching.
5. For the Principal Type B Certificate, the M.Ed. must be conferred.
6. 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 (M.Ed.)
Complete one of the following courses of study:

A. ADULT EDUCATION

http://coe.uaa.alaska.edu/adulted

The Master of Education in Adult Education is designed for working professionals who will develop, lead, and implement educational programs for adults across an entire range of professions, including higher education, health care, human services, non-profit organizations, government, and business. A learner-centered, interdisciplinary program, it is designed to develop a reflective practitioner-scholar and strengthen culturally responsive teaching of adults. Learner outcomes for this program are described on the website above.

SPECIAL ADMISSION REQUIREMENTS
1. The Adult Education program application packet (see website link above or contact us directly) contains instructions and a complete list of required documents.
2. Qualified applicants will be asked to complete a writing exercise.
3. The application process concludes with an interview with the Adult Education program faculty.

Note: Program admission does not require GRE or Miller Analogies Test.

PROGRAM REQUIREMENTS

1. Introductory Program Sequence (12 credits):
   - EDAE A615 Introduction to Adult Education 3
   - EDAE A655 The Adult Learner 3
   - EDAE A665 History and Philosophy of Adult Education 3
   - EDAE A675 Design of Programs for Adults 3
2. Program Concentration (12 credits):
   - Program concentration focuses students' academic efforts in a specific arena of practice. The concentration consists of a minimum of 12 credits with course options listed under each concentration. Up to three (3) credits not listed in the course options may be selected as appropriate, in consultation with the academic advisor. Complete one of the following concentrations.

   a. Teaching, Learning, and Development (12)
      - EDAE A657 Design of e-Learning (3)
      OR
      - EDAE A638 Facilitation of Learning with Technology (3)
      - EDAE A676 Curriculum and Instructional Design 3
      - EDAE A679 Methods and Materials in Adult Education 3
      - EDAE A695 Practicum in Adult Education 1-3
      - EDFN A654 Brain, Mind, and Education 3
      - PSY A450 Adult Development and Aging 3
   b. Human Resource Development and Leadership (12)
      - BA A632 Organizational Behavior & Human Resource Management 3
      - EDAE A650 Principles of Human Resource Development 3
      - Choose three (3) credits from the following two options:
        1) EDEL A637 Educational Leadership and Organizational Behavior (3)
        OR
        - EDFN A610 Organizational Theory and Behavior(3)
        2) EDAE A638 Facilitation of Learning w/Technology (3)
        OR
        - EDAE A637 Design of e-Learning (3)
      - EDAE A695 Practicum in Adult Education 1-3
     * Required
   c. Career and Technical Education (12)
      - CTE A611 Historical and Philosophical Foundations of Career and Technical Education 3
      - CTE A633 Current Issues in Career and Technical Education 3
      - CTE A643A Career and Technical Education Methods I 3
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**B. COUNSELOR EDUCATION**

*http://coe.uaa.alaska.edu/coun*

The M.Ed. in Counselor Education is designed to serve college graduates who have selected careers as professional counselors. The program encompasses theory, research, and practice related to professional counseling of children, adolescents or adults in schools and agencies.

**STUDENT OUTCOMES**

1. Articulate professional identity that is ethically and legally sound, and is aligned with accepted orientations and practices in the counseling field.
2. Demonstrate an understanding of the cultural contexts of helping relationships in a diverse society.
3. Apply knowledge of career information and career development theories to helping strategies.
4. Demonstrate an understanding of empirically-based theories and techniques of counseling.
5. Demonstrate an understanding of research methodology and concepts and their application to the counseling field.
6. Demonstrate an ability to effectively engage in the practice of counseling through supervised practice.

**PROGRAM REQUIREMENTS**

1. **Education Core:**
   - EDFN A612 Community Relations 3
   - EDFN A636 Innovations in Teaching and Learning 3
   - Research courses by advisement 6

   *Students who already possess a Master’s Degree may request waiver of the core education courses.*

2. **Counselor Education Core:**
   - EDCN A610 Foundations in Counseling 3
   - EDCN A614 Counseling Diverse Populations 3
   - EDCN A616 Counseling Theories 3
   - EDCN A623 Counseling Skills 3
   - EDCN A624 Group Counseling 3
   - EDCN A632 Career Development 3
   - EDCN A633 Issues for High Risk Youth* 3
   - EDAE A638 Facilitation of Learning with Technology (3) 3
   - EDAE A637 Design of e-Learning (3) 3
   - CTE A695C Advanced Professional Experiences 1-3

   *Required for this concentration*

3. **Final program sequence (12 credits):**
   - EDAE A691 Professional Seminar 3
   - EDAE A698 Inquiry Project (3) 3
   - EDAE A699 Thesis (3) 3

4. **Research courses by advisement** 6

5. **M.Ed. candidates in Adult Education prepare a portfolio throughout the program to document their progress through the program and their development as reflective practitioner-scholars.**

6. A total of 36 credits is required for the degree.

**State Certificate Options**

**a. Elementary (K-8) School Counseling (12 credits)**

- EDCN A611 Roles and Responsibilities of the Elementary Counselor 3
- EDCN A634 Counseling Practicum I (Elementary Level) 3
- EDCN A636 Counseling Practicum II (Elementary Level or Agency) 3

**Electives by advisement** 3

**b. Secondary (7-12) School Counseling (12 credits)**

- EDCN A615 Roles and Responsibilities of a Secondary School Counselor 3
- EDCN A634 Counseling Practicum I (Secondary Level) 3
- EDCN A636 Counseling Practicum II (Secondary Level or Agency) 3

**Electives by advisement** 3

**c. K-8 & 7-12 School Counseling (15 credits)**

- EDCN A611 Roles and Responsibilities of the Elementary Counselor 3
- EDCN A615 Roles and Responsibilities of a Secondary School Counselor 3
- EDCN A634 Counseling Practicum I (Elementary Level) 3
- COUN A636 Counseling Practicum II (Middle level Or High School) 3

**Electives by advisement** 3

**Non-State Certificated Options**

The following options do not lead to a Type C Certificate.

**d. General Counseling (12 credits)**

- EDCN A634 Counseling Practicum I (Agency) 3
- EDCN A636 Counseling Practicum II (Agency) 3

**Electives by advisement** 6

**e. Adult Counseling (15 credits)**

- CTE A645 Teaching of Adults 3
- CTE A655 The Adult Learner 3
- EDCN A634 Counseling Practicum I (Agency) 3
- EDCN A636 Counseling Practicum II (Agency) 3

**Electives by advisement** 3

**f. Vocational Education Counseling (15 credits)**

- CTE A611 Historical and Philosophical Foundations of Career and Technical Education 3
- CTE A633 Current Issues in Career and Technical Education 3
- EDCN A634 Counseling Practicum I (Agency) 3
- EDCN A636 Counseling Practicum II (Agency) 3

**Electives by advisement** 3

4. A total of 45-48 credits is required for the degree.

**C. EARLY CHILDHOOD SPECIAL EDUCATION**

*http://coe.uaa.alaska.edu/ecse*

The M.Ed. in Early Childhood Special Education is designed for individuals who desire initial professional preparation in early intervention and early childhood special education. The program...
encompasses theory, research, and practice relating to children birth to five years of age who experience developmental delays and disabilities. Student outcomes for the program are based on the professional standards of the Council for Exceptional Children located at: http://www.ccc.sped.org/Content/NavigationMenu/ProfessionalDevelopment/ProfessionalStandards/EthicsPracticeStandards/Individualized_General_Curriculum_Referenced_Standards.htm

STUDENT OUTCOMES

1. Apply legal and ethical policies that affect young children with developmental delays and disabilities, families, and programs for young children.
2. Use intervention strategies with young children having developmental delays and disabilities and their families that affirm and respect family, cultural, and linguistic diversity.
3. Develop and apply instructional practices based on knowledge of the child, family, community; and the curriculum.
4. Design, implement, and evaluate environments to assure developmental and functional appropriateness.
5. Assess the development and learning of young children with developmental delays and disabilities and use that information to direct intervention.
6. Critically analyze and apply principles of research in the area of early childhood special education.

SPECIAL ADMISSION REQUIREMENTS

1. Resume documenting educational experience and at least one year of appropriate professional experience. See Department for more information.
2. GPA of 2.75 in most recent 30 credits
3. Three letters of professional recommendation.
4. Writing sample of 300-500 words based on career goals and how the M. Ed. program relates to those goals
5. Documentation of technology skills prior to enrolling in distance courses
6. Applicants may be asked to participate in an interview.

PROGRAM REQUIREMENTS

1. Candidates seeking initial teacher certification must:
   a. Pass the Praxis I at the level established by the State, [Note: The Alaska Department of Education and Early Development also requires that Early Childhood Special Education (ECSE) teachers holding an initial Type A teaching certificate must, within three years of receiving their initial teaching certificate: (A) Take and pass either the Praxis II: Early Education: Content Knowledge, or Praxis II: Elementary Education: Curriculum, Instruction, and Assessment, and (B) For certificates issued September 1, 2006 and later, have two satisfactory performance reviews. These requirements must be met to advance to Professional Certification.];
   b. Successfully complete three (3) credits of multicultural education/cross-cultural communication and three (3) credits of Alaska studies from the State's approved list; and
   c. Provide documentation of appropriate field experience in a public school setting (see department for details).
2. Required Courses:
   Research classes by advisement 6
   EDSE A474 Special Children from Birth through Five 3
   EDSE A610Y Assessment: Early Childhood Special Education 3
   EDSE A620Y Advanced Internship: Early Childhood 6
   EDSE A622Y Strategies: Early Childhood Special Education 3
   EDSE A674 Families: Developing Parent Professional Partnerships 3
   EDSE A681 Issues in Early Childhood Special Education 3
   EDSE A685 Young Children with Complex Needs 3
   Electives by advisement 6
3. A total of 36 credits is required for the degree.  
   Note: EDEL A302 or EDET A626 may be required prerequisites if student lacks previous appropriate course work or skills.
4. Comprehensive examination is required.
5. Portfolio required.

D. EDUCATIONAL LEADERSHIP
http://coe.uaa.alaska.edu/edleadership

The M.Ed. 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.

SPECIAL ADMISSION REQUIREMENTS

1. At least one year of experience as a certificated elementary or secondary teacher.
2. Eligible for Alaska Teaching Certificate.

Principal Type B Certificate Program Requirements (K-8, 7-12, K-8 & 7-12)

1. Foundation Core:
   EDFN A636 Innovations in Teaching and Learning 3
   600-level electives by advisement 6
   Research courses by advisement 6
2. Required Courses:
   EDL A637 Educational Leadership and Organizational Behavior 3
   EDL A638 Instructional and Curricular Leadership 3
   EDL A639 The Politics of Education 3
   EDL A640 Law and Ethics in Education 3
   EDL A641 Principal Internship (3-6) 6
   EDL A642 Principal Seminar I 3
   EDL A643 Principal Seminar II 3
3. A total of 36 credits is required for the degree and to apply for an institutional recommendation for a Type B certificate from the Alaska Department of Education and Early Development (EED).
   Note: The Alaska Department of Education and Early Development requires three (3) credits of multicultural education/cross-cultural communication and three (3) credits of Alaska studies for State licensure. See the Alaska Department of Education and Early Development website for more information: www.eed.state.ak.us.
4. Comprehensive examination required.
5. Portfolio required.

M.Ed. in EDL Program Requirements (Teacher Leadership Option)

1. Foundation Core (12 credits)
   Research courses by advisement 6
   EDFN A636 Innovations in Teaching and Learning 3
   600-level electives by advisement 3
2. Required Courses (24 credits)
   EDL A637 Educational Leadership and Organizational Behavior 3
   EDL A638 Instructional and Curricular Leadership 3
   EDL A639 Politics of Education 3
   EDL A652 Introduction to Teacher Leadership 3
   EDL A653 Leadership for Equity 3
   EDL A654 Building Mentoring Relationships 3
   EDAE A656 Understanding and Facilitating Adult Learning 1
4. Apply the legal and ethical principles associated with special
3. Support and promote inclusiveness and equity for students with
2. Individualize instruction to meet the specific needs of students
locate at:
located at: http://coe.uaa.alaska.edu/programs/counseling/sped.cfm
located at: http://www.cec.sped.org
located at: http://www.ccc.sped.org
located at: www.uaa.alaska.edu
located at: slp@uaa.alaska.edu
located at: UAA is affiliated with two graduate schools outside Alaska to provide
located at: Each program is designed to provide the student with advanced
located at: A total of 36 credits is required for the degree.
located at: A total of 36 credits is required for the degree.
located at: A total of 36 credits is required for the degree.

E. MASTER TEACHER WITH SPECIALTY
OPTIONS
http://coe.uaa.alaska.edu
The M.Ed. in Master Teacher Specialty Options is designed for classroom teachers with Type A certificates who are seeking advanced professional education. Programs can be planned in such areas as:

Middle School Education - admission suspended
Curriculum and Instruction - admission suspended
Early Childhood – admission suspended
Educational Technology - admission suspended

1. Middle School Education - admission suspended
2. Curriculum and Instruction- admission suspended

Applicants selecting the Curriculum and Instruction specialty option shall complete the following core courses and their specialty option course work. See an academic advisor to plan specific course work for the specialty option.

Core courses:
EDFN A621 Culture, Language and Literacy 3
EDFN A622 Philosophy of Education 3
EDFN A627 Education Research 3
EDFN A631 Advanced Educational Psychology 3
EDFN A651 Curriculum Theory and Development 3
EDFN A698 Individual Research (1-6) 3

Select a specialty option consisting of a minimum of 18 credits. Candidates may concentrate their studies in such areas as elementary, secondary, reading, mathematics, etc. See a faculty advisor to plan specific course work.

3. A total of 36 credits is required for the degree.
4a. Early Childhood (without endorsement) – admission suspended
4b. Early Childhood (with endorsement through UAS) – admission suspended
5a. Educational Technology (without endorsement) – admission suspended
5b. Educational Technology (with endorsement) – admission suspended

F. SPECIAL EDUCATION
http://coe.uaa.alaska.edu/programs/counseling/sped.cfm
The M. Ed. in Special Education is designed for individuals who desire advanced professional preparation in Special Education. The program encompasses theory, research, and practice relating to individuals who experience disabilities. Student outcomes for the program are based on the professional standards of the Council of Exceptional Children located at: http://www.cec.sped.org

STUDENT OUTCOMES
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.

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.

SPECIAL ADMISSION REQUIREMENTS
1. GPA of 2.75 in the most recent 30 credits.
2. Current teaching certificate or proof of eligibility for obtaining a teaching certificate.
3. Resume documenting educational experience and at least one year of appropriate professional experience.
4. Writing sample of 300-500 words based on career goals and how the M.Ed. program relates to these goals.
5. Three letters of recommendation or rating forms from professional references.
6. Documentation of technology skills prior to enrolling in distance courses.
7. Applicants may be asked to participate in an interview.

PROGRAM REQUIREMENTS
1. Required courses:
Research courses by advisement 6
EDSE A622 Theories and Strategies 3
EDSE A632 Special Education Law: Principals and Practices 3
EDSE A633 Autism: Communication and Social Disorders 3
Electives by advisement 21

3. A total of 36 credits is required for the M.Ed. degree. Students seeking an institutional recommendation for a state teaching certificate must complete an additional 3 credits (total of 39 credits).

4. In addition to the M.Ed., students who already possess 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 M.Ed.)
5. Students who are admitted to the Graduate Certificate in Special Education may apply to the M. Ed. in Special Education. Applicants must meet all admissions requirements for the M. Ed. Applications must be submitted by published university timelines.

6. Successful completion of a comprehensive examination is required.

GRADUATE CERTIFICATES
The College of Education offers three graduate certificate programs by distance delivery: Educational Leadership Certificate: Principal; Post-Graduate Certificate in Educational Leadership: Superintendent; and the Graduate Certificate in Special Education.

Each program is designed to provide the student with advanced preparation in professional education. Admitted students are required to hold current teacher or administrator certificates, and successful completion of the programs results in an institutional recommendation for a state certificate or endorsement. Pending approval from the Alaska State Department of Education applicants for the Graduate Certificate in Special Education may be admitted without a current teaching certificate.
EDUCATIONAL LEADERSHIP
http://coe.uaa.alaska.edu/edleadership

PROFESSIONAL FIELD PRACTICE
See Master of Education section.

FIELD PLACEMENTS
See Master of Education section.

ADMISSION REQUIREMENTS
See the beginning of this chapter for admission requirements for graduate certificates.

Individuals applying to the Graduate Certificate Programs must complete UAA’s graduate application and the College of Education application. Applicant files are reviewed three times each year: May 1, November 1, and April 1. It is the applicant’s responsibility to have the file completed and submitted by these dates. The College application requires the following:

1. Earned Master’s Degree from a regionally accredited institution for the Educational Leadership Certificates.
2. Grade point average of 3.00 on a 4.00 scale.
3. Current teaching certificate or equivalent for the Educational Leadership Certificate: Principal; Type B Certification for the Educational Leadership Certificate: Superintendent.
4. Resume documenting educational experience.
5. Educational goal statement.
6. Three letters of recommendation or rating forms from professional references.

GRADUATION REQUIREMENTS
See the beginning of this chapter for graduate certificate university requirements.

Development of a professional portfolio is required. The portfolio is used to document attainment of the Interstate School Leaders Licensure Consortium (ISLLC) Standards for School Leaders for the Educational Leadership Certificates.

SPECIAL EDUCATION
http://coe.uaa.alaska.edu/programs/counseling/sped.cfm

The Graduate Certificate in Special Education is designed for certificated teachers who want to become special educators. 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. Student outcomes for the program are based on the professional standards of the Council of Exceptional Children (CEC) located at: http://www.cec.sped.org

STUDENT OUTCOMES
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. GPA of 2.75 in the most recent 30 credits.
2. Current teaching certificate or proof of eligibility for obtaining a teaching certificate. Pending approval from the Department of Education, applicants who do not possess a current teaching certificate will be considered for admission to the program. NOTE: Applicants without a teaching certificate may be required to take additional “leveling” courses prior to admission to the program.
3. Resume documenting educational experience and at least one year of appropriate professional experience.
4. Writing sample of 300-500 words based on career goals and how program relates to these goals.
5. Three letters of recommendation or rating forms from professional references.
6. Documentation of technology skills prior to enrolling in distance courses.
7. Applicants may be asked to participate in an interview.

PROGRAM REQUIREMENTS
1. Prerequisite: At least one approved course in special education or documentation of other appropriate experience with children or adults with disabilities. Course may be taken concurrently with other program requirements.
2. Required courses:
   - 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 A634 Supervision and Support of Paraprofessionals 3
   - EDSE A695E Advanced Internship in Special Education: Elementary (6) or
   - EDSE A695S Advanced Internship in Special Education: Secondary (6)

3. A total of 24 credits is required for the Graduate Certificate in Special Education. A maximum of six (6) credits may be waived with approval from the department chair if course competencies have been met through completion of degree/certificate course work at another regionally accredited institution.
4. Courses applied to this certificate may also apply to the M.Ed. in Special Education. Students who are admitted to the Graduate Certificate in Special Education may apply to the M. Ed. in Special Education.

INSTITUTIONAL RECOMMENDATION
To receive an institutional recommendation for an endorsement, the following requirements must be met.

1. Current teaching certificate or, pending Alaska State Department of Education approval, applicants may be admitted without a current teacher certificate.
2. All program courses completed with a minimum grade of B.
3. Baccalaureate degree from a regionally accredited institution or foreign equivalent.
4. Successful completion of internships and professional portfolio documenting CEC standards.

Note: The recommendation for special education endorsement will be...
at the developmental level of the existing teaching certificate. The State of Alaska Department of Education and Early Development may have additional requirements for State certification/endorsement. The Alaska Department of Education and Early Development requires three (3) credits of multicultural education/cross-cultural communication and three (3) credits of Alaska studies for State licensure. See the Alaska Department of Education and Early Development website for more information: www.eed.state.ak.us.

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COLLEGE OF HEALTH AND SOCIAL WELFARE

SCHOOL OF NURSING
Professional Studies Building (PSB), Suite 103, (907) 786-4550
http://nursing.uaa.alaska.edu

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 Health Care Administration, Nursing Education or as a Family Nurse Practitioner or Psychiatric-Mental Health Nurse Practitioner. Master’s level studies provide the student with a basis for further study at the doctoral level. The graduate program is accredited by the National League for Nursing Accreditation Commission (61 Broadway, New York, NY 10006; (212) 363-5555 ext. 153). Graduates in the Family Nurse Practitioner option are eligible to write the national certification examination for advanced professional practice as a family nurse practitioner. Graduates of the Health Care Administration option are eligible, after nurse executive practice, to write the national certification examination for advanced nursing administration. Graduates of the Psychiatric-Mental Health Nursing Option are eligible to write the national certification for advanced practice as a psychiatric-mental health nurse practitioner-adult, or psychiatric and mental health nurse practitioner-family. Graduates of the Nursing Education track who have had two years of full-time academic teaching experience are eligible to take the NLN Certified Nurse Educator Exam.

MASTER OF SCIENCE, NURSING SCIENCE
ADMISSION REQUIREMENTS
See the beginning of this chapter for Admission Requirements for Master’s Degrees. The following application submission deadlines are recommended to ensure full processing of application and transcripts:
- December 15th for March 1 applicants
- August 15th for November 1 applicants

Students applying to the Master of Science program in Nursing Science must also submit documentation of having met the following requirements:
1. Earned baccalaureate degree in nursing from a program accredited by the National League for Nursing or the Commission on Collegiate Nursing Education.
2. Undergraduate (and graduate, if applicable) GPA of 3.00 on a 4.00 scale.
3. Graduate Record Examination score with Analytic Writing score of 3.5 or higher.
4. Grade of 2.0 (C or higher) in an undergraduate research methods course and a statistics course that covers descriptive and inferential statistics.
5. Licensure as a registered professional nurse in the State of Alaska concurrent with enrollment in first clinical course.
6. The School of Nursing graduate admission application must be submitted directly to the School of Nursing.
7. Three letters of professional recommendation submitted directly to the School of Nursing. References may be contacted by a member of the Admissions Committee.
8. Professional portfolio
9. Minimum of one year of half-time clinical experience as a Registered Nurse.
Application deadlines:

November 1     GRADUATE STUDY only
March 1        GRADUATE STUDY and/or CLINICAL SPECIALTY

Applicants who meet the above criteria are considered for program admission on a competitive basis. Meeting all admission criteria does not guarantee admission. Neither does prior acceptance into Graduate Study status guarantee admission into the clinical nursing tracks. Special consideration may be given to candidates with portfolios that document exceptional clinical experience and a proven record of professional contributions. Candidates must submit documentation of their experience and contributions to the Admissions Committee. To the extent that there are limited seats available in the program, preference may be given to residents of the State of Alaska as defined by the University’s policy on residency for tuition purposes.

ACADEMIC PROGRESS

Students enrolled in the graduate certificate programs must maintain a 3.0 B GPA in all required course work. Students must earn a grade of B or higher in all clinical courses. If a student earns less than a B in a clinical course, that student must, on a space-available basis, retake the course the next time it is offered. A clinical course may be retaken only once. A student’s Graduate Nursing Program may include a maximum of two C grades. Grades below a C will not be applied to degree requirements. Noncompliance with this policy will result in academic probation, and possible dismissal from the program.

GRADUATION REQUIREMENTS

See the beginning of this chapter for University Requirements for Master’s Degrees.

PROGRAM REQUIREMENTS

1. Complete the following required courses:

   - NS A620 Nursing Research Methods 3
   - NS A621 Knowledge Development for Advanced Nursing Practice 4
   - HS/NS A625 Biostatistics for Health Professionals 3
   - NS A642 Professional Nursing in Perspective 3

   Choose one of the following options

   - 5

   2. Complete one of the following options:

      **Family Nurse Practitioner Option (32 credits)**

      - NS A601 Advanced Pathophysiology 3
      - NS A602 Advanced Health Assessment in Primary Care 3
      - NS A610 Pharmacology for Primary Care 3
      - NS A660 Family Nurse Practitioner I 4
      - NS A661 Family Nurse Practitioner II 5
      - NS A662 Family Nurse Practitioner III 5
      - NS A663 Family Nurse Practitioner IV 6
      - Electives Advisor approved 3

      **Psychiatric-Mental Health Nursing Option (32 credits)**

      - NS A601 Advanced Pathophysiology 3
      - NS A602 Advanced Health Assessment in Primary Care 3
      - NS A610 Pharmacology for Primary Care 3
      - NS A670 Advanced Psychiatric/Mental Health Nursing I 5
      - NS A671 Advanced Psychiatric/Mental Health Nursing II 5
      - NS A672 Advanced Psychiatric/Mental Health Nursing III 5

      Electives Advisor approved

<table>
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<tr>
<th>Health Care Administration Option (22-23 credits)</th>
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<tr>
<td>NS A658 Public Health Policy 3</td>
</tr>
<tr>
<td>NS A681 Analysis of Health Services 3</td>
</tr>
<tr>
<td>NS A682 Administrative Services 3</td>
</tr>
<tr>
<td>NS A682L Administrative Services Field Work (Optional) 1</td>
</tr>
<tr>
<td>NS A695 Practicum in Health Care Administration (4 credits)</td>
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Choose either set of nine (9) credits from the following:

- 9

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<tr>
<th>PADM A610 Organizational Theory and Behavior (3 credits)</th>
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<tr>
<td>NS A624 Human Resources Administration (3 credits)</td>
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<tr>
<td>Electives Advisor approved (3 credits)</td>
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<tr>
<td>or</td>
</tr>
<tr>
<td>BA A632 Organizational Behavior and Human Resource Management (3 credits)</td>
</tr>
<tr>
<td>Electives Advisor approved (6 credits)</td>
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3. A total of 40-50 credits is required for the degree.

CANDIDACY

The student is eligible for advancement to candidacy after demonstration of ability to succeed in graduate study through approval of the thesis or project proposal by the student’s thesis or project committee and the UAA Institutional Review Board (IRB), when needed.

THESIS OR PROJECT OPTION

A total of five (5) credits of either NS A696 Individual Project or NS A699 Thesis are required for the degree. Students who are unable to complete the thesis or project while registered for five (5) credits may be given a DF (deferred) grade for one semester; those students will be required to complete the Graduate Continuous Registration procedures (at the beginning of this chapter) and pay all fees.

Students who are unable to complete the thesis or project during these three semesters will be required to register for two (2) credits of NS A699, Thesis or NS A696, Individual Project every semester thereafter (excluding summer sessions) until the thesis or project is satisfactorily completed. There is no limit to the number of thesis or project credits that may be accrued; however, no more than 13 credits of thesis or project may be accrued without the student being required to take additional course work at the graduate-level.

Specific requirements for additional course work will be determined by the Director of the Graduate Program in Nursing and the Thesis or Project Chair.

PART-TIME/FULL-TIME STUDY

Options are available for full-time and part-time study. Prior to being formally admitted to graduate study, students may complete up to nine (9) credits of degree applicable course work, either UAA credit (with permission of the instructor) or transfer credit.

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.
GRADUATE PROGRAMS, COLLEGE OF HEALTH AND SOCIAL WELFARE

ADDITIONAL REQUIREMENTS
All students enrolled in UAA nursing programs must provide:

- Documentation of continuous current certification in Cardiopulmonary Resuscitation (CPR) for adults, infants, and children;
- Continuous professional malpractice insurance in amounts of $1 million/$3 million, and evidence of satisfactory health status, including immunity to chicken pox, rubella, rubeola, and hepatitis A and B (by titer), documentation of diphtheria/tetanus immunization within the past 10 years, annual PPD skin test or health exam indicating freedom from active tuberculosis, and documentation of an annual HIV test (results not required); and
- The results of a national level criminal background check.

Students are required to provide their own transportation to clinical sites. Students are also responsible for their portion of the cost of audio-conferencing. It is recommended that students have access to a personal computer, fast internet connectivity, and that they gain basic skills in computerized word processing prior to entry into the nursing program.

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.

GRADUATE NURSING CERTIFICATE PROGRAM
This program is designed for individuals who have previously acquired their Master’s Degree from a regionally accredited institution with a nursing program accredited by a nationally recognized accrediting agency (the National League for Nursing Accrediting Commission or the Collegiate Commission on Nursing Education), who wish to expand their nursing competencies or practice to include either the role of a family nurse practitioner or psychiatric mental health nurse practitioner.

The 15-29 credit graduate certificate curriculum integrates core courses with theory-based advanced practice nursing courses and clinical practice.

GRADUATE CERTIFICATE, FAMILY NURSE PRACTITIONER
The family nurse practitioner (FNP) graduate certificate for psychiatric nurse practitioners was developed 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 course work. Students who successfully complete the graduate certificate program will be eligible to take the family nurse practitioner examination offered by the American Nurses Credentialing Center (ANCC), or the American Academy of Nurse Practitioners (AANP) to become certified as an FNP. These examinations are given nationwide throughout the year.

The FNP graduate certificate for primary care specialties was developed for nurses who are already certified in one of the primary care nurse practitioner specialties (adult, child, or women). Students who successfully complete it will be eligible to take the family nurse practitioner examination offered by the American Nurses Credentialing Center (ANCC), or the American Academy of Nurse Practitioners (AANP) to become certified as an FNP. These examinations are given nationwide throughout the year.

GRADUATE CERTIFICATE, PSYCHIATRIC AND MENTAL HEALTH NURSE PRACTITIONER
The Psychiatric and Mental Health Nurse Practitioner (PMH) graduate certificate for advanced nurse practitioners was developed for nurses who are already certified as advanced nurse practitioners. Students who successfully complete the graduate certificate program will be eligible to take the psychiatric and mental health nurse practitioner examination offered by the American Nurses Credentialing Center (ANCC). This examination is given nationwide throughout the year.

ADMISSIONS REQUIREMENTS
See the beginning of this chapter for Admission Requirements for Graduate Certificates.

Application Deadlines:
- November 1: GRADUATE CERTIFICATE STUDY only
- March 1: GRADUATE CERTIFICATE STUDY and/or CLINICAL SPECIALITY

Special consideration may be given to applicants with clinical expertise and a proven record of professional contributions. Such applicants must submit documentation of their expertise and contributions along with their request for the School of Nursing Admissions Committee for special consideration. To the extent that there is limited space available in the graduate certificate program, preferences may be given to residents of the State of Alaska as defined by the University’s policy on residency for tuition purposes.

ADDITIONAL DEPARTMENTAL ADMISSION REQUIREMENTS
Students applying to the graduate certificate program in Nursing must also submit documentation of having met the following requirements:

1. Earned a Master’s Degree in nursing (MN or MSN) from a school of nursing accredited by the National League for Nursing;
2. Graduate GPA of 3.00 on a 4.00 scale;
3. Current licensure as an advanced practice nurse in the State of Alaska, concurrent with enrollment in first clinical course;
4. Must hold national certification as an advanced nurse practitioner;
5. A minimum of 500 hours of documented, supervised practicum;
6. Adequate computer skills. Students are expected to have the following basic computer skills prior to enrollment:
   - Basic word processing (preferably MS Word),
   - Sending and receiving e-mail, including e-mail with attachments,
   - Accessing and navigating the internet/world wide web, and
   - Basic functionality of hardware, software, and operating systems. It is also recommended students secure access to local technical support. For example, this might include the technical support staff at a place of employment, a computer- wise teenager, or a point of contact at a local computer store or training center
7. Successful completion with a grade of C or better of graduate-level courses in pathophysiology, pharmacology, and physical assessment. If these courses have not been completed, they must be taken concurrently with the program.

ACADEMIC PROGRESS
Students enrolled in the graduate certificate programs must maintain a 3.0 (B) GPA in all required course work. Students must earn a grade of B or higher in all clinical courses. If a student earns less than a B in a clinical course, that student must, on a space-available basis, retake the course the next time it is offered. A clinical course may be retaken only
The curriculum is based on standards for master’s education outlined in the Essentials for Master’s Education in Nursing published by the American Association of Colleges of Nursing (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 either standard classroom format or distance technologies, including but not limited to Blackboard Web-based approaches, CD-ROMS, and audio-conferencing or video-conferencing as appropriate and available. Teaching practice may be completed in the student’s own 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 and in adult education, with practicum opportunities in classroom and clinical settings.

**ADMISSION REQUIREMENTS**

See the beginning of this chapter for Admission Requirements for Graduate Certificates.

**Application Deadlines:**

November 1  GRADUATE CERTIFICATE STUDY only
March 1    GRADUATE CERTIFICATE STUDY and/or CLINICAL SPECIALITY

Special consideration may be given to applicants with clinical expertise and a proven record of professional contributions. Such applicants must submit documentation of their expertise and contributions along with their request to the School of Nursing Admissions Committee for special consideration. To the extent that there is limited space available in the graduate certificate program, preferences may be given to residents of the State of Alaska as defined by the University’s policy on residency for tuition purposes.

**GRADUATION REQUIREMENTS**

See the beginning of this chapter for Graduate Certificate University Requirements.

**PROGRAM REQUIREMENTS**

1. Complete the following required courses (20 credits):
   - **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** (29 credits)
     - NS A601  Advance Pathophysiology  3
     - NS A602  Advanced Health Assessment in Primary Care  3
     - NS A610  Pharmacology for Primary Care  3
     - NS A660  Family Nurse Practitioner I  4
     - NS A661  Family Nurse Practitioner II  5
     - NS A662  Family Nurse Practitioner III  5
     - NS A663  Family Nurse Practitioner IV  6
   - **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 15-29 credits is required for the certificate.

**GRADUATE CERTIFICATE, PSYCHIATRIC MENTAL HEALTH NURSE PRACTITIONER (PMH)**

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
   - NS A672  Advanced Psychiatric/Mental Health Nursing III  5
   - NS A674  Advanced Psychiatric/Mental Health Nursing IV  5

2. A total of 20 credits is required for the certificate.

**GRADUATE CERTIFICATE, NURSING EDUCATION**

This speciality certificate in nursing education is designed for nurses who have previously acquired a minimum of a Baccalaureate 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 certificate emphasizes instruction in teaching, program and course/development, implementation, and evaluation.
Graduate Programs, College of Health and Social Welfare

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DEPARTMENT OF HEALTH SCIENCES
Diplomacy Building (DPL). Room 405, (907)786-6565
http://health.uaa.alaska.edu/mph

MASTER OF PUBLIC HEALTH IN PUBLIC HEALTH PRACTICE

Public health embraces an ecological approach that recognizes the interactions and relationships among multiple determinants of health. Public health professionals typically take a community or population focus. Our graduate program prepares public health practitioners who identify and assess needs of populations; plan, implement and evaluate programs to address those needs; and otherwise assure conditions that protect and promote the health of populations. The Master of Public Health (MPH) in Public Health Practice is an interdisciplinary degree designed to provide a broad background to meet the challenges of the diverse and complex field of public health, with a particular focus on the needs of Alaska and the circumpolar north. Students with backgrounds in the natural sciences, social sciences, business, health professions, human services, business, education and law have successfully entered the field of public health at the graduate level.

Both mid-career students and recent graduates may pursue their careers with minimal disruption while working on the MPH degree, because all required courses are offered via distance format. Students are required to attend one mandatory meeting in Anchorage each year, typically in conjunction with the Alaska Public Health Summit, and are expected to communicate frequently with their MPH academic advisor. In person oral defense of capstone thesis in Anchorage is also expected of the student at the end of the MPH program.

This degree requires core courses in health education and behavioral sciences, environmental and occupational health, health management and policy, biostatistics and epidemiology. It also includes coursework in research methods, program evaluation, circumpolar health issues and management of public health emergencies and disasters, as well as the opportunity to create an individualized emphasis as the foundation for the required capstone project.

Based on national accreditation criteria and quality standards, the program goals are to prepare public health professionals who can:

- 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 (communication)
- Interact sensitively and professionally with individuals and communities with diverse characteristics (diversity and cultural proficiency)
- Create and communicate a shared vision for a better future, champion solutions to organizational and community challenges and energize commitment to goals (leadership)
- 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 (professionalism and ethics)
- Design, develop, implement and evaluate strategies and interventions to improve individual and community health (program planning and assessment)
- Recognize dynamic interactions among human and social systems and how they affect the relationships among individuals, groups, organizations and communities (systems thinking)
- Describe the role biostatistics serve in the discipline of public health (biostatistics)
- Specify approaches for assessing, preventing and controlling environmental hazards that pose risks to human health and safety (environmental health)
- Recognize the importance of epidemiology for informing scientific, ethical, economic and political discussions of health issues (epidemiology)
- Identify the main components and issues of the organization, financing and delivery of health services and public health systems in the U.S. (health policy and management)
- Describe the role of social, behavioral and community factors in both the onset and solution of public health problems (social and behavioral science).

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% of resident tuition, and is charged upon enrollment in MPH courses. The fee contributes directly to program support.

ADMISSION REQUIREMENTS

See the beginning of this chapter for Admission Requirements for Master's Degrees. In addition, students should also meet the following criteria when applying for admission to the MPH program:

1. Have earned a baccalaureate degree from a regionally accredited institution in the United States, or a foreign equivalent.
2. Have a cumulative 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). University of
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 six (6) semester credits each academic year, beginning with the first semester of enrollment. For satisfactory academic progress, the six (6) semester credits may consist of prerequisite courses or program courses. Failure to comply with the six (6) credit minimum each academic year may result in the student being removed from the degree program. See the beginning of this chapter for additional requirements to remain in good standing, and to maintain satisfactory academic progress toward the degree.

Candidacy Requirements

See the section Advancement to Candidacy at the beginning of this chapter.

Graduation Requirements

See University Requirements for Master’s Degrees at the beginning of this chapter.

Program Requirements

1. Complete the MPH core courses:
   - HS A605 Public Health and Society 3
   - HS A610 Environmental and Occupational Health 3
   - HS A615 Health Services Administration 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
   - HS A690 Circumpolar Health Issues 3
   - HS A699 Public Health Thesis 5
2. Complete one of the following emphasis areas:
   - Public Health Administration and Planning (9 credits):
     - ACCT A601 Accounting Foundations for Executives 3
     - PADM A624 Human Resources Administration 3
     - PADM A628 Administration of Financial Resources 3
   - Interdisciplinary (9 credits):
     Three focused public health-related elective courses at the 600-level with advisor approval.
3. A total of 42 credits is required for the degree.

Faculty

Rhonda M. Johnson, Associate Professor and MPH Coordinator, Rhonda.Johnson@uaa.alaska.edu
Betty J. Buchan, Assistant Professor, Betty.Buchan@uaa.alaska.edu
Richard A. Windsor, Presidential Professor of Public Health
Larry Weiss, Professor Emeritus, AFLDW@uaa.alaska.edu
2. Submit UAA graduate application for admission with fee and meet requirements found on the beginning of this chapter.
3. Submit complete undergraduate transcripts demonstrating an earned bachelor’s degree from an accredited college or university.
4. Submit the complete MSW Admissions Packet, available through the School of Social Work. A complete application will include the MSW program application form; a personal statement; three (3) letters of reference from employers, supervisors or academic faculty; a professional resume; and a sample of academic or professional writing in addition to other materials.

The MSW program reserves the right to request additional materials and/or interviews pertaining to program admission.

**LIBERAL ARTS REQUIREMENTS FOR ADMISSIONS**

The MSW program requires that all incoming students have successfully completed a baccalaureate degree in the liberal arts from an accredited institution of higher learning. The liberal arts baccalaureate should include successful coursework in the following areas:

1. Two (2) university courses in the humanities (history, philosophy, languages, literature, or similar disciplines);
2. Two (2) university courses in the social sciences (political sciences, sociology, anthropology, psychology, or similar disciplines, see note below concerning human development);
3. One (1) university course in the fine arts (music, theater, art appreciation or similar disciplines);
4. One (1) university course in oral communication;
5. One (1) university course in written communication;
6. Two (2) university courses in the natural sciences and/or mathematics (biology, chemistry, physics, geology, astronomy or from similar disciplines; algebra, calculus, trigonometry, statistics, or similar disciplines, see notes below concerning human biology and statistics.
7. A minimum of forty-five (45) semester credits or sixty-eight (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 course work.

As part of the liberal arts preparation, the MSW Program has established the following three specific prerequisites to admission: prior course work in human biology (one course); human development over the entire life span (one course); and statistics (one course). The human biology and human development courses provide educational background for understanding the bio-psycho-social determinants of human behavior. The 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 will be admitted to the MSW degree program. Please contact the department for further information.

**ACADEMIC PROGRESS**

To maintain satisfactory progress toward the degree, a student in the MSW program is expected to achieve a GPA of 3.00 or better on a 4.00 scale, with no individual course grade lower than a C, and to adhere to the Code of Ethics of the National Association of Social Workers. Students must earn a grade of B or better in all field practicum courses (SWK A631B, SWK A632B, SWK A633B, SWK A634B, SWK A639B).

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 service agencies.

Field placements located outside the Anchorage/ Matanuska-Susitna Valley area carry additional fees in order to help support MSW program expenses.

**TRANSFER CREDITS**

Up to nine (9) semester credits from a CSWE-accredited MSW program may be transferred to UAA and counted toward degree completion. Quarter credits will be converted to semester credits by multiplying quarter credits by two-thirds.

**CANDIDACY FOR A MASTER OF SOCIAL WORK DEGREE**

1. Refer to Advancement to Candidacy criteria found at the beginning of this chapter.
2. Submit the Application for Advancement to Candidacy packet available through the School of Social Work.
3. Successfully complete MSW comprehensive examination, given in the Integrative Seminar (SWK A635A) during spring semester of the concentration year of the program.

**GRADUATION REQUIREMENTS**

1. See the beginning of this chapter for University Requirements for Master’s Degrees.
2. Successful completion of individual research project (SWK A698).
3. Successful completion of all required academic course work specified on the Official Graduate Studies Plan, with a GPA of 3.00 or better, no course grade of lower than a C, and no practicum course grade lower than a B (SWK A631B, SWK A632B, SWK A633B, SWK A634B, SWK A639B).

**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 two to seven (2-7) credits each semester: fall, spring, and summer, for two to four years dependent upon prior academic preparation. A copy of the part-time program plan is available from the School of Social Work.

1. **Foundation Curriculum:** Complete, test-out, or waive the following required courses in the foundation sequence:

   **Fall - Year One**
   - SWK A606 Social Welfare: History and Contemporary Programs 3
   - SWK A630 Practice Skills Lab 1
   - SWK A631A Social Work Practice I 3
   - SWK A631B Generalist Practicum I* 3
   - SWK A642 Human Behavior in the Social Environment 3
   - SWK A643 Human Diversity in Social Work Practice 3

   **Spring - Year One**
   - SWK A607 Contemporary Social Welfare Policy and Change 3
   - SWK A624 Social Work Research 3
   - SWK A632A Social Work Practice II 3
   - SWK A632B Generalist Practicum II* 3
   - Graduate-level Social Work elective.** 3

2. **Concentration Curriculum:**

   **Fall - Year Two**
   - SWK A608 Social Policy for Advanced Generalist Practice 3
   - SWK A625 Social Work Research Lab 1
   - SWK/HS A628 Program Evaluation 3
   - SWK A633A Social Work Practice III: Direct Practice 3
   - SWK A633B Advanced Generalist Practicum III* 3
   - SWK A634A Social Work Practice IV: Organizational Practice 3
   - Graduate-level Social Work elective.** 3

   **Spring - Year Two**
   - SWK A634B Advanced Generalist Practicum IV* 4
   - SWK A635 Advanced Generalist Integrative Seminar 3
GRADUATE PROGRAMS, COLLEGE OF HEALTH AND SOCIAL WELFARE

RESEARCH PROJECT
All students are required to complete an independent research project (SWK A698) in the concentration year of study. The project is an opportunity for the student to conduct an original research project under the guidance of a faculty member. Students attend a weekly seminar to facilitate the process. The research process includes formulating the research question, conducting a literature review, designing and conducting the study, analyzing the data, writing the research report, and disseminating the results to faculty, fellow students and the practice community. Students are expected to comply with UAA policies and procedures for the protection of human subjects.

GRADUATE CERTIFICATE IN CLINICAL SOCIAL WORK PRACTICE
Graduate Certificate Program Description: The Graduate Certificate in Clinical Social Work Practice prepares MSW graduates to practice clinical social work using social work principles and methods to assist in the treatment of mental and emotional conditions of individuals, families or groups. The certificate includes 50 hours of post-MSW group supervision of clinical social work practice. The 15 credit graduate certificate uses the MSW program elective sequence as a platform for developing advanced knowledge and skills for clinical social work practice and partially preparing students for licensure as a Licensed Clinical Social Worker (LCSW) in Alaska. Courses are offered during the Spring and Fall semesters, meeting weekly for 1.25 hours. Group supervision courses are offered between January and December, meeting weekly for 1.25 hours. Application deadline is November 15th for a Spring semester start date.

ADMISSION REQUIREMENTS
Applicants for the Graduate Certificate in Clinical Social Work Practice must:
1. Be in the concentration year of the UAA MSW program or have completed an MSW degree from a program accredited by the CSWE;
2. Have a cumulative graduate grade average of B (3.00 on a 4.00 scale);
3. Provide a written summary of social work practice experience and career goals; and
4. Be eligible for licensure in Alaska.

CURRICULUM REQUIREMENTS (TOTAL = 15 CREDITS):
Required courses (10 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
- SWK A668 Group Supervision I 1
- SWK A669 Group Supervision II 1
- SWK A670 Group Supervision III 1
- SWK A671 Advanced Clinical Group Supervision 3
- SWK A698 Individual Research Project 3

Plus completion of one of the following sequences (5 credits):
- SWK A656 Treatment of Families (3) and SWK A672 Social Work with Families and Couples (2)
or
- SWK A665 Comparative Group Work (3) and SWK A667 Clinical Group Therapy (2)

CERTIFICATE COMPLETION REQUIREMENTS
Students enrolled in the Graduate certificate program are required to complete the curriculum requirements with a cumulative GPA of 3.00 or better and a minimum grade of B in SWK A668 Group Supervision I, SWK A669 Group Supervision II and SWK A670 Group Supervision III.

STUDENT OUTCOMES
The intended student outcomes for the graduate certificate in social work practice are:
- Expand the diversity of their clinical experiences;
- Increase their knowledge of the ethical and legal parameters of practice;
- Enhance their practice skills;
- Learn to identify clients who are at-risk and to intervene appropriately;
- Augment their repertoire of practice theories and methods;
- Mature in their professional use of self;
- Achieve integrity of their professional beliefs;
- Increase confidence in their clinical judgement through self-study of practice through clinical supervision;
- Define their professional stance vis-à-vis the realities of the practice environment;
- Understand and accept their practice limitations; and
- Develop a concept and a plan for their future professional development.

GRADUATE CERTIFICATE IN SOCIAL WORK MANAGEMENT
Graduate Certificate Program Description: The Graduate Certificate in Social Work Management prepares MSW graduates to be managers in social service settings. Students develop advanced knowledge and skills in organizational practice, supervisory management, leadership and decision-making, marketing in the social sector, financial resource development, budgeting and fiscal management. The curriculum is based on the Leadership and Management Practice Standards established by the National Network for Social Work Managers. Application deadline is November 15th for a Spring semester start date.

ADMISSION REQUIREMENTS
Applicants for the Graduate Certificate in Social Work Management must:
1. Be in the concentration year of the UAA MSW program or have completed an MSW degree from a program accredited by the CSWE;
2. Have a cumulative graduate grade point average 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):
- MSW Required Course (3 credits):
  - SWK A634A SW Practice IV: Organizational Practice 3
- MSW Elective Courses (12 credits):
  - SWK A654 Supervisory Management in Social Work 3
  - SWK A659 Leadership and Decision Making in Social Work 3

University of Alaska Anchorage 2007-2008 Course Catalog www.uaa.alaska.edu
Graduate Certificate, Dietetic Internship

LUCY CUDDY HALL (CUDY) 126 (907) 786-4728

The UAA Dietetic Internship, with a specialty emphasis on Alaska Native culture and Alaska healthcare delivery systems, developmentally accredited by the Commission on Accreditation for Dietetics Education (CADE), offers the supervised practice experience required by the American Dietetic Association (ADA) to sit for the Registered Dietitian (RD) exam. 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 partake 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 Requirements

1. Graduates will demonstrate the ability to adapt to the ever-changing scientific, technical, and professional environment including knowledge of public policy, legislative issues, ethics, and lifelong learning.
2. Graduates will demonstrate the ability to communicate efficiently and effectively through the development of writing, speaking, listening, and problem solving skills.
3. Graduates will demonstrate their ability to efficiently and effectively use the techniques and tools for managing foodservice systems.
4. Graduates will demonstrate their ability to apply knowledge and skills in medical nutrition therapy in a variety of settings.
5. Graduates will demonstrate their ability to apply knowledge and skills in community nutrition to enhance health and promote wellness in a variety of settings.
6. Graduates will demonstrate an understanding of Alaska Native culture and Alaska’s unique healthcare delivery system.
7. Students will achieve a satisfactory rating for all the entry-level competencies prior to completion of the program.
8. Graduate will pass the national Registered Dietitian exam, on the first try, greater than 80% of the time.
9. Graduates will have employers who will rate alumni with a knowledge base of at least “satisfactory” on follow-up surveys.
10. Graduates will indicate they felt well-prepared for their practices as a Registered Dietitian.

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 exam.

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, see the Dietetic Internship website: http://di.uaa.alaska.edu.
2. Baccalaureate degree (minimum) in Dietetics or Foods and Nutrition.
3. Didactic Program in Dietetics Verification Statement within the past five years. Fulfill remedial education requirements (available upon request) if no course work or work experiences in dietetics in five years prior to program admission.
4. GPA of 3.0 or higher (4.0 scale).
5. Evidence of ability and willingness to work productively (prior work or volunteer experience).
6. Current resume and three letters of recommendation (one must be from an employer and one must be from a professor or academic advisor).
8. Provide documentation of all necessary immunizations required to work in hospitals and other healthcare facilities.
9. Provide documentation of all necessary security background checks to meet State and Federal requirements.
10. Provide documentation of necessary insurance coverage required to work in hospitals and healthcare facilities.
11. Acceptance into the program may become competitive if the number of applicants exceeds the number of intern spaces available. This program currently accepts four to five (4-5) interns each academic year.

GRADUATION REQUIREMENTS
See the beginning of this chapter for Graduate Certificate University Requirements.

PROGRAM REQUIREMENTS

1. Complete the following courses:
   - DN A692A Seminar: Current Issues in Dietetics: Clinical and Community Nutrition 2
   - DN A692B Seminar: Current Issues in Dietetics: Community Nutrition and Foodservice Administration 1
   - DN A695C Practicum in Clinical Nutrition 4
   - DN A695D Practicum in Community Nutrition 2
   - DN A695E Advanced Practicum in Community Nutrition 4
   - DN A695F Practicum in Foodservice Administration 4
2. A total of 15 credits is required for this certificate

VOCATIONAL EDUCATION

MASTER OF SCIENCE, VOCATIONAL EDUCATION

University Center (UC), Suite 130, (907) 786-6423

Admission to the MSVE program has been suspended. Please contact the department for information.

SCHOOL OF ENGINEERING

The School of Engineering offers graduate degrees in Arctic Engineering, Civil Engineering, Engineering Management, Science Management, 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. A lecture course may, with the approval of the student's graduate committee, be substituted for the project. For this option, students must have completed the equivalent of a master's research project.

ARCTIC ENGINEERING

Engineering Building (ENGR), Room 201, (907) 786-1900
www.engr.uaa.alaska.edu/programs/arctic

The Arctic Engineering program is designed to provide graduate education for engineers who must deal with the unique challenges 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. 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.

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.

MASTER OF SCIENCE, ARCTIC ENGINEERING

The Master of Science of Arctic Engineering degree requires completion of a set of core courses that will prepare an engineer to understand and adapt prior engineering knowledge and skills to problems of cold regions. The program also allows students to study advanced elective courses in a particular area of specialized interest. Research activities carried out by faculty of the UAA School of Engineering provide opportunities for project reports dealing with current Arctic knowledge. A graduate Advisory Committee of at least three members is appointed to guide each admitted student to degree completion. Two members must be UAA Arctic Engineering faculty members. On successful completion of the program, students will have gained sufficient knowledge to:
1. Recognize natural conditions and engineering challenges that are unique to cold regions,
2. Interpret associated specialized language and units of measure,
3. Locate, interpret, and apply public information about cold regions physical conditions,
4. Apply fundamental physical principles for solutions to common cold regions engineering problems,
5. Assess need for complex specialized Arctic engineering solutions,
6. Determine physical and thermal properties, evaluate frost heave rates, and estimate heat flow in soils, prevent foundation failure due to seasonally frozen ground or permafrost by appropriate project site exploration and design of constructed features,
7. Determine mathematical and physical properties governing heat and mass transfer in cold climates,
8. Determine temperature profiles in structure walls, roof, and foundations, predict moisture content and mass flow rates in structures,
9. Acquire, integrate, and interpret data from public archives regarding site conditions associated with planning and design of community utility systems and formulate field measurement programs to determine site conditions for planning and design,
10. Analyze properties of lake, river, and sea ice, predict behavior of ice under natural conditions, and predict ice forces on engineering structures, and
11. Apply the sum of specialized Arctic engineering knowledge and skills gained in the program toward solution of a practical engineering problem and report this to fellow specialists.

ADMISSION REQUIREMENTS
See the beginning of this chapter for Admission Requirements for Master's Degrees. All students admitted to the Arctic Engineering program must have previously earned a baccalaureate degree in an engineering discipline with a cumulative GPA of at least 2.5. Admitted students are also responsible for completion of prerequisites for Arctic Engineering program courses, which may not have been included in their undergraduate education.

GRADUATION REQUIREMENTS
See the beginning of this chapter for University Requirements for Master's Degrees.

MAJOR REQUIREMENTS
1. Candidates must complete the following core courses:
   CE A603 Arctic Engineering 3
   CE A681 Frozen Ground Engineering 3
   ME A685 Arctic Heat and Mass Transfer 3
2. Candidates must also complete at least three additional courses (9 credits) from the following Arctic Engineering program elective courses:
   CE A682 Ice Engineering (3)
   CE A683 Arctic Hydrology and Hydraulic Engineering (3)
   CE A684 Arctic Utility Distributions (3)
   CE A688 Snow Engineering (3)
   ME A687 Arctic Materials Engineering (3)
3. Candidates must complete additional graduate electives (9 credits) in mathematical, science, or engineering subjects related to or supportive of the student's program of study, as approved by the student's Advisory Committee to fulfill the minimum 30-credit degree requirement. One technical undergraduate elective course at the "400" level may be applicable with prior permission of the student's Advisory Committee and provided a grade of B or better is achieved. All course work applied toward degree requirements must be approved by the student's Advisory Committee.
4. Each student must complete the following course (3 credits) after Advancement to Candidacy is approved by their Advisory Committee. Advancement to Candidacy requires prior approval of a project proposal by the student's Advisory Committee:
   CE A686 Engineering Project 3
   a. The Arctic Engineering project must solve a practical engineering problem to the extent that original developments by the candidate are evident in the project report.
   b. The project problem and solution must be presented in the context of the current state of the art by means of a thorough review of pertinent literature.
   c. The project must include innovative components directly involving cold regions engineering.
   d. The project must have sufficient scope to clearly demonstrate the candidate's advanced technical expertise in cold regions engineering.
   e. The project report must demonstrate command of knowledge and skills directly associated with the candidate's graduate program of study.
   f. The written project report, in the judgment of the candidate's Advisory Committee, must be publishable in the proceedings of a cold regions engineering specialty conference.
   g. The work must require a level of effort consistent with three semester hours of credit (approximately 45 to 60 hours per credit hour or 135 to 180 hours total effort).
5. A total of 30 credits is required for the degree.

CIVIL ENGINEERING
Engineering Building (ENGR), Room 201, (907) 786-1900
www.engr.uaa.alaska.edu/programs/cce

Engineering embraces the wide range of cultural and professional subjects having to do with the planning, design, and construction of works necessary for civilization. Civil Engineering in particular deals with environmental control; bridges, buildings, dams, and harbor facilities; water resource development and waste disposal; water power, irrigation works, and drainage; air, water, highway, and railway transportation; construction and management; topographic surveying and geodesy; city management and development planning.

Graduate students should enter one of two programs: those whose goal is broad professional practice will ordinarily choose the curriculum leading to the Master of Civil Engineering degree; those whose interests or background favor a specialized program with emphasis on research and/or advanced specialized study will ordinarily select the Master of Science in Civil Engineering degree.

Students can work with their academic advisor to develop a graduate study plan that will meet their career objectives. A degree program can include courses in Environmental Quality Engineering, Engineering Management, and other areas in addition to the Civil Engineering courses. Students are encouraged to review the School of Engineering web site for current course and program information.

MASTER OF SCIENCE, CIVIL ENGINEERING

ADMISSION REQUIREMENTS
See the beginning of this chapter for Admission Requirements for Master's Degrees. All students must hold a baccalaureate degree in an engineering discipline.

GRADUATION REQUIREMENTS
See the beginning of this chapter for University Requirements for Master's Degrees.
PROGRAM REQUIREMENTS
Complete 30 credits of course work approved by the student’s graduate committee, of which six (6) to 12 credits will be thesis (CE A699).

MASTER OF CIVIL ENGINEERING

ADMISSION REQUIREMENTS
See the beginning of this chapter for Admission Requirements for Master’s Degrees. All students must hold a baccalaureate degree in an engineering discipline.

GRADUATION REQUIREMENTS
See the beginning of this chapter for University Requirements for Master’s Degrees.

PROGRAM REQUIREMENTS
Complete 30 credits of course work beyond the Bachelor of Science degree. This shall include three (3) credits of a Civil Engineering Project (CE A686). All course work must be approved by the student’s graduate committee.

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ENGINEERING MANAGEMENT AND SCIENCE MANAGEMENT

University Center, UC 153 (907) 786-1924
http://soc.uaa.alaska.edu/espm

The Engineering Management and Science Management curriculum is designed for graduate engineers and scientists who will hold executive or managerial positions in engineering, construction, industrial, or governmental organizations. It includes human relations, financial, economic, quantitative, technical, and legal subjects useful in solving problems of management.

MASTER OF SCIENCE, ENGINEERING MANAGEMENT

MASTER OF SCIENCE, SCIENCE MANAGEMENT

ADMISSION REQUIREMENTS
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 nine (9) semester credits of appropriate graduate-level course work completed at other institutions with a grade of A or B may be transferred and applied toward the total 30 credits of required and elective courses. Both substitutions and transfer of credit must be approved by the department.

1. Complete the following requirements:
   - **Core Curriculum** (21 credits minimum)
     - ESM A601 Engineers in Organizations (3)
     - ESM A605 Engineering Economy (3)
     - ESM A608 Legal Environment for Engineering Management (3)
     - ESM A610 Cost Estimating (3)
     - ESM A620 Statistics for ESM or equivalent (3)
     - ESM A621 Operations Research (3)
     - PM A601 Project Management Fundamentals (PM fee) (3)
   - **Elective Curriculum** (6 credits minimum)
     - Any ESM/PM/Engineering/Science/Business Administration or other graduate courses approved by your ESM advisor.
     - ESM elective courses are:
       - ESM A606 Advanced Engineering Economy (3)
       - ESM A613 Management of Technical People (3)
       - ESM A617 Technology Management (3)
       - ESM A619 Computer Simulation of Systems (3)
       - ESM A623 Total Quality Management (3)
       - ESM A698 Individual Research (3)

2. To register for ESM A684 or ESM A699 students must have a 3.0 GPA or better in courses listed on their official graduate studies plans:
   - **Non-Thesis Option**
     - Complete ESM A684 ESM Project.
   - **Thesis Option**
     - Complete six to nine (6-9) credits of ESM A699 ESM Thesis.
     - Both Non-Thesis Option (project) and Thesis Option require a defense.

3. A minimum of 30 credits is required for the degree.

Questions:
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Engineering, Science, & Project Management Department
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(907) 786-1924 (907) 786-1935 fax

FACULTY
Jang Ra, Professor, Chair, AFJWR@uaa.alaska.edu
ENVIRONMENTAL SCIENCE AND TECHNOLOGY

School of Engineering
Engineering Building (ENGR), Room 201, (907) 786-1900
www.engr.uaa.alaska/programs/environmental

The graduate program in Applied Environmental Science & Technology (AEST) is designed for students seeking careers as environmental professionals in the academic, regulatory, industrial, military, or consulting sectors. The program is interdisciplinary in nature, and encourages candidates to develop an understanding of environmental principles through advanced studies in biology, chemistry, geology, statistics and environmental engineering.

This degree program offers two options:

MASTER OF SCIENCE APPLIED ENVIRONMENTAL SCIENCE & TECHNOLOGY (MS-AEST)

This degree is designed for those students who wish to pursue specialized advanced study and original research. The MS-AEST is excellent preparation for both the practicing professional and the doctoral candidate.

MASTER OF APPLIED ENVIRONMENTAL SCIENCE & TECHNOLOGY (M-AEST)

This is a non-thesis degree designed for students who seek to enhance their education for professional practice without having to conduct original research.

Both options promote meaningful collaboration between the students and an interdisciplinary faculty team, and both provide an excellent foundation for a career in the applied environmental fields.

PROGRAM OBJECTIVES AND EXPECTED OUTCOMES

The objective of the AEST program is to produce graduates who:

- Have an advanced technical knowledge of environmentally-related disciplines within the life sciences, physical sciences, geosciences, mathematics and environmental engineering;
- Are capable of integrating advanced technical information from different science and engineering disciplines;
- Are capable of conceiving and conducting a research project (MS-AEST option only); and
- Are capable of working in a professional environment.

In keeping with these objectives, the expected outcome of the AEST program is that the graduates will have:
- An ability to use advanced methods of analysis;
- An ability to understand and apply advanced environmental engineering theory;
- An ability to understand and apply advanced scientific theory;
- An ability to integrate advanced technical information from different science and engineering disciplines;
- An ability to conduct advanced environmental science research (MS-AEST option only); and
- An ability to manage projects and function in a professional environment.

ADMISSION REQUIREMENTS

Students must meet all of the admissions requirements for Master’s Degrees at the beginning of this chapter. In addition, students must meet the requirements specified below.

In order to be considered for full admission into the program, students will be able to demonstrate:

- Successful completion of a Bachelor of Science degree from a regionally accredited undergraduate program;
- A minimum undergraduate GPA of 3.0 in the natural/physical sciences or engineering;
- Successful completion of two or more consecutive semesters (or equivalent) in two of the following subject areas: Chemistry, Physics, Biology, or Geology;
- Successful completion of one or more year of calculus; and
- Satisfactory verbal and quantitative GRE scores as determined by the admissions committee. The general GRE requirement may be waived at the discretion of the admissions committee for applicants with significant professional experience.

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 towards the graduate degree.

Applicants not meeting the admissions requirements may be provisionally accepted at the discretion of the admissions committee. In this case, the candidate’s continuation in the program after the first semester will be contingent upon successful completion of a student-specific remedial plan formulated by the admissions committee.

APPLICATION PROCEDURES

All application materials must be received by the UAA Office of Admissions, per department request, by March 1st for Fall admission, and October 1st for Spring admission. The required application materials to be submitted to Admissions include:

- A completed UAA graduate application form;
- Official transcripts of all college-level work;
- Official GRE scores (general examination or subject-specific in a relevant subject area)
- In addition, please submit to the School of Engineering:
  - Three letters of recommendation from people familiar with the applicant's technical aptitude; and
  - A one-page statement of the applicant's career goals.

BEGINNING THE PROGRAM

Upon admission to the AEST program, students will complete the following actions:

- Meet with an academic advisor prior to the start of classes to plan coursework for the first semester of study. Academic advisors will be assigned by the admissions committee, and named in the acceptance letters sent to successful applicants;
- Select a Graduate Study Committee (GSC) consisting of three UAA faculty members, to be chaired by the student’s academic advisor. The GSC must be selected during the first semester of study. Academic advisors will
- Prepare a Graduate Study Plan for approval by the student’s GSC for the academic year. 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 Enrollment Services.
COURSE REQUIREMENTS

Courses for the AEST program must be selected from the following list of approved courses. In order to ensure that the students achieve a balanced graduate education, at least one course must be completed with a grade of B or better in each of the core competency areas: Analysis, Biology, Chemistry, Environmental Engineering, and Geology. The remaining technical elective credits can be selected from any of the approved courses listed below. A minimum of 21 credits must be drawn from approved 600-level courses.

Analysis
- ESM A620 Statistics for ESM (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 Analysis (3)
- STAT A601 Statistical Methods (3)

Biology
- BIOL A478 Biological Oceanography (4)
- BIOL A650 Advanced Microbial Ecology (3)
- BIOL A661 Advanced Molecular Biology (3)
- BIOL A675 Advanced Arctic Tundra Ecosystems (3)
- BIOL A685 Advanced Topics in Biology (1-5)

Chemistry
- AEST A601 Aquatic Process Chemistry (3)
- CHEM A450 Environmental Chemistry (3)
- CHEM A634 Advanced Instrumental Methods (4)
- CHEM A641 Advanced Biochemistry I (3)
- CHEM A642 Advanced Biochemistry II (3)
- CHEM A698 Individual Research (1-9)

Environmental Engineering
- AEST A602 Water Quality Management (3)
- AEST A603 Solid Waste Management (3)
- AEST A604 Regulatory and Permitting Processes (3)
- AEST A608 Fundamentals of Air Pollution (3)
- AEST A613 Remediation (3)
- AEST A694 Environmental Law (3)
- CE A441 Introduction to Environmental Engineering (3)
- CE A600 Fundamentals of Environmental Science and Engineering (3)
- CE A662 Surface Water Dynamics (3)
- CE A663 Ground Water Dynamics (3)
- CE A674 Waves, Tides, and Ocean Processes for Engineers (3)
- CE A677 Coastal Measurements and Analysis (3)
- CE A683 Arctic Hydrology and Hydraulic Engineering (3)
- ENVF F651 Environmental Risk Assessment (3) (UAF Online Course)*
- ENVF 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)
- PM A601 Project Management (3)

Geology
- GEOL A455 Permafrost (3)
- GEOL A457 Soil Genesis and Classification (4)
- GEOL A460 Environmental Geochemistry (3)
- GEOL A475 Environmental Geophysics (3)
- GEOL A690 Graduate Topics in Geology (1-4)

Thesis
- AEST A699 Thesis (1-6)

Alternate courses may be used to meet the course requirement(s) on approval by the student’s graduate committee.

*UAF courses will be considered as resident credit. It is the student’s responsibility to check the UAF Catalog for current course content and availability.

GRADUATION REQUIREMENTS (MS-AEST DEGREE)

In order to receive an MS-AEST degree, students must:

1. Satisfy all university requirements for the Master’s Degrees listed at the beginning of this chapter;
2. Advance to Candidacy prior to the beginning of the semester in which the student intends to graduate. Advancement to Candidacy for the MS-AEST degree will require approval of a thesis research proposal by the graduate committee;
3. Complete 24 credits of course work approved in advance by the student's graduate committee, and six (6) credits of thesis work approved through the Advancement to Candidacy process. Thesis credits are accumulated under the course number AEST A699. Once a student has successfully advanced to candidacy for the MS-AEST degree, that student may not opt to complete their degree under the non-thesis option; and
4. Satisfactorily complete an oral comprehensive examination (thesis defense) during the final semester prior to graduation.

All thesis research must meet the following requirements:

- The work must contribute to the body of knowledge in the candidate's graduate field of study. A literature search is required to demonstrate how the work is associated with the current state of the art in the candidate's graduate field of study.
- The thesis, as judged by the graduate committee, must be of sufficient quality to justify publication in either a peer-reviewed technical conference proceeding or a peer-reviewed journal.
- Publication of a manuscript in a journal or conference paper is not a requirement for graduation, but submissions will be encouraged.
- The work must demonstrate command of knowledge and skills associated with the candidate's graduate program of study.
- The work must require a level of effort consistent with six credit hours (Approximately 45 to 60 hours per credit hour, 270 hrs to 360 hrs total).
- The thesis format must meet general UAA requirements for format as determined by the UAA Consortium Library.

The student must defend the thesis in an oral presentation to the student's graduate committee and invited guests. The thesis defense serves as the student's required comprehensive examination. The student may select an outside reviewer approved by the Dean or designee of the program to participate in the oral comprehensive examination to assure that the examination, defense, or scholarship evaluation is fair and appropriate. The outside reviewer is a faculty member from another department in the university or other qualified individual in the area in which the student is seeking a degree.

Students who fail to pass the comprehensive exam (thesis defense) will work with their graduate advisor to develop an action plan to correct any deficiencies noted in the comprehensive exam. 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 take the comprehensive exam. Failure to pass a second time will result in dismissal from the program.

GRADUATION REQUIREMENTS (M-AEST DEGREE)

In order to receive an M-AEST degree, students must:

1. Satisfy all university requirements for the Master’s Degrees listed at the beginning of this chapter;
2. Advance to Candidacy prior to the beginning of the semester in which the student intends to graduate. Advancement to Candidacy for the M-AEST degree does not require a research proposal;
3. Complete 30 credits of course work approved in advance by the student's graduate committee; and
4. Satisfactorily complete a written comprehensive examination during the final semester prior to graduation.

When a student is within one semester of completing the course requirements, the graduate committee will administer a comprehensive exam to evaluate the candidate's knowledge of advanced environmental science principles. The exam will be developed by a graduate faculty committee and will contain questions consistent with the student's coursework areas of concentration. The student may select an outside reviewer approved by the Dean or designee of the program to participate in the examination to assure that the examination is fair and appropriate. The outside reviewer is a faculty member from another department in the university or other qualified individual in the area in which the student is seeking a degree.

Students who fail to pass the comprehensive exam will work with their graduate advisor to develop an action plan to correct any deficiencies noted in the comprehensive exam. 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 take the comprehensive exam. Failure to pass a second time will result in dismissal from the program.

FACULTY
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John Olofsson, Professor, AFJAO@uaa.alaska.edu

PORT AND COASTAL ENGINEERING

The UAA School of Engineering offers a cohesive sequence of courses in the theory and practice of port and coastal engineering. The series is intended to provide specialized education to enhance the theoretical knowledge and practical skills of graduate engineers to deal with engineering problems of the coastal zone. Upon completion of the certificate program, students will have specialized knowledge and skills applicable in all the coastal zones and oceans of the world.

STUDENT OUTCOMES
Abilities to:
1. Characterize oceans, seas, and estuaries in terms of physical dimensions, sediments, water chemistry, major wind patterns and currents, and wave climate;
2. Plan and design port and harbor features suited to demands of vessels and cargo transfer operations and to local oceanographic and nearshore conditions;
3. Define nearshore coastal processes in terms of wind, wave, and current climates and their interaction with sediments and local features of the shoreline;
4. Quantify natural physical processes or human activities responsible for coastal erosion, and design shore protection works suited to the local environmental setting; and
5. Accomplish oceanographic and engineering data collection, including water level measurements and hydrographic surveys, analyze data, and interpret analytical results to define nearshore bathymetry, waves, tides, and coastal processes.

GRADUATE CERTIFICATE, PORT AND COASTAL ENGINEERING

ADMISSION REQUIREMENTS AND RELATED GRADUATE CERTIFICATE POLICIES

See the beginning of this Chapter for Graduate Certificates University Requirements.

Admission to the Port and Coastal Engineering Graduate Certificate Program requires that a student must have earned a Bachelor of Science degree 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 Graduate Certificates University Requirements.

PROGRAM REQUIREMENTS

Complete the following three courses and one of two alternative fourth courses, as noted.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
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<tr>
<td>CE A674</td>
<td>Waves, Tides, and Ocean Processes</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>
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<tr>
<td>or GEO A433</td>
<td>Hydrographic Surveying</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 12

A student who earns the Port and Coastal Engineering Graduate Certificate may apply up to nine (9) credits from the Certificate program toward other graduate degrees at UAA.

PROJECT MANAGEMENT

University Center, UC 153 (907) 786-1924
http://soe.uaa.alaska.edu/espm

Project Management has become essential in virtually all areas of business and industry, including Engineering, Construction, Oil & Gas, Mining, Communications, Healthcare, Information Technology, Utilities, Education, Military, Government, Transportation, Retail and other sectors. While acknowledging and encouraging the application of Project Management skills and approaches in all these areas, the Master of Science in Project Management will concentrate on Technology-driven projects.

The program is organized around the nine knowledge areas defined in the Project Management Body of Knowledge (PMBOK® Guide), a globally recognized standard for managing projects in today’s marketplace. The PMBOK® Guide is approved as an American National Standard (ANSI) by the American National Standards Institute (ANSI). Students completing the program will be fully trained to plan and execute engineering and technology projects and to meet user requirements.

MASTER OF SCIENCE, PROJECT MANAGEMENT

ADMISSION REQUIREMENTS

See the Admissions Requirements for Master’s Degrees at the beginning of this chapter.

Admission to the Graduate program in Project Management is offered to applicants who provide sufficient evidence that they meet the requirements for study at an advanced level. Applicants must meet the minimum admissions requirements of the University of Alaska
Anchorage. In addition, an entering Master's student will normally have:

1. Earned at least a Bachelor's degree in engineering, science, or equivalent areas (as agreed to by the Department Chairman), from an accredited university with a minimum of a B average in the last two years of undergraduate work.
2. Completed an undergraduate statistics course with a B or better.
3. Become proficient in the use of computers for word processing and spreadsheet analysis.
4. Completed a minimum of two years of appropriate project management experience in a science or engineering related field.
5. Obtained three letters of recommendation from professors, former or current employers or supervisors who are familiar with the applicant's work experience.
6. Provided a statement of professional career objectives related to the study of project management.

GRADUATION REQUIREMENTS

The University Requirements for Master's Degrees must be met along with the Program Requirements that follow.

PROGRAM REQUIREMENTS

1. Complete the following requirements:
   PM A601 Project Management Fundamentals 3
   PM A610 Project Scope Management 3
   PM A612 Project Time Management 3
   PM A614 Project Cost Management 3
   PM A616 Project Quality Management 3
   PM A620 Project Human Resource Management 3
   PM A622 Project Communications Management 3
   PM A624 Project Risk Management 3
   PM A626 Project Procurement Management 3
   PM A685 Project Management Case Study and Research 6

It is strongly recommended that PM A601 - Project Management Fundamentals be taken in the student's first semester.

As a prerequisite for PM A685 registration, students must have a cumulative 3.0 GPA or better in courses listed on their official graduate studies plans.

2. A total of 33 credits is required for the degree.

Questions:
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(907) 786-1924
(907) 786-1935 fax

FACULTY

Jang Ra, Professor, Chair, AFJWR@uaa.alaska.edu
ACCT - ACCOUNTING

Offered through the College of Business & Public Policy
Edward and Cathryn Rasmuson Hall (RH), Room 309, 786-4100
www.cbp.uaa.alaska.edu/accounting.asp

Students taking any ACCT, BA, CIS, ECON, LGOP, LOG, or PADM course will be charged a single lab fee of $25 for the semester. Applies to Elmendorf AFB or Fort Richardson classes only when specifically annotated. Does not apply to Eagle River.

ACCT A051  Recordkeeping for Small Business  1 CR
Contact Hours: 1 + 0
Offered only at Matanuska-Susitna College.
Special Note: Does not satisfy any degree requirements even as an elective.

ACCT A101  Principles of Financial Accounting I  3 CR
Contact Hours: 3 + 0
Registration Restrictions: MATH A055 with minimum grade of C or approved UAA mathematics placement test score.
Special Note: ACCT A101 and ACCT A102 will satisfy requirement for ACCT A201. AAS accounting majors must take ACCT A101 and ACCT A102.
First semester introductory financial accounting. Emphasizes procedures for recording, analyzing, and summarizing accounting transactions dealing with long-term assets, current and long-term liabilities, as well as stockholder and partner equity transactions, and the statement of cash flows. Taught from the perspective of the accountant/bookkeeper who is responsible for recording accounting transactions.

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.
Second semester introductory financial accounting. Emphasizes procedures for recording, analyzing, and summarizing accounting transactions dealing with long-term assets, current and long-term liabilities, as well as stockholder and partner equity transactions, and the statement of cash flows. Taught from the perspective of the accountant/bookkeeper who is responsible for recording accounting transactions.

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. Offered fall semesters.
Basic concepts and procedures of practical bookkeeping. Fundamental principles and practices necessary to record and report financial data in a service and merchandising business for manual systems and computerized systems.

ACCT A201  Principles of Financial Accounting  3 CR
Contact Hours: 3 + 0
Registration Restrictions: MATH A105 with minimum grade of C or approved UAA mathematics placement test score.
Special Note: ACCT A101 and ACCT A102 will satisfy the requirement for ACCT A201. AAS accounting majors must take ACCT A101 and ACCT A102.
Introduction to financial accounting concepts and principles. Emphasizes the recognition and recording of financial information, the creation and understanding of financial statements, and the role accounting information takes in business and society.

ACCT A202  Principles of Managerial Accounting  3 CR
Contact Hours: 3 + 0
Prerequisites: CIS A110 and [ACCT A101 with minimum grade of C and ACCT A102 with minimum grade of C] or ACCT A201 with minimum grade of C.
Studies 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, and relevant costs for decision making.

ACCT A210  Income Tax Preparation  3 CR
Contact Hours: 3 + 0
Prerequisites: [ACCT A101 and ACCT A102] or ACCT A201 and CIS A110.
Preparation of individual income tax returns, manually and computerized (using the latest in tax preparation software). Tax research and tax planning with emphasis on primary and administrative sources of income tax law. Emphasis is on the sources and interpretation of the tax laws and principles as well as how they apply to individuals.

ACCT A216  Accounting Information Systems I  3 CR
Contact Hours: 3 + 0
Prerequisites: ACCT A201 and CIS A110.
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 and computerized 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: [ACCT A101 and ACCT A102] or ACCT A201 and CIS A110.
Special Fees.
Introduction to processing accounting information using commercial accounting software. Illustrates conversion from manual to computerized accounting system; includes maintenance of chart of accounts and all master files; processing sales, receivables, and cash receipts, purchases, payables, and cash payments; preparation of financial statements and other reports. Includes only minimal coverage of the payroll function.

ACCT A225  Payroll Accounting  3 CR
Contact Hours: 3 + 0
Prerequisites: [ACCT A101 and ACCT A102] or ACCT A201 and CIS A110.
Special Fees.
Introduces students to the federal and state laws and regulations that affect payroll and employment practices. Topics covered include calculation of wages, withholding taxes, health, retirement, and other voluntary deductions and preparation of payroll tax reports. Also includes recording and posting payroll information to accounting records.

ACCT A230  Workpaper Preparation and Presentation  3 CR
Contact Hours: 3 + 0
Prerequisites: [ACCT A101 with minimum grade of C and ACCT A102 with minimum grade of C] and ACCT A222 with minimum grade of C and CIS A110 with minimum grade of C.
Emphasizes preparation and analysis of workpapers to support year-end corporate financial statements. Includes an in-depth analysis of major balance sheet accounts and a study of financial statement presentation formats and requirements.

ACCT A295  Entry-Level Accounting Internship  3 CR
Contact Hours: 0 + 0
Prerequisites: [ACCT A101 with minimum grade of C and ACCT A102 with minimum grade of C] and ENGL A111 and [COMM A111 or COMM A235 or COMM A237 or COMM A241].
Registration Restrictions: Permission of College of Business & Public Policy Accounting Faculty Internship Coordinator; Cumulative GPA of 2.75 or higher; must be an AAS Accounting major.
Grade Mode: Pass/No Pass.
Special 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 & 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 & Public Policy majors must be admitted to upper-division standing.

A continuation of the study of intermediate accounting including the principles governing financial reporting of investments, liabilities, stockholders' equity, revenues and cash flows.

ACCT A310 Income Tax 3 CR
Contact Hours: 3 + 0
Prerequisites: ACCT A202 with minimum grade of C.
Registration Restrictions: College of Business & Public Policy majors must be admitted to upper-division standing.

Special Fees.
A study of the federal income tax law as it applies to individuals, sole proprietors, and property transactions. Emphasis is on research, theory, application, and tax planning.

ACCT A316 Accounting Information Systems II 3 CR
Contact Hours: 3 + 0
Prerequisites: ACCT A202 and ACCT A216 and CIS A305.
Registration Restrictions: College of Business & Public Policy majors must be admitted to upper-division standing.

A study of an Accounting Information System (AIS) as an integral component of an enterprise information system. Emphasis on data modeling and database design of accounting systems using the Resources-Events-Agents (REA) model as the springboard toward the design of AIS components in a relational database. Also includes coverage of internal controls and systems documentation as aids to database design and modeling.

ACCT A342 Managerial Cost Accounting 3 CR
Contact Hours: 3 + 0
Prerequisites: ACCT A202 with minimum grade of C.
Registration Restrictions: College of Business & Public Policy majors must be admitted to upper-division standing.

Accounting as a planning and control device is studied by applying the concepts of cost flow, job order and process costing, flexible budgeting, standard cost analysis and relevant costing models.

ACCT A401 Advanced Accounting I 3 CR
Contact Hours: 3 + 0
Prerequisites: ACCT A302.
Registration Restrictions: College of Business & Public Policy majors must be admitted to upper-division standing.

A study of accounting for expanded business entities. Includes accounting of joint ventures, partnerships, branches and parent-subsidiary consolidated statements.

ACCT A410 Advanced Income Tax 3 CR
Contact Hours: 3 + 0
Prerequisites: ACCT A302 and ACCT A310.
Registration Restrictions: College of Business & Public Policy majors must be admitted to upper-division standing.

Special Fees.
Offered fall semesters.

The study of the federal income tax law as it applies to partnerships and corporations. Emphasizes research, tax planning, and compliance procedures.

ACCT A420 Fraud Examination 3 CR
Contact Hours: 3 + 0
Prerequisites: ACCT A301.
Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Discusses 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 analysis techniques.

ACCT A430 Governmental and Non-Profit Accounting 3 CR
Contact Hours: 3 + 0
Prerequisites: ACCT A301.
Registration Restrictions: College of Business & Public Policy majors must be admitted to upper-division standing.

Offered fall semesters.

Accounting and financial reporting for governmental and non-profit entities, including municipalities, states, the federal government, schools, hospitals, universities, and health and welfare organizations. The fund structure provides a foundation for understanding these entities.

ACCT A452 Auditing 3 CR
Contact Hours: 3 + 0
Prerequisites: ACCT A302 and ACCT A316.
Registration Restrictions: College of Business & Public Policy majors must be admitted to upper-division standing.

Offered fall and spring semesters.

Study of professional standards applicable to independent auditor's examination of financial statements and related expression(s) of opinion.

ACCT A453 Internal Auditing 3 CR
Contact Hours: 3 + 0
Prerequisites: ACCT A302 and ACCT A342.
Registration Restrictions: College of Business & Public Policy majors must be admitted to upper-division standing.

Offered spring semesters.

Covers auditing techniques (gathering and evaluating evidence) within a company, or governmental unit, to evaluate internal controls, compliance with policy and operational efficiency.

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 & Public Policy Accounting Faculty Internship Coordinator; upper-division standing; cumulative GPA of 2.75 or higher.
Grade Mode: Pass/No Pass.

Special Note: May not be used to satisfy upper-division Accounting elective requirement. May be repeated for credit but only 6 credits will apply to degree requirements.

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
Registration Restrictions: Graduate Standing.
Offered fall semesters.

A traditional survey of accounting for the core requirement in the MBA program. Covers common financial and managerial topics with brief exposure 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.
Registration Restrictions: Graduate Standing.
Offered spring semesters.

Examines correct use and interpretation of accounting data. This involves the examination of financial statements, financial analysis, simulations, budgeting, examination of variances from budgets and forecasting the results of decisions.

ADT - AUTOMOTIVE & DIESEL TECHNOLOGY

Offered through the Community & Technical College
Auto & Diesel Technology Building (ADT), Room 207, 786-1461
www.uaa.alaska.edu/ctc/programs/applied/automotive

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.

ADT A122  Engine Theory and Diagnosis  3 CR  
Contact Hours:  2 + 2  
Prerequisites: ADT A102.  
Special Fees.  
Introduces theory of design, operation, diagnosis, disassembly, repair, and service procedures of engines used on medium and heavy equipment.

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.  
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.  
Special Fees.  
Prerequisites: ADT A131.  
Introduces the design, operation, diagnosis, disassembly, repair, and service procedures to the suspension and steering systems on medium and heavy duty equipment.

ADT A152  Heavy Duty Suspension and Steering  4 CR  
Contact Hours:  2 + 4  
Special Fees.  
Prerequisites: ADT A121.  
Introduces theory, operation, diagnosis, repair, and service procedures of brake 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 English A111 and Math A055.  
Special Fees.  
Special Note: Students are expected to provide the basic hand tools needed to participate in lab activities. See faculty advisor for tool list.  
Introduces regulations and maintenance procedures on medium and heavy duty equipment. Includes hands on maintenance, applications of maintenance scheduling, safety procedures and Department of Transportation compliance, verification, and documentation.

ADT A160  Manual Drive Trains and 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 + 5-3  
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-Transcripted Departmental Certificate of Completion in Automotive Electrical; Automotive Brakes; Suspension and Alignment; and Automotive Power Trains; and the AAS degree in Automotive Technology.  
Provides supervised workplace experience in selected industry settings. Integrates knowledge and practice to achieve basic-level skill competencies.

ADT A202  Auto Fuel and Emissions Systems  4 CR  
Contact Hours:  3 + 2  
Special Fees.  
Prerequisites: ADT A122.  
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 A222  Automotive Engine Performance  3 CR  
Contact Hours:  2 + 2  
Prerequisites: ADT A122.  
Special Fees.  
Provides supervised workplace experience in selected industry settings. Integrates knowledge and practice to achieve basic-level skill competencies.

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 A271 General Motors ASEP IV 12 CR  
Contact Hours: 8 + 8  
Prerequisites: ADT A170.  
Registration Restrictions: Acceptance into the UAA General Motors Automotive Service Education Program (ASEP) including sponsorship by an approved GM dealer.  
Special Fees.  
Special Note: Student is expected to provide the basic hand tools needed to participate in lab activities.  
Covers fuel, ignition and emission control systems, and computerized engine control systems used on late model GM vehicles. Introduces characteristics of fuels used in the modern internal combustion engine, use of vehicle scanners, and GM computer-based automotive information and specification retrieval systems. Emphasizes GM training courses as required by the International Association of GM Automotive Service Education Programs.

ADT A272 General Motors ASEP V 12 CR  
Contact Hours: 8 + 8  
Prerequisites: ADT A170.  
Registration Restrictions: Acceptance into the UAA General Motors Automotive Service Education Program (ASEP) including sponsorship by an approved GM dealer.  
Special Fees.  
Special Note: Student is expected to provide the basic hand tools needed to participate in lab activities.  
Covers General Motors (GM) power trains, including clutches, automatic and manual transmissions, automatic and manual transmissions, four wheel drive systems and rear wheel drive systems. Includes fundamentals of vibration correction. Emphasizes specific related GM training courses as required by the International Association of GM Automotive Service Education Programs.

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.
AET - ARCHITECTURAL & ENGINEERING TECHNOLOGY

Offered through the Community & Technical College
University Center (UC) Room 130, 786-6423
www.uaa.alaska.edu/ctc/programs/applied/aet

AET A100  Fundamentals of Drafting  3 CR
Contact Hours: 1 + 2
Offered only at Matanuska-Susitna College.
Special Fees.
Prerequisites: AET A102 and AET A181.

AET A101  Fundamentals of CADD for Building Construction  4 CR
Contact Hours: 2 + 4
Registration Restrictions: Proof of eligibility for placement into MATH A105 and ENGL A111.
Crosstlisted with: CM A101.
Special Fees.
Prerequisites: AET A102 and AET A181.

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.
Crosstlisted with: CM A102.
Special Fees.
Prerequisites: AET A102 and AET A181.

AET A111  Civil Drafting  3 CR
Contact Hours: 2 + 3
Prerequisites: AET A102 and AET A181.
Special Fees.
Prerequisites: AET A102 and AET A181.

AET A121  Architectural Drafting  3 CR
Contact Hours: 3 + 0
Prerequisites: AET A102 and AET A181.
Special Fees.
Prerequisites: AET A102 and AET A181.

AET A123  Codes and Standards  3 CR
Contact Hours: 2 + 3
Prerequisites: AET A102 and AET A181.
Special Fees.
Prerequisites: AET A102 and AET A181.

AET A131  Structural Drafting  3 CR
Contact Hours: 2 + 3
Prerequisites: AET A102 and AET A181.
Special Fees.
Prerequisites: AET A102 and AET A181.

AET A142  Mechanical and Electrical Technology  4 CR
Contact Hours: 3 + 2
Prerequisites: AET A101 and AET A102.
Crosstlisted with: CM A142.
Special Fees.
Prerequisites: AET A102 and AET A181.

AET A143  Mechanical and Electrical Drafting  3 CR
Contact Hours: 2 + 3
Prerequisites: AET A102 and AET A181.
Special Fees.
Prerequisites: AET A102 and AET A181.

AET A161  Blueprint Reading for the Construction Industry  1 CR
Contact Hours: 1 + 2
Registration Restrictions: High school reading and writing skills and math including addition and subtraction of fractions and decimals.
Special Fees.
Prerequisites: AET A102 and AET A181.

AET A162  Cost Estimating for General Contractors  2 CR
Contact Hours: 1 + 2
Registration Restrictions: High school math, reading, and writing skills, and field experience.
Special Fees.
Prerequisites: AET A102 and AET A181.

AET A171  Building Your Own Home  3 CR
Contact Hours: 1 + 1
Registration Restrictions: Basic high school English and math skills recommended.
Special Fees.
Prerequisites: AET A102 and AET A181.

AET A181  Intermediate CADD for Building Construction  4 CR
Contact Hours: 2 + 4
Prerequisites: AET A102 and CM A101.
Special Fees.
Prerequisites: AET A102 and CM A101.

AET A213  Civil Technology  4 CR
Contact Hours: 2 + 4
Prerequisites: AET A101 and AET A102.
Crosstlisted with: CM A213.
Special Fees.
Prerequisites: AET A102 and AET A102.

AET A231  Structural Technology  3 CR
Contact Hours: 2 + 4
Prerequisites: AET A102 and AET A102.
Crosstlisted with: CM A231.
Special Fees.
Prerequisites: AET A102 and AET A102.

For general contractors, subcontractors, and tradespeople. Introduction to skills and techniques needed to produce cost-effective bid proposals for residential and light commercial building projects. Emphasis on quantity/material take-offs, bid proposal forms, and scheduling.

AET A142  Mechanical and Electrical Technology  4 CR
Contact Hours: 3 + 2
Prerequisites: AET A101 and AET A102.
Crosstlisted with: CM A142.
Special Fees.
Prerequisites: AET A102 and AET A181.

AET A143  Mechanical and Electrical Drafting  3 CR
Contact Hours: 2 + 3
Prerequisites: AET A102 and AET A181.
Special Fees.
Prerequisites: AET A102 and AET A181.

AET A161  Blueprint Reading for the Construction Industry  1 CR
Contact Hours: 1 + 2
Registration Restrictions: High school reading and writing skills and math including addition and subtraction of fractions and decimals.
Special Fees.
Prerequisites: AET A102 and AET A181.

AET A162  Cost Estimating for General Contractors  2 CR
Contact Hours: 1 + 2
Registration Restrictions: High school math, reading, and writing skills, and field experience.
Special Fees.
Prerequisites: AET A102 and AET A181.

AET A171  Building Your Own Home  3 CR
Contact Hours: 1 + 1
Registration Restrictions: Basic high school English and math skills recommended.
Special Fees.
Prerequisites: AET A102 and AET A181.

AET A181  Intermediate CADD for Building Construction  4 CR
Contact Hours: 2 + 4
Prerequisites: AET A102 and CM A101.
Special Fees.
Prerequisites: AET A102 and CM A101.

AET A213  Civil Technology  4 CR
Contact Hours: 2 + 4
Prerequisites: AET A101 and AET A102.
Crosstlisted with: CM A213.
Special Fees.
Prerequisites: AET A102 and AET A102.

AET A231  Structural Technology  3 CR
Contact Hours: 2 + 4
Prerequisites: AET A102 and AET A102.
Crosstlisted with: CM A231.
Special Fees.
Prerequisites: AET A102 and AET A102.

For general contractors, subcontractors, and tradespeople. Introduction to skills and techniques needed to produce cost-effective bid proposals for residential and light commercial building projects. Emphasis on quantity/material take-offs, bid proposal forms, and scheduling.

AET A142  Mechanical and Electrical Technology  4 CR
Contact Hours: 3 + 2
Prerequisites: AET A101 and AET A102.
Crosstlisted with: CM A142.
Special Fees.
Prerequisites: AET A102 and AET A181.

AET A143  Mechanical and Electrical Drafting  3 CR
Contact Hours: 2 + 3
Prerequisites: AET A102 and AET A181.
Special Fees.
Prerequisites: AET A102 and AET A181.
### AET - Architectural and Engineering Technology

**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 A143].  
Special Fees.  
Provides a culminating problem-solving situation for students from the various certificate programs. The problem will be taken from community-generated enterprise and solved in a project-based learning environment.

**AET A290** Architectural and Engineering Technology Internship 1-6 CR  
Selected Topics (Topic)  
Contact Hours: 0-6 + 0-12  
Registration Restrictions: Department Permission required.  
Grade Mode: Pass/No Pass.  
Special Note: May be repeated for credit under different topic.  
Provides theoretical and/or experiential learning in selected areas of Architectural and Engineering Technology. Provides technical information on current industry trends.

**AET A295** Architectural and Engineering Technology Internship 1-3 CR  
Contact Hours: 0 + 15  
Registration Restrictions: Sophomore standing and faculty permission.  
Grade Mode: Pass/No Pass.  
Special Fees.  
Places students in generalized and specialized architectural, engineering or building construction offices related to student educational program and occupational objectives. Direct supervision by architect, engineer, or contractor professional, program faculty, and Cooperative Education Director.

**AET A490** Architectural and Engineering Technology Internship 1-6 CR  
Selected Topics (Topic)  
Contact Hours: 0-6 + 0-12  
Registration Restrictions: Department approval required.  
Grade Mode: Pass/No Pass.  
Special Fees.  
Special Note: May be repeated for credit under different topic.  
Provides advanced theoretical and/or experiential learning in selected areas of Architectural and Engineering Technology. Provides technical information on current industry trends.

### AGRI - Agriculture

**AGRI A138** Organic Gardening 1-3 CR  
Contact Hours: 1 + 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 A139** 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 A213** Practical Horsemanship II 3 CR  
Contact Hours: 3 + 0  
Offered only at Matanuska-Susitna College.  
Introduces fundamentals of training and care of light horses. Covers theories of horse behavior as related to training and performance. Emphasizes health and care of horses in Alaska's environment. Intended to be academic but practical course with hands-on training.

**AGRI A215** Basic Horse Behavior and Training II 3 CR  
Contact Hours: 3 + 0  
Offered only at Matanuska-Susitna College.  
Focuses on practical psychology of riding, and introduces basic principles and methods of training the performance horse from mounting of the horse to training skills under saddle. Includes the actual starting and training of green horses.

**AGRI A217** Foundation Horsemanship 3 CR  
Contact Hours: 3 + 0  
Offered only at Matanuska-Susitna College.  
Introduces principles necessary for understanding horse behavior and physical development of the riding horse. Presents principles and procedures of communication, and horse training from halter training to mounted work. Includes actual handling and training of horses.

**AGRI A240** Greenhouse Operation and Management 3 CR  
Offered only at Matanuska-Susitna College.  
Introduces fundamentals of training and care of light horses. Covers theories of horse behavior as related to training and performance. Emphasizes health and care of horses in Alaska's environment. Intended to be academic but practical course with hands-on training.

**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 US Air Force I 1 CR  
Contact Hours: 1 + 0  
Introduces basic military concepts. Covers key events in US Air Force history, military customs and courtesies, ethics, and communication skills.

**AIRS A102** Foundations of US Air Force II 1 CR  
Contact Hours: 1 + 0  
Describes the organizational structure of Air Force major commands and operational wings. Covers facilities and services available at Air Force installations. Introduces Air Force writing formats.
AKNS A150  US Air Force Leadership Laboratory  1 CR
Contact Hours:  0 + 4
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, has required weekly physical fitness training, marching, and leadership exercises.

AKNS A201  Evolution of Air and Space Power I  2 CR
Contact Hours:  2 + 0
Prerequisites: AKNS A101 and AKNS A102.
Examines the evolution of air and space combat technology, doctrine, historical context and practice from the first use of dirigibles to the development of Intercontinental Ballistic Missiles and long-range bombers in the early 1960s.

AKNS A202  Evolution of Air and Space Power II  2 CR
Contact Hours:  2 + 0
Prerequisites: AKNS A201.
Builds upon previous (AKNS A201) course work and examines the evolution of air and space combat technology, doctrine, and practice from the early 1960s to the present.

AKNS A301  US Air Force Leadership and Management I  3 CR
Contact Hours:  3 + 0
Prerequisites: AKNS A202.
Special Note: This is a mandatory course for students seeking an Air Force officer's commission. Analyzes fundamental concepts of leadership and management to include Total Quality Management principles, supervision skills, and mentoring techniques.

AKNS A302  US Air Force Leadership and Management II  3 CR
Contact Hours:  3 + 0
Prerequisites: AKNS A301.
Special Note: This is a mandatory course for students seeking an Air Force officer's commission. Examines concepts of military professionalism and officership. Analyzes the application of military ethics to various combat and non-combat scenarios. Covers officer evaluation, promotion, and assignment systems.

AKNS A401  National Security Affairs I  3 CR
Contact Hours:  3 + 0
Prerequisites: AKNS A302.
Special Note: This is a mandatory course for students seeking an Air Force officer's commission. Examines the relationship of the military to society and the role of the Executive and Congressional branches in military affairs. Examines the capabilities of the US Air Force, Navy, and Army. Outlines US national security goals, commitments, and issues in Europe and East Asia.

AKNS A402  National Security Affairs II/Prep for Active Duty  3 CR
Contact Hours:  3 + 0
Prerequisites: AKNS A401.
Special Note: This is a mandatory course for students seeking an Air Force officer's commission. Outlines US national security goals, commitments, and issues in the former Soviet Union, Middle East, and Latin America. Analyzes non-traditional military operations and covers various personnel, legal, and leadership topics.

AKNS A102  Alaska Native Languages II  4 CR
Contact Hours:  4 + 0
Prerequisites: AKNS A101.
May be stacked with: AKNS A109.
Course Attributes: UAA GER Humanities Requirement.
Special Note: Course may be repeated for credit if language varies. Native speaking students can gain entrance to the course with the instructor's signature. Continuing study of Language and Culture for those wishing to learn the specific language being offered. TPR (Total Physical Response) method used whereby students learn comprehension and use of language in everyday situations. Some reading and writing included.

AKNS A109  Alaska Native Language Orthography  4 CR
Contact Hours:  4 + 0
Prerequisites: AKNS A101.
May be stacked with: AKNS A102.
Special Fees.
Special Note: Course may be repeated for credit if language varies. It is assumed that students have the appropriate level of language proficiency to master this course. Students should discuss with the instructor expectations and demands of this course prior to registering.

AKNS A146  Introduction to Alaska Native Dance  1-2 CR
Contact Hours: .5x1 or 1-2
Crosslisted with: DNCE A146.
Special Fees.
Special Note: May be repeated for up to 6 credits.
Beginning course in Alaska Native dance techniques involving movement, sounds/vocal, music, and storytelling. Historical, cultural, and aesthetic context of dances stressed throughout class.

AKNS A201  Native Perspectives  3 CR
Contact Hours:  3 + 0
Course Attributes: UAA GER Humanities Requirement.
Special Fees.
Introduction to Alaska Native perspectives on time, philosophy and spirituality, communication, justice, and their ecology, and their relationship to contemporary issues. Includes overviews of Alaska Native peoples and of language groups necessary to an understanding of the diversity of Native perspectives.

AKNS A215  Music of Alaska Natives and Indigenous Peoples of Northern Regions  3 CR
Contact Hours:  3 + 0
Prerequisites: ENGL A111.
Crosslisted with: MUS A215.
Course Attributes: UAA GER Fine Arts Requirement.
Special Fees.
Special Note: AKNS A215 or MUS A111 recommended.
Explores the music of Alaska Natives and Indigenous Peoples of Northern regions by group, including influences from Euro-American music.

AKNS A290  Selected Topics in Alaska Native Studies  1-3 CR
Contact Hours:  1-3 + 0
Special Fees.
Special Note: Subtitle varies. May be repeated for credit with a different subtitle.
A topic of contemporary or continuing interest in Alaska Native Studies, treated at an introductory level. Prominent leaders in the Native community are brought into direct classroom contact with students to discuss important issues in rural Alaska and the larger Native community.

AKNS A346  Alaska Native Politics  3 CR
Contact Hours:  3 + 0
Registration Restrictions: Upper-division standing.
Crosslisted with: PS A346.
Special Note: May be applied to the Alaska Culture and History requirements for State of Alaska teacher recertification.

AKNS - ALASKA NATIVE STUDIES
Offered through the College of Arts and Sciences
Social Sciences Building (SSB), Room 378, 786-6135
http://native.uaa.alaska.edu
AMT - AVIATION MAINTENANCE TECHNOLOGY

Offered through the Community & Technical College
Aviation Complex, 2831 Merrill Field Drive, 264-7400
www.uaa.alaska.edu/ctc/programs/aviation

AMT A170 Aircraft Ground Operations and Safety 1 CR
Contact Hours: 1 + 2
Registration Restrictions: Formal acceptance into the AMT certificate or degree program.
Special Fees.
Examines safety in aviation maintenance including aircraft ground operation and fuel servicing. Presents policies and procedures of the Aviation Maintenance Technology Program, UAA and the FAA.

AMT A171 Basic Aerodynamics 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Formal acceptance into the AMT certificate or degree program.
Introduces the theory of aerodynamics and factors affecting flight of heavier-than-air fixed and rotary wing aircraft. Emphasizes aircraft weight and balance, aircraft structures, aerodynamics, theory of flight and aircraft rigging.

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, turbochargers, and superchargers.

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.
Examines 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.
Examines practices involved in the performance of overhaul of aircraft internal combustion engines. Describes disassembly, cleaning, non-destructive testing, measurement, lubrication, and assembly of internal combustion engines.

AMT A272  Aircraft Electrical Hardware and Systems  3 CR
Contact Hours: 2 + 2
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. Analyzes 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 these systems.

AMT A274L  Aircraft Electronic Systems Lab  1 CR
Contact Hours: 0 + 3
Prerequisites: AMT A174L.
Corequisite: AMT A274.
Special Fees.
Examines the functional mechanisms 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 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.
Corequisite: AMT A282.
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, magnetos, 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, magnetos, 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.
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 systemsto determine air worthiness. Details aircraft disassembly, balancing, reassembly, weight and balance, and the procedures for rigging structural assemblies and flight control systems. Students will conduct research on regulations and conformity data; plan and perform inspections, then analyze and record findings.

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 air worthiness, recording findings in maintenance records.

ANTH - ANTHROPOLOGY
Offered through the College of Arts and Sciences
Beatrice McDonald Hall (B MH), Room 212B, 786-6840
http://anthro.uaa.alaska.edu

ANTH A101 Introduction to Anthropology 3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Social Sciences Requirement.
Special Note: Recommended for majors and non-majors. Offered fall and spring semesters.
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.
Offered fall and spring semesters.
Introduction to culture and history of Alaska Natives. Includes environmental settings, linguistic subdivisions, traditional sociocultural organization and subsistence patterns, contact with non-Native groups, and contemporary issues.

ANTH A202 Cultural Anthropology 3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Social Sciences Requirement.
Offered fall and spring semesters.
Introduction to the methods, theories, and fundamental concepts for the study of cultural systems. Includes social relationships, economic organization, political systems, symbols and beliefs. Serves as foundation for more specialized courses in cultural anthropology.

ANTH A205 Biological Anthropology 3 CR
Contact Hours: 3 + 0
Offered fall and spring semesters.
Introduction to human behavior, genetics, classification and evolution with comparisons to other primates. Examines distribution, morphological and physiological adaptations of human populations.

ANTH A210 Introduction to Anthropological Linguistics 3 CR
Contact Hours: 3 + 0
Offered as Demand Warrants.
Introduction to concepts in anthropological linguistics. This course examines approaches to representing structures of the language of the world and such topics as folk taxonomies, typologies, kinship, communicative interaction, and language change and variation, all in relation to cultures and societies.
ANTH A211  Fundamentals of Archaeology  3 CR
Contact Hours:  3 + 0
Offered fall semesters.
Introduction to basic concepts, theories, and methods of archaeology with overview of historical development and major findings. Prepares students for summer field schools and more specialized courses.

ANTH A250  The Rise of Civilization  3 CR
Contact Hours:  3 + 0
Course Attributes: UAA GER Social Sciences Requirement.
Offered fall and spring semesters.
A survey of the emergence of civilization in human cultural development. Covers development of domestication, urbanization, trade, and state formation in a comparative framework. Emphasizes non-Western Civilizations: China, India, Southeast Asia, Mesoamerica, South America and Africa.

ANTH A270  Cross-Cultural Perspectives on Women  3 CR
Contact Hours:  3 + 0
Offered as Demand Warrants.
Surveys women cross-culturally exploring the nature of the relationship between gender and sex roles. Factors determining the status of women are sought in subsistence, mobility and access to power. Follows the female from subhuman primate, to the roles they’ve played as gatherers and goddesses, to movements such as the Chinese revolution and Western feminism.

ANTH A290  Special Topics in Anthropology 1-3 CR
Contact Hours:  1-3 + 0
Special Note: May be repeated once for credit with a change in subtitle.
Special topics course of general interest in anthropology.

ANTH A312  North American Archaeology  3 CR
Contact Hours:  3 + 0
Registration Restrictions: ANTH A211 recommended.
Offered as Demand Warrants.
Tracing human developments in the New World North of Mexico up to European contact.

ANTH A324  Psychological Anthropology  3 CR
Prerequisites: ANTH A101 or ANTH A202.
Contact Hours:  3 + 0
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
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 A330  Ancient Civilizations of Mexico and Guatemala  3 CR
Contact Hours:  3 + 0
Offered as Demand Warrants.
Study of the origin, development and collapse of prehistoric cultural systems in Mexico and Guatemala. Includes basic description and theoretical analysis of different cases.

ANTH A333  Peoples and Cultures of Southeast Asia  3 CR
Contact Hours:  3 + 0
Registration Restrictions: ANTH A202 recommended.
Offered as Demand Warrants.
Cultural variation and unifying traditions of Southeast Asian peoples, including their prehistory, early cultural influences, effects of European contact, major cultural traditions and selected current issues.

ANTH A335  Native North Americans  3 CR
Contact Hours:  3 + 0
Registration Restrictions: ANTH A202 recommended.
Offered as Demand Warrants.
Traditional cultures of Native North Americans, effects of contact with Europeans and contemporary adaptations.

ANTH A360  Anthropology of Art  3 CR
Contact Hours:  3 + 0
Prerequisites: ANTH A101 or ANTH A202.
History, major theories, debates, and findings in the intersection of the disciplines of anthropology and art regarding the investigation of visual representations and aesthetics across cultures, and the impacts of globalization and tourism on indigenous art. Study of the cultural goals, production, care, and duration of pictorial representation from multiple perspectives.

ANTH A361  Language and Culture  3 CR
Contact Hours:  3 + 0
Study of the relationship between language and culture with coverage of such topics as language variation, meaning in culture, taxonomies, and phonemic principles.

ANTH A365  Races: Modern Human Diversity  3 CR
Contact Hours:  3 + 0
Registration Restrictions: Upper-division standing.
Offered as Demand Warrants.
Survey of modern human biological variation in an evolutionary perspective. Comparison of the differences (and similarities) within and between modern human populations and the distribution of those differences.

ANTH A371  Selected Topics in Anthropology 1-3 CR
Contact Hours:  1-3 + 0
Special Note: May be repeated for credit.
Topic varies.

ANTH A375  Introduction to Cultural Resource Management  3 CR
Contact Hours:  3 + 0
Prerequisites: ANTH A211.
Practical aspects of cultural resource management, from evaluating cultural resources and the appropriate laws to ethical conduct, mapping, and resume writing.

ANTH A400  Anthropology of Religion  3 CR
Contact Hours:  3 + 0
Registration Restrictions: ANTH A202 recommended.
Offered as Demand Warrants.
Descriptive and comparative study of religious phenomena in traditional societies including myth, ritual, magic, witchcraft, and shamanism.

ANTH A410  History of Anthropology  3 CR
Contact Hours:  3 + 0
Registration Restrictions: 12 credits of Anthropology
Development of the science of anthropology, stressing the leaders in the field and the theories developed.
ANTH A413 Peopling of the Americas 3 CR
Contact Hours: 3 + 0
Prerequisites: ANTH A312.
Registration Restrictions: ANTH A211 strongly recommended.
Offered as Demand Warrants.
Critical analysis of the literature concerning the origins of the first Americans, the
timing of the earliest migrations across the Bering Land Bridge, and the adaptations
developed by early peoples in the Americas from 12,000 to 8,000 years ago. Included is a
detailed analysis of relevant archaeological sites as well as linguistic and biological data
pertaining to Native American origins.

ANTH A415 Applied Anthropology 3 CR
Contact Hours: 3 + 0
Prerequisites: ANTH A101 or ANTH A202.
May be stacked with: ANTH A615.
Offered alternate fall semesters.
The methods, theory, and history of the application of cultural anthropology to
sociocultural issues and problems with an emphasis on the circumpolar north.

ANTH A416 Arctic Archaeology 3 CR
Contact Hours: 3 + 0
Prerequisites: ANTH A211.
Offered alternate fall semesters.
Origins and development of the prehistoric cultures of northern North America and
adjacent northeast Asia.

ANTH A425 Archaeology of Identity 3 CR
Contact Hours: 3 + 0
Prerequisites: ANTH A211.
Examination of gender, age, social status, and ethnicity using archaeological data.

ANTH A427 Ethnohistory of Alaska Natives 3 CR
Contact Hours: 3 + 0
Registration Restrictions: ANTH A200 and HIST 341 strongly recommended.
May be stacked with: ANTH A627.
Offered alternate spring semesters.
Examines major changes in Alaskan Native societies from contact through 1940
including initial contacts, disease, trade, warfare, education, missionization, economic
development, and political mobilization. Integrates different sources of information
including oral traditions, historical narratives, government documents, and archeological
evidence.

ANTH A429 Contemporary Alaska Native Society 3 CR
1940 - Present
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
Registration Restrictions: Faculty permission and ANTH 211 recommended.
May be stacked with: ANTH A631.
Special Fees.
Special Note: May be repeated once for credit.
Introduction to basic techniques of archaeological data recovery and recording,
laboratory processing, and preliminary analysis of archaeological materials.

ANTH A432 Hunting and Gathering Societies 3 CR
Contact Hours: 3 + 0
Registration Restrictions: ANTH A202 recommended.
Offered as Demand Warrants.
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.
Offered as Demand Warrants.
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 A202.
An intensive appraisal of peoples of the Northwest coast, emphasizing various
interpretations of cultural history, cultural variation and cultural contact.

ANTH A436 Aleut Adaptations 3 CR
Contact Hours: 3 + 0
Prerequisites: ANTH A200.
Offered as Demand Warrants.
Intensive study of traditional and post-contact Aleut culture. Includes origins,
prehistory, biological and cultural adaptations. Also considers contemporary Aleut
social, economic and political status.

ANTH A437 Eskimo Adaptations 3 CR
Contact Hours: 3 + 0
Prerequisites: ANTH A200.
Eskimo peoples of the circumpolar north devoted primarily to Alaskan groups
including Inupiaq, Alutiq, and Yup’ik (including Siberian Yup’ik). Includes
environment, language, social organization, subsistence patterns, contact with non-
Native peoples, art and architecture, and contemporary issues.

ANTH A438 Tlingit and Haida Adaptations 3 CR
Contact Hours: 3 + 0
Registration Restrictions: ANTH A200 or ANTH A435 recommended.
Offered as Demand Warrants.
Examines the adaptations of the Tlingit and Haida Indians to the northeastern
Pacific Coast of North America. The course is divided into precontact, traditional,
and ethnohistoric periods covering the time from earliest occupation of the region up to
1900. System comparison and contrast of the ecological, social, ceremonial, and cultural
characteristics of each society as well as responses to Euroamerican contact.

ANTH A439 Athapaskan Adaptations 3 CR
Contact Hours: 3 + 0
Prerequisites: ANTH A200.
Offered as Demand Warrants.
An analysis of traditional and contemporary cultures and history of the northern
Athapaskan speakers of the boreal forest of interior Alaska and northwestern Canada.
Emphasizes environmental adaptations, commonalities and variations in cultural
patterning, the impact of interactions with neighboring peoples including Europeans,
and culture change over time.

ANTH A445 Evolution of Humans and Disease 3 CR
Contact Hours: 3 + 0
Prerequisites: ANTH A205.
May be stacked with: ANTH A645.
Offered as Demand Warrants.
Interrelationships of human behavior, biology, and disease. Paleopathological
diagnosis.

ANTH A455 Medical Anthropology 3 CR
Contact Hours: 3 + 0
Prerequisites: ANTH A202 or ANTH A205.
May be stacked with: ANTH A655.
Special Fees.
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 A487 Food and Nutrition: An Anthropological Perspective
Contact Hours: 3 + 0
Registration Restrictions: ANTH A202 recommended. May be stacked with: ANTH A687.
A critical evaluation of the nutritional and ethnographic record concerning the role of food and nutrition in human societies. Includes the history of human diet and its relationship to biological and cultural evolution, contemporary human diet and nutrition in cross-cultural perspective, dietary adequacy and nutritional pathology, food-getting and food-preparation technology, and relationship between food and population.

ANTH A480 Analytical Techniques in Archaeology
Contact Hours: 0 + 9
Registration Restrictions: Six credits of Anthropology and/or museum studies. May be stacked with: ANTH A680.
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
Contact Hours: 3 + 0
Prerequisites: ANTH A202 or ANTH A205 or ANTH A211. May be stacked with: ANTH A681.
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.

ANTH A482 Historical Archaeology
Contact Hours: 3 + 0
Prerequisites: ANTH A211. May be stacked with: ANTH A682.
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.

ANTH A483 Archaeology of Animals
Contact Hours: 3 + 2
Prerequisites: ANTH A211. May be stacked with: ANTH A683.
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 diet 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
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
Contact Hours: 3 + 2
Prerequisites: ANTH A215. May be stacked with: ANTH A685.
Methods of human skeletal identification, description, and analysis. Includes identification of age and sex attributes. Lecture and laboratory format.

ANTH A486 Applied Human Osteology
Contact Hours: 3 + 0
Prerequisites: ANTH A485. May be stacked with: ANTH A686.
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
Contact Hours: 1-3 + 0
Prerequisites: ANTH A211 recommended. Special Note: May be repeated with change of subtitle.
Topics in anthropology presented by members of the professional community.

ANTH A495 Practicum in Anthropology
Contact Hours: 1-3 + 0
Registration Restrictions: Graduate standing. 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
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
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing. May be repeated for credit with change of subtitle.
Topics in anthropology presented by members of the professional community.

ANTH A605 Proseminar in Biological Anthropology
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing. May be repeated for credit with change of subtitle.
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
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing. May be repeated for credit with change of subtitle.
A survey of the practice and techniques of modern archaeological data collection and analysis designed for graduate students, professionals, and other serious students. Case studies, class discussions based on readings, and student presentations emphasized with a focus upon the archaeology of prestate/nonstate societies.

ANTH A615 Advanced Applied Anthropology
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing. May be stacked with: ANTH A415.
Special Fees. Special Note: Lectures concurrent with ANTH A415. In addition to meeting all requirements for ANTH A415, graduate students will be required to make mixed-media class presentations based on literature research or interviews with local practicing anthropologists. Offered alternate fall semesters.

The methods, theory, and history of the application of cultural anthropology to sociocultural issues and problems with an emphasis on the circumpolar north.

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www.uaa.alaska.edu
Remodeling as well as identification of age, sex, and racial attributes, and interpretation of archaeological materials. Examines continuity and change in Alaskan Native society from 1940 to present, including initial contacts, disease, trade, warfare, education, missionization, economic development and political mobilization. Integrates different sources of information including oral traditions, historical narratives, government documents, and archaeological evidence.

ANTH A629  Contemporary Alaska Native Society  1940 - Present
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
May be stacked with: ANTH A429.
Examines major changes in Alaskan Native societies from contact through 1940, including initial contacts, disease, trade, warfare, education, missionization, economic development and political mobilization. Integrates different sources of information including oral traditions, historical narratives, government documents, and archaeological evidence.

ANTH A630  Advanced Research Methods in Cultural Anthropology
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
May be stacked with: ANTH A430.
Lectures concurrent with ANTH A430. In addition to meeting all requirements for ANTH A430, graduate students will be required to complete a research grant proposal and engage in computer-assisted qualitative data analysis. Offered as Demand Warrants.

ANTH A631  Field Methods in Archaeology
Contact Hours: 0 + 3-24
Registration Restrictions: Written permission of the instructor.
May be stacked with: ANTH A431.
Methods, techniques, and theoretical approaches to human skeletal identification, description, and analysis. Encompasses principles of growth, development, and remodeling as well as identification of age, sex, and racial attributes, and interpretation of pathological changes in human bone. Includes methods and theory of statistical interpretation of skeletal data.

ANTH A645  Advanced Evolution of Humans and Disease
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
May be stacked with: ANTH A445.
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 A655  Advanced Analytical Techniques in Archaeology
Contact Hours: 0 + 9
Registration Restrictions: Written permission of the instructor and graduate standing.
May be stacked with: ANTH A480.
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
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
May be stacked with: ANTH A481.
Advanced methods and techniques of description, classification, and analysis of archaeological data. Laboratory work with archaeological specimens and data is emphasized.

ANTH A675  Cultural Resource Management
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
May be stacked with: ANTH A476.
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 Medical Anthropology
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
May be stacked with: ANTH A455.
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 A683  Zooarchaeology  4 CR  
Contact Hours: 3 + 2  
Registration Restrictions: Graduate standing. May be stacked with: ANTH A483.  
Special Fees.  
Special Note: ANTH A680 recommended.  
Methods and techniques for, and theoretical approaches to, the description, analysis, and interpretation of animal bone assemblages from archaeological sites. Includes identification and quantification of animal remains, paleoenvironmental and dietary reconstruction, seasonality of site occupation, hunting and herding strategies, and the role of animals in the economy and ideology of human societies. Independent research in zooarchaeology involving preparation of comparative osteological materials and/or analysis of an assemblage of archaeological faunal materials.

ANTH A685  Advanced Human Osteology  4 CR  
Contact Hours: 3 + 2  
Registration Restrictions: Graduate standing. May be stacked with: ANTH A485.  
Special Fees.  
Methods, techniques, and theoretical approaches to human skeletal identification, description, and analysis. Encompasses principles of growth, development, and remodeling as well as identification of age, sex, and racial attributes, and interpretation of pathological changes in human bone. Lecture and laboratory format.

ANTH A686  Advanced Applied Human Osteology  3 CR  
Contact Hours: 3 + 0  
Prerequisites: ANTH A485 or ANTH A685.  
Registration Restrictions: Graduate standing. May be stacked with: ANTH A486.  
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  
Special Note: May be repeated with change of subtitle. Special topics in anthropology at the graduate level.

ANTH A692  Graduate Seminar in Anthropology  3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: Graduate Standing in Anthropology. Special Fees.  
Examination of advanced concepts, theory, and/or methodology in one of the four subfields of anthropology.

ANTH A695  Anthropology Practicum  3 CR  
Contact Hours: 0 + 9  
Registration Restrictions: ANTH A615 for Applied Cultural M.A. in Anthropology track; ANTH A675 for Cultural Resource Management M.A. in Anthropology track. Prerequisites may be taken concurrently with course. Special Fees.  
Offered fall and spring semesters.  
Anthropology practicum in the public or private sector. Emphasis on the application of anthropological skills under the supervision of an approved field instructor.

ANTH A699  Thesis Research  1-6 CR  
Contact Hours: 0 + 3-18  
Registration Restrictions: Candidacy status and permission of thesis chair. Grade Mode: Pass/No Pass. Special Fees.  
Special Note: Students may enroll for variable credit, but a total of 6 credits are required for graduation. Offered fall and spring semesters.  
Independent research conducted under the supervision of a student's graduate committee.

ART - ART

Offered through the College of Arts and Sciences  
Fine Arts Building (ART5), Room 302A, 786-1783  
http://art.uaa.alaska.edu  

ART A100  Two-Dimensional Activities  1-3 CR  
(Topics in Drawing, Design, or Painting)  
Contact Hours: 0 + 2-6  
Special Fees.  
Special Note: Does not satisfy BA or BFA degree requirements. May be repeated 3 times for credit in different topic areas.  
Art studio topics in drawing, painting, or design may be offered to introduce possible areas for future concentrated study. Recommended for students seeking initial exposure to studio arts.

ART A101  Three Dimensional Activities  1-3 CR  
(3-D Materials and Techniques)  
Contact Hours: 0 + 2-6  
Special Fees.  
Special Note: Does not satisfy BA or BFA degree requirements. May be repeated 3 times for credit in different topic areas.  
Art studio topics in sculpture, ceramics, or metalworking may be offered to introduce possible areas for future concentrated study. Recommended for students seeking initial exposure to studio arts.

ART A102  Fiber and Basketry Activities  1-3 CR  
(Topics in Fibers, Basketry, Weaving, or Papermaking)  
Contact Hours: 0 + 2-6  
Special Fees.  
Special Note: Does not satisfy BA or BFA degree requirements. May be repeated 3 times for credit in different topic areas.  
Art studio topics in fibers, basketry, weaving, or papermaking may be offered to introduce possible areas for future concentrated study. Recommended for students seeking initial exposure to studio arts.

ART A103  Replicative Arts  1-3 CR  
(Topics in Printmaking, Photography, & Digital Arts)  
Contact Hours: 0 + 2-6  
Special Fees.  
Special Note: Does not satisfy BA or BFA degree requirements. May be repeated 3 times for credit in different topic areas.  
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, A305, and A405.  
Special Fees.  
Introduction to elements of drawing based on development of skill using wet and dry media such as pencil, charcoal, conte, ink, and brush. Class and homework assignments in drawing and composition of objects, still lifes, perspective effects, and the human figure.

ART A111  Two-Dimensional Design  3 CR  
Contact Hours: 0 + 6  
Special Fees.  
Study of the organization, structure, and composition of form through the use of the basic design elements including color. Emphasis on development of design as related to two-dimensional art.

ART A112  Color Design  3 CR  
Contact Hours: 0 + 6  
Special Fees.  
Study of fundamentals of color and two-dimensional visual perception. Projects will emphasize evaluation and mixing of color.
ART A113  Three-Dimensional Design  3 CR
Contact Hours:  0 + 6 Special Fees.
Examination of three-dimensional design. Focus on terminology, exploration of materials, and appropriate use of hand and power tools. Development of problem-solving skills and methods of self-evaluation.

ART A160  Art Appreciation  3 CR
Contact Hours:  3 + 0 Course Attributes: UAA GER Fine Arts Requirement. Special Fees. Special Note: Course meets General Education Requirement except for Art majors.
Development of an appreciation of all the visual arts. Course emphasis is on the theories, practice, materials, and techniques of the visual arts.

ART A176  CAD for the Arts  3 CR
Contact Hours:  2 + 2 Crosslisted with: THR A176. Special Fees.
Concepts and techniques of 2D 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 scene design and 3D studio arts.

ART A180A  Beginning Stained Glass  3 CR
Contact Hours:  3 + 0 Special Fees. Special Note: Does not satisfy BA in Art or BFA degree requirements.
Introduces techniques including pattern designing, cutting, and lead came.

ART A180B  Intermediate Stained Glass  1 CR
Contact Hours:  1 + 0 Prerequisites: ART A180A. Special Fees. Special Note: Does not satisfy BA in Art or BFA degree requirements.
Continuation of ART 180A emphasizing advanced use of lead came and copper foil.

ART A201  Beginning Handbuilt Ceramics  3 CR
Contact Hours:  0 + 6 May be stacked with: ART A301 and A401. Special Fees.
Introduction to ceramic materials and processes. Emphasis on handbuilt forming methods and earthenware temperature range. Includes clays, clay bodies, slips, glazes, and firing process. Introduces ceramic history, idea development and creative problem solving.

ART A202  Beginning Wheelthrown Ceramics  3 CR
Contact Hours:  0 + 6 Prerequisites: ART A201. May be stacked with: ART A302 and A402. Special Fees.
Introduction to ceramic materials and processes. Emphasis on wheelthrowing methods and stoneware temperature range. Includes clays, clay bodies, slips, glazes, and firing process. Introduces ceramic history, idea development and creative problem solving.

ART A205  Intermediate Drawing  3 CR
Contact Hours:  0 + 6 Prerequisites: ART A105. May be stacked with: ART A305 and A405. Special Fees.
Expands visual awareness, technical ability and creative/conceptual input. Complex technical and intuitive/creative approaches to drawing will be investigated. Class and homework assignments in drawing objects, still life, perspective effects, and human forms.

ART A209  Beginning Metalsmithing and Jewelry  3 CR
Contact Hours:  0 + 6 Prerequisites: ART A105. May be stacked with: ART A309 and A409. Special Fees.
Introduction to the basic techniques, tools, and materials, and application of design principles. Includes historical considerations.

ART A211  Beginning Sculpture  3 CR
Contact Hours:  0 + 6 Prerequisites: ART A105 and ART A113. May be stacked with: ART A311 and A411. Special Fees.
Exploration of fundamental elements of sculpture: form, mass, volume, scale, material, and surface. Introduction to aesthetics and history of modern sculpture. Includes tools, techniques, and materials available to the sculptor.

ART A212  Beginning Watercolor  3 CR
Contact Hours:  0 + 6 May be stacked with: ART A312 and A412. Special Fees.
Exploration of aquarelle techniques. Emphasizes composition as affected by color, value, stylistic considerations, and individual expression; exhibition procedures are included.

ART A213  Beginning Painting  3 CR
Contact Hours:  0 + 6 May be stacked with: ART A313, A413, and A414. Special Fees.
Introduction to materials and traditional techniques as applied to painting as a fine art. Focus on visual awareness, technical ability and conceptual input with investigation of intuitive and creative approaches. Subject matter drawn from still life, landscape/nature, interior spaces and the human form.

ART A215  Beginning Printmaking  3 CR
Contact Hours:  0 + 6 Prerequisites: ART A105 and ART A113. May be stacked with: ART A314, A315, and A415. Special Fees.
Introduces basic skills and concepts of printmaking process. Focuses on creativity and craftsmanship including traditional and contemporary printmaking methods and skills.

ART A224  Beginning Photography  3 CR
Contact Hours:  0 + 6 Special Fees.
Basic principles including camera functions for artistic expression through the processing and printing of black and white film.

ART A225  Beginning Photography - Digital  3 CR
Contact Hours:  0 + 6 Registration Restrictions: Demonstrated computer competency or ART A103 Selected Topic: Creative Digital Darkroom. Offered only at Kenai Peninsula College. Special Fees. Basic principles including digital camera functions, digital tools and technology for artistic expression in the creation of photographic images.

ART A228  Art as a Profession  3 CR
Contact Hours:  3 + 0 Prerequisites: ART A105 and ART A111 and ART A112 and [ART A205 or ART A257] and ART A261 and ART A262. Registration Restrictions: At least one Art Studio or Digital Art Program concentration course must be taken in addition to prerequisite list. Special Fees. Introduces techniques including pattern designing, cutting, and lead came.

ART A257  Digital Art and Design I  3 CR
Contact Hours:  0 + 6 Prerequisites: ART A105 and ART A111. Registration Restrictions: Instructor permission. Special Fees. Special Note: May be repeated for credit.
Idea development and problem solving skills for the commercial market. Introduction to client identity, printing, and production process. Survey of industry history.

ART A261  History of Western Art I  3 CR
Contact Hours:  3 + 0 Prerequisites: ENGL A111. Course Attributes: UAA GER Fine Arts Requirement, UAA GER Humanities Requirement. Special Fees. Origins and development of painting, sculpture, and architecture. Covers the history of art from prehistory through the Medieval Period of the Western World.
ART A262  History of Western Art II  3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A111.
Course Attributes: UAA GER Fine Arts Requirement, UAA GER Humanities Requirement.
Special Fees.
Origins and development of painting, sculpture, and architecture. Covers the history of art from the Renaissance through the modern period with an emphasis on the art of the Western World.

ART A271  Beginning Surface Design  3 CR
Contact Hours: 0 + 6
May be stacked with: ART A371 and A471.
Introduction to resist-dyeing processes using directly applied resists (wax, rice paste) in designing and patterning the art fabric surface.

ART A272  Beginning Fiber-Sculpture  3 CR
Contact Hours: 0 + 6
May be stacked with: ART A372 and A472.
Introduction to hand-constructed textiles, adapting traditional methodology to the production of contemporary art.

ART A273  Beginning Woven Forms  3 CR
Contact Hours: 0 + 6
May be stacked with: ART A373 and A473.
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.
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 A401.
Special Fees.
Special Note: May be repeated once for credit with substantive change in media or emphasis. Intensified development of handbuilt forming methods with emphasis on form, content, and creative problem solving. Focus on the ceramic process as a vehicle for personal creative expression.

ART A302  Intermediate Wheelthrown Ceramics  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A105 and ART A113 and ART A201 and ART A202.
Registration Restrictions: Instructor permission. May be stacked with: ART A202 and A402.
Special Fees.
Special Note: May be repeated once for credit with substantive change in media or emphasis. Intensified development of wheelthrowing techniques with emphasis on the history, aesthetics, and porcelain temperature range of functional pottery. Focus is on the ceramic process as a vehicle for personal creative expression.

ART A305  Advanced Drawing  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A205.
Registration Restrictions: Instructor permission. May be stacked with: ART A105, A205, and A405.
Special Fees.
Special Note: May be repeated for credit with substantive change in media or emphasis. Refinement of advanced drawing and conceptual skills by examining contemporary techniques and materials.

ART A307  Life Drawing and Composition I  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A205.
Registration Restrictions: Instructor permission. May be stacked with: ART A407.
Special Fees.
Special Note: May be repeated once for credit with substantive change in media or emphasis. Drawing from live models to explore possibilities in design, composition and media. Emphasis on form and space using wet and dry media including charcoal, graphite, pen, and brush.

ART A309  Intermediate Metalsmithing and Jewelry  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A209.
Registration Restrictions: Instructor permission. May be stacked with: ART A209 and A409.
Special Fees.
Special Note: May be repeated once for credit with substantive change in media or emphasis. Continued investigation of techniques, tools, and materials used in metalsmithing and jewelry.

ART A311  Intermediate Sculpture  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A211.
Registration Restrictions: Instructor permission. May be stacked with: ART A211 and A411.
Special Fees.
Special Note: May be repeated once for credit with substantive change in media or emphasis. Exploration of sculptural concepts and processes with emphasizing aesthetics and history of modern sculpture. Focus on development of construction skills with access to advanced machines and tools and their applications.

ART A312  Intermediate Watercolor Painting  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A212.
Registration Restrictions: Instructor permission. May be stacked with: ART A212 and A412.
Special Fees.
Special Note: May be repeated once for credit with substantive change in media or emphasis. Intensified development of expressive skills including watercolor painting techniques and refines material uses with the emphasis on individual approaches to traditional and non-traditional pictorial and conceptual problems.

ART A313  Intermediate Painting  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A213.
Registration Restrictions: Instructor permission. May be stacked with: ART A213, A413, and A414.
Special Fees.
Special Note: May be repeated once for credit with substantive change in media or emphasis. Intensified development of expressive skills in painting. Reviews beginning painting techniques and refines material uses with emphasis on individual approaches to pictorial and conceptual problems.

ART A314  Printmaking—Litho/Serigraphy  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A215.
Registration Restrictions: Instructor permission. May be stacked with: ART A215, A315, and A415.
Special Fees.
Exploration of lithographic and serigraphic printmaking processes. Continued development of printing techniques and individual creative concepts in image making.
ART A315  Intermediate Printmaking  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A215.
Registration Restrictions: Instructor permission. For the study of lithography or serigraphy, ART A314 is required as a prerequisite.
May be stacked with: ART A215, A314, and A415.
Special Fees.
Special Note: May be repeated 3 times for credit with change of printmaking process. Explores the major processes (lithography, serigraphy, intaglio, and relief processes) linked to contemporary and digital developments.

ART A323  Color Photography  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A224.
Registration Restrictions: Instructor permission.
Special Fees.
Special Note: May be repeated once for credit with substantive change in 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.
Offered only at Kena Peninsula College.
Encourages different creative points of view using digital photographic technology for artistic expression. Includes digital image acquisition with a digital or film camera and film scanner while further developing studio lighting, commercial digital approaches, digital darkroom techniques, and printing digital images.

ART A331  Experimental Photography  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A324.
Registration Restrictions: Instructor permission.
Special Fees.
Special Note: May be repeated once for credit with substantive change in medium or emphasis.
Investigates experimental techniques and conceptual approaches to photography. Encourages exploration of diverse artistic expression.

ART A352  Intermediate Graphic Design  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A252.
May be stacked with: ART A452.
Special Fees.
Special Note: May be repeated for credit.
Applied problems in intermediate graphic design.

ART A353  Illustration I  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A257.
Registration Restrictions: Instructor permission.
May be stacked with: ART A453.
Special Fees.
Special Note: May be repeated once for credit.

ART A357  Digital Art and Design II  3 CR
Contact Hours: 0 + 6
Prerequisites: ART A257.
Registration Restrictions: Instructor permission.
Special Fees.
Special Note: May be repeated once for credit with substantive change in emphasis with faculty approval.
Exploration of 2-D digital tools and techniques for creative expression, emphasizing production of hard copy.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ART A372</td>
<td>Intermediate Fiber-Sculpture</td>
<td>3 CR</td>
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<td></td>
<td>Contact Hours: 0 + 6</td>
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<td></td>
<td>Prerequisites: ART A272.</td>
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<td>Registration Restrictions: Instructor permission.</td>
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<td></td>
<td>May be stacked with: ART A272 and A472.</td>
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<td>Special Note: May be repeated once for credit</td>
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<td>with substantive change in media or emphasis.</td>
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<td></td>
<td>Explores hand-constructed textiles and traditional percussion textiles including paper and felt making as interpreted in a contemporary context.</td>
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<tr>
<td>ART A373</td>
<td>Intermediate Woven Forms</td>
<td>3 CR</td>
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<td>Contact Hours: 0 + 6</td>
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<td></td>
<td>Prerequisites: ART A273.</td>
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<td>Registration Restrictions: Instructor permission.</td>
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<td>May be stacked with: ART A273 and A473.</td>
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<td>Special Note: May be repeated once for credit</td>
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<td>with substantive change in media or emphasis.</td>
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<td></td>
<td>Continued exploration of floor loom techniques and their use with off-loom processes for the production of contemporary art.</td>
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<tr>
<td>ART A390</td>
<td>Selected Topics in Studio Art</td>
<td>3 CR</td>
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<td>Contact Hours: 0 + 6</td>
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<td>Prerequisites: ART A273.</td>
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<td>Registration Restrictions: Instructor permission.</td>
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<td></td>
<td>May be stacked with ART A490 in same topic.</td>
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<td>Special Note: May be repeated for credit in</td>
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<td></td>
<td>different studio topic for a maximum of 9 credits.</td>
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<td>Selected topics in studio art allowing for</td>
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<td></td>
<td>concentrated study in a specific area.</td>
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<tr>
<td>ART A401</td>
<td>Advanced Handbuilt Ceramics</td>
<td>3 CR</td>
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<td></td>
<td>Contact Hours: 0 + 6</td>
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<td></td>
<td>Prerequisites: ART A111 and ART A211 and ART A301.</td>
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<td>Registration Restrictions: Instructor permission.</td>
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<td></td>
<td>May be stacked with ART A201 and A301.</td>
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<td>Special Fees.</td>
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<td>Special Note: May be repeated for credit</td>
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<td></td>
<td>Covers functional ceramics, vessel forms and</td>
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<td></td>
<td>sculptural ceramics. Focus is on the ceramic</td>
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<td></td>
<td>process as a vehicle for personal creative</td>
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<td></td>
<td>expression.</td>
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<tr>
<td>ART A402</td>
<td>Advanced Wheelthrown Ceramics</td>
<td>3 CR</td>
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<td></td>
<td>Contact Hours: 0 + 6</td>
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<td></td>
<td>Prerequisites: ART A111 and ART A211 and ART A302.</td>
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<td>Registration Restrictions: Instructor permission.</td>
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<td></td>
<td>May be stacked with ART A202 and A302.</td>
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<td>Special Fees.</td>
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<td>Special Note: May be repeated for credit</td>
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<td></td>
<td>Covers functional wheelthrown ceramics and the</td>
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<td></td>
<td>vessel form. Focus is on the ceramic process in</td>
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<td></td>
<td>a variety of firing temperatures as a vehicle for</td>
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<tr>
<td></td>
<td>personal creative expression.</td>
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<tr>
<td>ART A405</td>
<td>Experimental Drawing</td>
<td>3 CR</td>
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<td>Contact Hours: 0 + 6</td>
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<td></td>
<td>Prerequisites: ART A305.</td>
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<td>Registration Restrictions: Instructor permission.</td>
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<td></td>
<td>May be stacked with ART A105, A205, and A305.</td>
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<td>Special Fees.</td>
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<td>Special Note: May be repeated for credit</td>
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<td></td>
<td>Integrates the development of ideas and personal</td>
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<td>iconography through experimentation with</td>
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<td></td>
<td>contemporary techniques and materials in</td>
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<tr>
<td>ART A407</td>
<td>Life Drawing and Composition II</td>
<td>3 CR</td>
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<td></td>
<td>Contact Hours: 0 + 6</td>
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<td></td>
<td>Prerequisites: ART A307.</td>
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<td>Registration Restrictions: Instructor permission.</td>
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<td>May be stacked with ART A307.</td>
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<td>Special Fees.</td>
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<td>Special Note: May be repeated for credit</td>
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<td></td>
<td>Drawing from live models to explore advanced</td>
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<td>possibilities in design, composition and media.</td>
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<td>Emphasis on form and space using wet and dry</td>
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<td></td>
<td>media: charcoal, graphite, pen, brush, etc.</td>
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<td>Special emphasis on conceptual drawing</td>
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<td></td>
<td>concerns.</td>
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<tr>
<td>ART A409</td>
<td>Advanced Metalsmithing and Jewelry</td>
<td>3 CR</td>
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<td>Contact Hours: 0 + 6</td>
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<td></td>
<td>Prerequisites: ART A309.</td>
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<td>Registration Restrictions: Instructor permission.</td>
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<td></td>
<td>May be stacked with ART A209 and A309.</td>
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<td>Special Fees.</td>
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<td>Special Note: May be repeated once for credit</td>
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<td></td>
<td>Further investigation of advanced techniques,</td>
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<td>tools, and materials and more advanced design</td>
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<td>principles. Special emphasis on holloware</td>
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<td>and forging and understanding of these</td>
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<td></td>
<td>traditional techniques in a historical context.</td>
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<tr>
<td>ART A411</td>
<td>Advanced Sculpture</td>
<td>3 CR</td>
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<td></td>
<td>Contact Hours: 0 + 6</td>
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<td></td>
<td>Prerequisites: ART A311.</td>
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<td>Registration Restrictions: Instructor permission.</td>
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<td></td>
<td>May be stacked with ART A211 and A311.</td>
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<td>Special Fees.</td>
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<td>Special Note: May be repeated once for credit</td>
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<td></td>
<td>Exploration of concepts and processes emphasizing</td>
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<td></td>
<td>aesthetics and history of contemporary sculpture.</td>
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<td></td>
<td>Continued development of construction skills with</td>
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<tr>
<td></td>
<td>access to more advanced machines, tools, and</td>
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<td></td>
<td>welding equipment.</td>
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<tr>
<td>ART A412</td>
<td>Advanced Watercolor Painting</td>
<td>3 CR</td>
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<td></td>
<td>Contact Hours: 0 + 6</td>
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<td></td>
<td>Prerequisites: ART A312.</td>
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<td>Registration Restrictions: Instructor permission.</td>
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<td>May be stacked with ART A212 and A312.</td>
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<td>Special Fees.</td>
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<td></td>
<td>Continued investigation of more advanced</td>
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<td></td>
<td>watercolor techniques and approaches</td>
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<td></td>
<td>regarding conceptual/pictorial constructions.</td>
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<td>Encourages experimentation, research and</td>
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<td>technical approaches.</td>
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<td>ART A413</td>
<td>Advanced Painting</td>
<td>3 CR</td>
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<td>Contact Hours: 0 + 6</td>
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<td>Prerequisites: ART A313.</td>
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<td>Registration Restrictions: Instructor permission.</td>
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<td>May be stacked with ART A213, A313, and A414.</td>
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<td>Special Fees.</td>
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<td>Special Note: May be repeated once for credit</td>
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<td></td>
<td>Development of advanced painting techniques.</td>
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<td>Focus on complex concepts and pictorial</td>
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<td>constructions including research and</td>
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<td></td>
<td>experimentation in various media.</td>
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<tr>
<td>ART A414</td>
<td>Senior Painting Projects</td>
<td>3 CR</td>
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<td></td>
<td>Contact Hours: 0 + 6</td>
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<td></td>
<td>Prerequisites: ART A413.</td>
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<td>Registration Restrictions: Instructor permission.</td>
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<td>May be stacked with ART A213, A313, and A413.</td>
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<td>Special Fees.</td>
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<td>Special Note: May be repeated once for credit</td>
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<td></td>
<td>Expansion of individual ideas and concepts through</td>
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<td>continued experimentation and research in</td>
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<td></td>
<td>painting techniques and methodologies.</td>
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<td></td>
<td>Focus on developing a cohesive body of work.</td>
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<tr>
<td>ART A415</td>
<td>Advanced Printmaking</td>
<td>3 CR</td>
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<td></td>
<td>Contact Hours: 0 + 6</td>
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<td></td>
<td>Prerequisites: ART A314 and ART A315.</td>
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<td>Registration Restrictions: Instructor permission.</td>
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<td>May be stacked with ART A215, A314, and A315.</td>
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<td>Special Fees.</td>
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<td>Special Note: May be repeated three times for</td>
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<td>credit with change of printmaking process.</td>
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<td></td>
<td>Continued development in major printmaking</td>
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<td></td>
<td>processes including lithography, serigraphy,</td>
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<td></td>
<td>intaglio, and relief.</td>
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<td>Explores connections between various printmaking</td>
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<td>disciplines and contemporary practices, especially</td>
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<td>digital development and production of one of a</td>
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<td>kind projects. Development of individual</td>
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<td>creative concepts and experimentation in image</td>
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<td>making is expected. Interdisciplinary approaches</td>
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<td>ART A424</td>
<td>Advanced Photography</td>
<td>3 CR</td>
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<td>Contact Hours: 0 + 6</td>
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<td>Prerequisites: ART A324.</td>
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<td>Registration Restrictions: Instructor permission.</td>
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<td>May be stacked with ART A215, A314, and A315.</td>
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<td>Special Fees.</td>
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<td>Special Note: May be repeated once for credit</td>
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<td>Investigates advanced level techniques and</td>
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<td>conceptual approaches to traditional and</td>
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<td>digital photography. Encourages exploration of</td>
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<td>diverse approaches in photography.</td>
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<tr>
<td>ART A451</td>
<td>Internship/Graphic Design</td>
<td>1-6 CR</td>
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<td>Contact Hours: 0 + 2-12</td>
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<td>Registration Restrictions: Faculty permission.</td>
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<td>Special Note: May be repeated for a maximum of 12 credits.</td>
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<td>Internship position. Placement is dependent upon</td>
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<td>interest, expertise, prerequisites, and</td>
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<td>appropriateness to the position.</td>
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</table>
### ART A452  
**Advanced Graphic Design**  
3 CR  
Contact Hours: 0 + 6  
Prerequisites: ART A352.  
May be stacked with: ART A352.  
Special Fees.  
Special Note: May be repeated for credit.  
Applied problems in advanced graphic design.

### ART A453  
**Illustration II**  
3 CR  
Contact Hours: 0 + 6  
Prerequisites: ART A353.  
Registration Restrictions: Instructor permission.  
May be stacked with: ART A353.  
Special Fees.  
Special Note: May be repeated once for credit.  
Applied problems in advanced illustration.

### ART A456  
**3-D Digital Animation**  
3 CR  
Contact Hours: 0 + 6  
Prerequisites: ART A357.  
Registration Restrictions: Instructor permission.  
Special Fees.  
Studio course in computer animation: geometric modeling, motion specification, lighting, texture mapping, rendering, compositing, using production techniques and systems for computer-synthesized animation.

### ART A471  
**Advanced Surface Design**  
3 CR  
Contact Hours: 0 + 6  
Prerequisites: ART A371.  
Registration Restrictions: Instructor permission.  
May be stacked with: ART A271 and A371.  
Special Note: May be repeated once for credit.  
Development and refinement of individual problems in resist-dyeing using fluid, bound and print/transfer techniques.

### ART A472  
**Advanced Fiber-Sculpture**  
3 CR  
Contact Hours: 0 + 6  
Prerequisites: ART A372.  
Registration Restrictions: Instructor permission.  
May be stacked with: ART A272 and ART A372.  
Special Note: May be repeated once for credit.  
Refinement of fiber processes with an emphasis on structural forms, materials, approaches, scale relationships and installations.

### ART A473  
**Advanced Woven Forms**  
3 CR  
Contact Hours: 0 + 6  
Prerequisites: ART A373.  
Registration Restrictions: Instructor permission.  
May be stacked with: ART A273 and A373.  
Special 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**  
1-3 CR  
Contact Hours: 0 + 2-6  
Registration Restrictions: Instructor permission and 6 credits of upper division coursework in same studio discipline.  
Special Fees.  
Special Note: May be stacked with a course of the same topic offered in ART A390. May be repeated for credit in different studio topic 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: BA A166 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.  
Lectures, discussions, and projects integrating the knowledge of professional practices for the artist, the development of effective communication skills to be a practicing artist, the necessary critical tools to resolve and assess creative problem solving art-related issues, and the ability to research the needed information to make reasonable decisions pertinent to art practices.

### ART A492  
**Art History Seminar**  
3 CR  
Contact Hours: 3 + 0  
Prerequisites: ART A261 or ART A262 or ART A360.  
Registration Restrictions: Instructor permission.  
Special Fees.  
Special Note: May be repeated 3 times for credit in different topics for a maximum of 12 credits.  
Seminar in art history.

### ART A495  
**Practicum**  
1-3 CR  
Contact Hours: 0 + 2-6  
Registration Restrictions: Instructor permission and a minimum of 3 credits of 400-level coursework in selected content area and approval of area coordinator.  
Grade Mode: Pass/No Pass.  
Special Note: A total of 6 credits may be applied to an Art degree.  
Management and operation of art studio for advanced student seeking an art career.  
Gain hands-on skills in organization of materials and the physical environment. Some working supervision of students.

### ART A498  
**Individual Research**  
1-3 CR  
Contact Hours: 0 + 2-6  
Registration Restrictions: Instructor permission and minimum of 6 credits upper division studio coursework in selected studio area and approval of area coordinator.  
Special Fees.  
Special Note: A total of 6 credits may be applied toward an Art degree.  
Individual art research focusing on professional development, conceptual growth and awareness, critical thinking, and advanced technical proficiency in any of the major disciplines.

### ART A499  
**Thesis**  
3 CR  
Contact Hours: 0 + 6  
Prerequisites: ART A491.  
Registration Restrictions: Declared major in BFA in Art and approval of BFA Committee.  
Grade Mode: Pass/No Pass.  
Student will produce and exhibit a body of work based on an approved thesis proposal. Exhibition of work will be in designated group show.

### ASL - AMERICAN SIGN LANGUAGE

**Offered through the College of Arts and Sciences**  
Administration/Humanities Building (ADM), Suite 287, 786-4030  
http://language.uaa.alaska.edu

**ASL A101  
Elementary American Sign Language I**  
3 CR  
Contact Hours: 3 + 0  
Prerequisites: None.  
Course Attributes: UAA GER Humanities Requirement.  
Special Fees.  
Introduction to American Sign Language for beginners with no such prior knowledge. This course emphasizes receptive comprehension, sign production, and everyday vocabulary. Students are also introduced to basic grammatical and sentence structures, and to the Deaf community and culture.

**ASL A102  
Elementary American Sign Language II**  
3 CR  
Contact Hours: 3 + 0  
Prerequisites: ASL A101.  
Course Attributes: UAA GER Humanities Requirement.  
Special Fees.  
Continuation of ASL A101, designed for students able to comprehend and initiate very basic conversations on everyday topics. Students gain confidence in asking and answering questions, learn to sustain modest conversations, increase their vocabulary and knowledge of grammatical and sentence structures, and deepen their understanding of Deaf community and culture.

**ASL A201  
Intermediate American Sign Language I**  
3 CR  
Contact Hours: 3 + 0  
Prerequisites: ASL A102.  
Course Attributes: UAA GER Humanities Requirement.  
Special Fees.  
Development of receptive and expressive proficiency, with continued emphasis on purposeful communication. Students gain greater confidence in producing extended discourse, become more adept at creating with the language, and begin to sustain extended conversation. Grammatical structures are examined more in-depth, and a wider range of current topics is introduced.
### ASTR - Astronomy

**Offered through the College of Arts and Sciences**  
**Engineering Building (ENGR), Room 333, 786-1238**  
[http://salt.uaa.alaska.edu](http://salt.uaa.alaska.edu)

#### ASTR A103 Introductory Astronomy I 3 CR  
- **Contact Hours:** 3 + 0  
- **Registration Restrictions:** High school algebra and trigonometry or equivalent.  
- **Course Attributes:** UAA GER Natural Sciences Requirement.  
  - 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 A104L Introductory Astronomy I Lab 1 CR  
- **Contact Hours:** 0 + 3  
- **Prerequisites:** ASTR A103.  
- **Course Attributes:** UAA GER Natural Sciences Lab Only.  
  - Introductory astronomy laboratory with experiments in basic observational methods and data analysis applicable to the study of the solar system.

#### ASTR A104 Introductory Astronomy II 3 CR  
- **Contact Hours:** 3 + 0  
- **Prerequisites:** ASTR A103.  
- **Course Attributes:** UAA GER Natural Sciences Requirement.  
  - Special Note: May be taken out of sequence, but not recommended.  
  - Introduction to solar, stellar, galactic, extragalactic astronomy. Stars, clusters, galaxies, stellar evolution, the universe as a whole, and cosmology.

#### ASTR A104L Introductory Astronomy II Lab 1 CR  
- **Contact Hours:** 0 + 3  
- **Prerequisites:** ASTR A104 or concurrent enrollment.  
- **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.

### AT - Aviation Technology

**Offered through the Community & Technical College**  
**Aviation Complex, 2811 Merrill Field Drive, 264-7400**  
[www.uaa.alaska.edu/ctc/programs/aviation](http://www.uaa.alaska.edu/ctc/programs/aviation)

#### AT A053 Preventive Maintenance for Pilots and Owners 1-4 CR  
- **Contact Hours:** 5-2 + 2-8  
- **Grade Mode:** Pass/No Pass.  
  - 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 A100 Private Pilot Ground School 3 CR  
- **Contact Hours:** 3 + 0  
  - **Special Fees:**  
  - **Special Note:** Two hours in Flight Training Device required.  
  - Prepares students for FAA Private Pilot Knowledge Test. Includes basic aerodynamics, aircraft engine operation and flight instruments, navigation, weather information, and dissemination services. Covers FAA regulations, the Aeronautical Information Manual, radio communication, and navigation are also covered.

#### AT A101 Pre-Professional Flying 2 CR  
- **Contact Hours:** 1 + 2  
- **Registration Restrictions:** AT A100 or concurrent enrollment, or passing score on Private Pilot Knowledge Test. Department approval required. FAA Student Pilot/Class II Medical Certificate required.  
  - **Special Fees:**  
  - **Special Note:** Open-entry, open-exit. Three hours in Flight Training Device required.  
  - Begins flight instruction for students intending to become professional pilots.

#### AT A102 Introduction to Aviation Technology 3 CR  
- **Contact Hours:** 3 + 0  
- **Registration Restrictions:** Private Pilot Certificate or higher rating.  
  - Specialized instruction and discussion concerning unique flying conditions faced by Alaskan pilots. Basic aerodynamics, mountain flying, skis, floats, wheels, judgment of unimproved landing areas, characteristics of Alaska weather, external loads, airplane performance and limitations. Includes survival techniques.

#### AT A104 Alaska Bush Flying 3 CR  
- **Contact Hours:** 3 + 0  
- **Registration Restrictions:** Private Pilot Certificate or higher rating.  
  - Specialized instruction and discussion concerning unique flying conditions faced by Alaskan pilots. Basic aerodynamics, mountain flying, skis, floats, wheels, judgment of unimproved landing areas, characteristics of Alaska weather, external loads, airplane performance and limitations. Includes survival techniques.

#### AT A116 Instrument Ground School 3 CR  
- **Contact Hours:** 3 + 0  
- **Registration Restrictions:** Private Pilot Certificate or AT A100.  
  - **Special Fees:**  
  - **Special Note:** Two hours in Flight Training Device required.  
  - Preparation for FAA Instrument Pilot Knowledge Test. Includes attitude instrument flying, air traffic control and navigation facilities, pilot responsibilities, IFR en route charts, approach plates, airspace, and airway route system.

#### AT A126 Instrument Flying 2 CR  
- **Contact Hours:** 1 + 2  
- **Prerequisites:** AT A101 and (AT A116 or concurrent enrollment).  
  - **Registration Restrictions:** Department approval required  
  - **Special Fees:**  
  - **Special Note:** Open-entry, open-exit. Eight hours in Frasca 146 and four hours in Frasca 242 Flight Training Device required.  
  - Fulfills FAA flight training requirements for an instrument airplane rating under FAR Part 141.

#### AT A132 History of Aviation 3 CR  
- **Contact Hours:** 3 + 0  
- **Traces aviation history with particular emphasis on manned-powered flight.**  
- Emphasizes the Golden Age of Flight (1900-1945) and the Jet Age (1945-present).

#### AT A133 Aviation Law and Regulations 3 CR  
- **Contact Hours:** 3 + 0  
- **History of laws influencing aviation.**  
- Case studies of aviation litigation.  
- Organization, authority, responsibility, and functions of department of transportation, FAA, and Civil Aeronautics Board.

#### AT A134 Principles of Aviation Administration 3 CR  
- **Contact Hours:** 3 + 0  
- **Future trends in aviation administration.**

#### AT A143 ATC Regulations 3 CR  
- **Contact Hours:** 3 + 0  
- **Special Note:** Open-entry, open exit.  
  - Applies Federal Aviation Regulations to the air traffic control system. Introduces regulations governing the operation of air traffic control specialist within the Federal system.

#### AT A144 ATC Flight Procedures 3 CR  
- **Contact Hours:** 3 + 0  
- **Special Fees:**  
  - **Special Note:** One hour in Flight Training Device required. 2 Open-entry, open exit.  
  - Provides a basic understanding of the various methods of navigation. Develops the confidence to provide assistance and the proper reaction to various situations in air traffic control.
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**Course Descriptions**

- **AT A147 Pilot/Controller Techniques**: 3 CR Contact Hours: 3 + 0 Prerequisites: AT A143. Special Note: Open entry, open exit. Examines methods of airport, as well as aeronautical lighting and other visual aids, such as airports 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.

- **AT A200 Commercial Ground School**: 3 CR Contact Hours: 3 + 0 Prerequisites: AT A116. Special Fees. Special Note: Two hours in Flight Training Device required. Preparation for FAA Commercial Pilot Knowledge Test. Includes advanced studies in topics presented in AT A100 and AT A116, high performance and complex aircraft, commercial flight maneuvers, and commercial Federal Aviation Regulations.

- **AT A218 Commercial Flying I**: 1.5 CR Contact Hours: 1 + 1 Prerequisites: AT A126 and (AT A200 or concurrent enrollment). Registration Restrictions: Department approval required Special Fees. Special Note: Open-entry, open-exit. Flight training to review basic private pilot maneuvers and to introduce the advanced flight maneuvers required of a commercial pilot.

- **AT A219 Commercial Flying II**: 1.5 CR Contact Hours: 1 + 1 Prerequisites: AT A218. Registration Restrictions: Department approval required Special Fees. Special Note: Open-entry, open-exit. Flight training to build proficiency and experience in cross-country flying and night operations. Includes introduction to complex airplanes.

- **AT A220 Commercial Flying III**: 2 CR Contact Hours: 1 + 2 Prerequisites: AT A219. Registration Restrictions: Department approval required Special Fees. Special Note: Open-entry, open-exit. Develops proficiency required to pass the FAA Commercial Pilot Practical Flight Test.

- **AT A231 Search, Survival, and Rescue**: 3 CR Contact Hours: 3 + 3 Prerequisites: AT 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. Organizations for search and rescue with emphasis on systems and operational methods used in Alaska.

- **AT A232 Advanced Aviation Navigation**: 3 CR Contact Hours: 3 + 0 Prerequisites: AT A100. Special Fees. Examines earth's surface and mapping methods, Low, High, and International en route navigation charts and approach plates; examines advanced technology navigation and flight display systems, and the theory and operation of GPS navigation equipment; looks at future trends in aeronautical navigation.

- **AT A233 Aviation Safety**: 3 CR Contact Hours: 3 + 0 Registration Restrictions: Basic knowledge of aviation terminology. Survey of aviation safety to identify primary causes of aviation accidents. Develops and evaluates safety programs. Roles of national transportation safety board and other agencies. Future concepts in aviation safety.

- **AT A235 Elements of Weather**: 3 CR Contact Hours: 3 + 0 Definitions of 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 forecasts, and weather satellites.

- **AT A240 Operations in Flight Service Station**: 3 CR Contact Hours: 3 + 0 Prerequisites: AT A143 and AT A255. Examines fundamentals of weather observation, use of FAA publications in flight planning, phraseologies, and radio frequencies used in air-ground communications. Writes and decodes civil Notice to Airmen (NOTAMs) and operating positions in Flight Service Stations.

- **AT A241 Control Tower Operations**: 3 CR Contact Hours: 3 + 0 Prerequisites: AT A143 and AT 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.

- **AT A241L Control Tower Operation Lab**: 1 CR Contact Hours: 0 + 2 Corequisite: AT A241. Grade Mode: Pass/No Pass. Special Fees. Employs hands-on time in the control tower simulator. Emphasizes real life ATC situations to develop techniques for the manipulation of air traffic during taxi, tokeoff, and landing.

- **AT A242 ATC Terminal Radar Procedures**: 3 CR Contact Hours: 3 + 0 Prerequisites: AT A143 and AT A144 and AT A235. Explores radar theory fundamentals and system operation in air traffic control. Examines procedures of instrument traffic control in the terminal radar environment.

- **AT A242L ATC Terminal Radar Procedures Lab**: 1 CR Contact Hours: 0 + 2 Corequisite: AT A242. Grade Mode: Pass/No Pass. Special Fees. Employs hands-on time in radar laboratory simulators to develop techniques for the separation, vectoring and speed control of air traffic in a terminal radar environment.

- **AT A243 ATC Enroute Procedures**: 3 CR Contact Hours: 3 + 0 Explores procedures of instrument traffic control in the non-radar environment. Develops longitudinal, vertical, and lateral separation of air traffic. Includes lab scenarios designed to develop routine problem solving processes to adapt the student controller to real life ATC situations.

- **AT A243L ATC Enroute Procedures Lab**: 1 CR Contact Hours: 0 + 2 Corequisite: AT A243. Grade Mode: Pass/No Pass. Special Fees. Explores techniques of longitudinal, vertical, and lateral separation of air traffic using lab scenarios designed to develop routine problem solving processes to adapt the student controller to real life ATC situations.

- **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.

- **AT A290 Selected Topics in Aviation Technology**: 1-6 CR Contact Hours: 0-6 + 0-12 Registration Restrictions: Department permission required. Special Fees. 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.
### AT 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 (AT) classes.  
Proof of accident insurance required.  
Special Note: Students must apply to the Aviation Technology Division to arrange for industry placement prior to course enrollment.  

Places students in generalized aviation related work activities for purpose of introducing the students to the aviation industry. Direct supervision by aviation industry professionals and program faculty.

### AT A300  CFI Ground School  3 CR

**Contact Hours:** 3 + 0  
Registration Restrictions: AT A200 or Commercial Pilot Certificate with Instrument Rating.  

Prepares students for the 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 responsibility. Covers performance and analysis of flight training maneuvers, advanced aerodynamics, fundamentals of instrument flight, flight training publications, and Federal Aviation Regulations.

### AT A301  CFI Flying  2 CR

**Contact Hours:** 1 + 2  
Prerequisites: AT A220 and (AT A300 or concurrent enrollment).  
Registration Restrictions: Must hold a Commercial Pilot Certificate with Instrument Rating. Faculty permission required.  

Special Fees.  
Special Note: Open-Entry; Open Exit; One hour in Frasca Flight Training Device required.  
Fulfills FAA flight training requirements for obtaining a Certified Flight Instructor Certificate under FAR Part 141.

### AT A305  Additional Aircraft Rating  2 CR

**Contact Hours:** 1 + 2  
Prerequisites: AT A220 or concurrent enrollment.  
Registration Restrictions: Faculty permission required.  
Special Note: Open entry-open exit. May be repeated once for credit.  

Provides flight instruction for Professional Piloting students seeking additional ratings on their pilot certificates, e.g. Float, Multi-engine, or Type rating. Course completion requires awarding of rating sought.

### AT A325  Tools for Weather Briefing  3 CR

**Contact Hours:** 3 + 0  
Prerequisites: AT A325.  

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 cause and effect. Qualifying Air Traffic Control majors may receive Weather Observer Certification upon successful completion of Federal Aviation Administration knowledge exams.

### AT A331  Human Factors in Aviation  3 CR

**Contact Hours:** 3 + 0  
Registration Restrictions: AAS in aviation field or advanced aircman certificate.  

Students will become familiar with the following aspects of human factors: the meaning of human factors, human error, fatigue, body rhythms and sleep, fitness and performance, vision and visual illusions, motivation and leadership. Communication: language and speech, attitudes and persuasion, training and teaching devices, documentation, displays and controls, space and layout, the aircraft cabin and its human payload.

### AT A332  Transport Aircraft Systems  3 CR

**Contact Hours:** 3 + 0  
Registration Restrictions: Certificate, degree or professional experience in piloting, maintenance, administration, or air traffic control.  

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.

### AT A335  Airport Operations  3 CR

**Contact Hours:** 3 + 0  
Prerequisites: AT A102 and AT A134.  
Registration Restrictions: Junior standing  

Examines the management and operations of civil airports. Emphasizes master planning, Federal Aviation Regulations (FAR) dealing with airport operations; environmental issues; land use planning; airport capacity delay and access factors; economics impacts; financial analyses and budgeting systems; security; liability; maintenance; professional qualification; and relations.

### AT A336  Air Service Operations  3 CR

**Contact Hours:** 3 + 0  
Prerequisites: AT A120 and AT A134.  
Class Standing Restriction: Must be Junior.  

Assesses functions and future trends of air service operations. Analyzes organizations, financing, revenues, and expenses, construction, expansion, safety, and relations with local agencies including airport management.

### AT A337  Airline Operations  3 CR

**Contact Hours:** 3 + 0  
Prerequisites: AT A102 and AT A134.  
Class Standing Restriction: Must be Junior.  

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.

### AT A340  Terminal Instrument Procedures  3 CR

**Contact Hours:** 3 + 0  
Prerequisites: MATH A272.  

Evaluates the criteria used to formulate, review, approve, and publish procedures for instrument approach and departure of aircraft to and from civil and military airports.

### AT A362  Aerodynamics and Flight Performance  3 CR

**Contact Hours:** 3 + 0  
Prerequisites: MATH A107 and PHYS A123.  

Examines aerodynamic and flight performance. 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.

### AT A365  Aviation Maintenance Management  3 CR

**Contact Hours:** 3 + 0  
Prerequisites: AT A331.  

Examines maintenance management principles and programs in various aviation employment settings such as aviation, air traffic control, management, and aviation maintenance. Examines human perceptions and the decision-making process in the aviation environment to develop CRM training programs applicable in various aviation employment settings.

### AT A400  ATP Ground School  3 CR

**Contact Hours:** 3 + 0  
Registration Restrictions: Must hold a Commercial Pilot Certificate with Instrument Rating 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 forecast, and applicable FARs.

### AT A401  ATP Flying  2 CR

**Contact Hours:** 1 + 2  
Prerequisites: AT A400 or concurrent enrollment.  
Registration Restrictions: Must hold a Commercial Pilot Certificate with Instrument Rating and comply with FAR Part 61.159. Faculty permission required.  
Special Fees.  
Special Note: Open entry-open exit. Three hours in Frasca 242 Flight Training Device required.  
Fulfills FAA flight training requirements for obtaining an Airline Transport Pilot Certificate under FAR Part 141.

### AT A405  Additional CFI Rating  2 CR

**Contact Hours:** 1 + 2  
Registration Restrictions: Certified Flight Instructor Certificate required. Faculty permission 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.  
Course completion requires awarding of rating sought.

### AT A415  Company Resource Management  3 CR

**Contact Hours:** 3 + 0  
Prerequisites: AT 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 human perceptions and the decision-making process in the aviation environment to develop CRM training programs applicable in various aviation employment settings.

### AT A420  Air Transportation System  3 CR

**Contact Hours:** 3 + 0  
Registration Restrictions: Upper Division Standing  
Evaluates historical development and analyzes selected contemporary issues, problems, and trends facing the air transportation industry. Includes regulators and associations, the makeup of commercial and general aviation air transportation, and international aviation.
AT 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.

AT A431  Aircraft Accident Investigation  3 CR  
Contact Hours: 3 + 0  
Prerequisites: AT A233 and AT A331.  
Provides a comparative examination of elements and issues used in a field and laboratory investigation of an aircraft accident. The focus will be 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.

AT A432  Turbine Airplane Transition  3 CR  
Contact Hours: 3 + 0  
Prerequisites: AT A332.  
Special Fees.  
Special Note: Includes Cessna Caravan Level B Simulator time and material covered is specific to the Cessna Caravan (CE-208) airplane.  
Facilitates transition to turbine powered airplanes using CD-208; 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).

AT A440  Facility Operation and Administration  3 CR  
Contact Hours: 3 + 0  
Prerequisites: BA A361 and BA A461.  
An air traffic control capstone course which emphasizes effective operation and administration of air traffic service (ATS) facilities and conflict resolution between FAA instructions and the term of a labor union contract. Evaluates current issues and events and their potential impact on the National Airspace System.

AT A490  Advanced Topics in Aviation Technology  1-6 CR  
Contact Hours: 0-6 + 0-12  
Registration Restrictions: Department permission required.  
Provides advanced theoretical and/or experiential learning in all areas of Aviation Technology (aviation maintenance, professional piloting, aviation administration, and air traffic control). Specific course content is determined by current industry trends and student needs. Emphasizes analysis, evaluation, and synthesis.

AT A492  Air Transportation System Seminar  3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: Senior standing.  
Grade Mode: Pass/No Pass.  
Analyzes the relevance of current events and issues in the air transportation industry as found in aviation related professional and/or popular print and electronic media; students will be expected to read, analyze, discuss, and debate assigned readings in a seminar atmosphere with a view to understanding the rational as well as being able to synthesize interrelated segment effects on the transportation system as a whole.

AT A495  Aviation Internship II  1-3 CR  
Contact Hours: 0 + 5-15  
Registration Restrictions: Grade of C or better in 12 credits of upper division courses, six of which must be aviation technology (AT) credit hours. Proof of accident insurance required.  
Special Note: Students must apply to the Aviation Technology Division to arrange for industry placement prior to course enrollment.  
Places students in specialized aviation related work experiences pertinent to educational program and future employment objectives, overseen by aviation industry professionals and program faculty. Complete a major industry project specific to the student's area of scholastic preparation.

BA - BUSINESS ADMINISTRATION

BA A101  Introduction to Management  3 CR  
Contact Hours: 3 + 0  
Entry level survey of development of management theory. Techniques associated with core managerial functions such as planning, organizing, actuating, and controlling. Selected management concepts and models viewed within organizational settings.

BA A131  Personal Finance  3 CR  
Contact Hours: 3 + 0  
Introduction to consumer finance. Surveys topics such as family budgeting, income tax fundamentals, consumer credit, home buying and financing, auto financing, insurance, investment fundamentals, estate planning, and retirement planning.

BA A155  Personal Investments  3 CR  
Contact Hours: 3 + 0  
An in-depth course on investment of personal income with emphasis on investments, including stocks, bonds, mutual funds, banking, annuities, insurance, real estate, estate planning, and taxes.

BA A166  Small Business Management  3 CR  
Contact Hours: 3 + 0  
Business planning as key to successful small business management. Examines practical aspects of management for starting and operating a small businesses. Assists students in furthering their understanding of personal finance, business planning, marketing, production, and business finance.

BA A231  Fundamentals of Supervision  3 CR  
Contact Hours: 3 + 0  
Offered fall and spring semesters.  
For students with or without supervisory experience. Introduction to effective supervisor's role. Emphasizes development of insights and skills necessary to get things done through others by planning, organizing, motivating, and controlling. Practical experience in decision making approach to condemning situations facing supervisors.

BA A232  Fundamentals of Organizational Management  3 CR  
Contact Hours: 3 + 0  
Offered as Demand Warrants.  
Discusses leadership styles of managers and skills necessary to effectively lead organizations. Explores literature in motivation and leadership for practical implications. Students analyze organizational case studies.

BA A233  Survey of Finance  3 CR  
Contact Hours: 3 + 0  
Prerequisites: [ACCT A101 or ACCT A201] and MATH A105.  
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.

BA A241  Business Law I  3 CR  
Contact Hours: 3 + 0  
Crosslisted with: JUST A241.  
Offered fall and spring semesters.  
Introduces legal aspects of business activities. Emphasizes basic principles, institutions, and administration of law in contracts, employment, torts, property, agency, real estate, and insurance.
COURSE DESCRIPTIONS

BA A242  Business Law II  3 CR
Contact Hours: 3 + 0
Prerequisites: BA A241 or JUST A241.
Crosslisted with: JUST A242.
Offered as Demand Warrants.
Emphasizes basic principles, institutions, and administration of law in suretyships,
partnerships, corporations, trusts, bankruptcy, negotiable instruments and sale of goods.

BA A260  Marketing Practices  3 CR
Contact Hours: 3 + 0
Prerequisites: BA A151.
Examines the tools, techniques, and principles of marketing and how to apply them.
Identifies the significance of connecting with customers. Examines and identifies market
factors which create the greatest customer satisfaction possible in the highly competitive
environments of the 21st century.

BA A263  Practices in Consumer Behavior  3 CR
Contact Hours: 3 + 0
Prerequisites: BA A260.
Offered as Demand Warrants.
Provides students with usable understanding of consumer behavior; based on the
belief that knowledge of factors influencing consumer behavior can be used to develop
successful marketing strategy. Explores motivation, personality, lifestyle, decision making,
and the impact of cross-cultural variations on consumer buying behavior.

BA A264  Personal Selling  3 CR
Contact Hours: 3 + 0
Prerequisites: BA A260.
Designed for people with or without sales experience. Explores skills all individuals
use to sell themselves, products, services, and ideas. Offers opportunities for students to
practice selling skills that will help them become better communicators throughout life.

BA A273  Introduction to Statistics for Business and Economics  3 CR
Contact Hours: 3 + 0
Prerequisites: CIS A110 and [MATH A107 or MATH A172].
Special Note: A student may apply no more than 3 credits from STAT A252 or BA A273
toward graduation requirements for a baccalaureate degree. Offered fall and spring semesters.
Introduces statistics and probability with emphasis on the analysis of business and
economic data. Includes descriptive statistics for univariate and bivariate data;
elementary probability and sampling distributions; and estimation of means,
proportions, and simple regression coefficients. Students will be introduced to one or
more computer packages for statistical data analysis.

BA A295  Internship in Business Administration  3 CR
Contact Hours: 0 + 9
Prerequisites: ENGL A111 and [COMM A111 or COMM A235 or COMM A237 or
COMM A241].
Registration Restrictions: Permission of Faculty Internship Coordinator; 2.75 GPA.
MATH A105 or A107 recommended.
Grade Mode: Pass/No Pass.
Special Fees.
Special Note: May be repeated for credit, but only 3 credits will apply to meeting
business administration degree requirements.
Integrates classroom study with planned and supervised work experience in the
public and private sectors. Students are exposed to occupational work environment
beyond the boundaries of the campus, enhancing self-confidence and career direction.

BA A300  Organizational Theory and Behavior  3 CR
Contact Hours: 3 + 0
Registration Restrictions: College of Business & Public Policy majors must be admitted to
upper-division standing.
Offered fall and spring semesters.
Discusses literature of organizational theory; emphasizes theoretical concepts,
organizational design, dynamics of formal and informal groups, communication in
leadership, organizational development, organizational effectiveness, and social science
research techniques.

BA A306  Real Estate Principles  3 CR
Contact Hours: 3 + 0
Registration Restrictions: College of Business & Public Policy majors must be admitted to
upper-division standing.
Surveys all aspects of real estate ownership. Topics covered are: rights and interest in
land, forms of ownership, real estate sales contract, mortgages and notes, deeds of trust,
Sources of financing, and real estate appraisal.

BA A315  Property Management and Marketing  3 CR
Contact Hours: 3 + 0
Registration Restrictions: College of Business & Public Policy majors must be admitted to
upper-division standing.
Surveys all aspects of property management and marketing. Topics covered are:
residential management, shopping center management, office building management,
leases, maintenance, landlord-tenant laws, real estate sales, and marketing.

BA A320  Real Estate Finance  3 CR
Contact Hours: 3 + 0
Prerequisites: BA A131 or BA A306.
Registration Restrictions: College of Business and Public Policy majors must be admitted to
upper-division standing.
Surveys all aspects of real estate finance. Topics covered are: interest rates,
mortgages, federal housing policies, secondary mortgage markets, leverage and property,
taxation, and real estate in a portfolio context.

BA A325  Corporate Finance  3 CR
Contact Hours: 3 + 0
Prerequisites: ACCT A202 and BA A273 and ECON A202.
Registration Restrictions: College of Business & Public Policy majors must be admitted to
upper-division standing.
Surveys the practice of corporate finance. Topics covered are: financial statements
analysis, valuation of securities, capital budgeting, risk and return, cost of capital, capital
structure, and working capital management.

BA A343  Principles of Marketing  3 CR
Contact Hours: 3 + 0
Registration Restrictions: College of Business & Public Policy majors must be admitted to
upper-division standing.
Examines the present role and evolving scope of marketing in organizations and the
global economy. Provides a comprehensive delineation of the key marketing terms,
concepts, and decision paradigms; offers an overview of the requisite steps, strategic
considerations, and essential elements involved in planning, implementing, and
evaluating marketing activities and campaigns.

BA A361  Human Resource Management  3 CR
Contact Hours: 3 + 0
Prerequisites: BA A301.
Registration Restrictions: College of Business & Public Policy majors must be admitted to
upper-division standing.
Offered spring semesters.
Human resource practice in industry and the analysis of human resource structures,
problems and trends. Includes recruiting, selecting, performance appraisal, training,
compensation, labor and civil rights laws, interviewing, and testing.

BA A375  Statistics for Business and Economics  3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A272 and BA A273.
Registration Restrictions: College of Business & Public Policy majors must be admitted to
upper-division standing.
Offered fall and spring semesters.
Intermediate statistics and probability with emphasis on the analysis of business and
economic data. Includes multivariate probability models; classical 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 extensively used.

BA A377  Operations Management  3 CR
Contact Hours: 3 + 0
Prerequisites: BA A273 and MATH A272.
Registration Restrictions: College of Business & Public Policy majors must be admitted to
upper-division standing.
Offered fall and spring semesters.
Management of the operations/production system with emphasis on quantitative
analysis. Characteristics of systems, types of production systems, forecasting, planning
and scheduling work, facility design and location, and selected topics in operations
research will be covered. The student is expected to spend two hours each week
utilizing the College of Business & Public Policy computer laboratory.

BA A380  Investment Management  3 CR
Contact Hours: 3 + 0
Prerequisites: BA A241 or BA A306.
Registration Restrictions: College of Business & Public Policy majors must be admitted to
upper-division standing.
Introductory course in investment management covering valuations and techniques
of investment in financial securities. Evaluates investment choices including: common
stock, preferred stock, bonds, convertible, mutual funds, closed end funds, hedge funds,
and private equity.
BA A381 Consumer Behavior 3 CR
Contact Hours: 3 + 0
Prerequisites: BA A343.
Registration Restrictions: College of Business & Public Policy majors must be admitted to upper-division standing.
Consumer-firm relationship analyzed through the application of concepts drawn from contemporary behavioral science to concrete business cases and practices. Relevant concepts from fields of cultural anthropology, sociology, and psychology applied to problems encountered in marketing to various consumer groups.

BA A385 Advanced Corporate Finance 3 CR
Contact Hours: 3 + 0
Prerequisites: BA A325.
Registration Restrictions: College of Business & Public Policy majors must be admitted to upper-division standing.
Advanced course in corporate finance presenting 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.

BA A395 Property Management Internship 3 CR
Contact Hours: 0 + 9
Prerequisites: BA A343 and [BA A275 or ECON A412 or ECON A429].
Registration Restrictions: College of Business & Public Policy majors must be admitted to upper-division standing.
Integrates classroom knowledge with supervised work experience in the property management and related real estate environment.

BA A420 Marketing Research 3 CR
Contact Hours: 3 + 0
Prerequisites: BA A343 and [BA A275 or ECON A412 or ECON A429].
Registration Restrictions: College of Business & 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 A426 Financial Institutions 3 CR
Contact Hours: 3 + 0
Prerequisites: BA A325.
Registration Restrictions: College of Business & Public Policy majors must be admitted to upper-division standing.
Study of the functions, structures, delivery systems, efficiencies, risk managements, and performances of financial institutions including banks, saving and loan associations, credit unions, investment companies, pension funds, mutual funds, and endowments.

BA A431 Real Estate Appraisal 3 CR
Contact Hours: 3 + 0
Prerequisites: BA A306.
Registration Restrictions: College of Business & Public Policy majors must be admitted to upper-division standing.
Surveys all aspects of the real estate appraisal. Topics covered are: appraisal process, real estate economics, property inspection, sales comparison approach, cost approach, income approach, reporting appraisal opinion, and the professional appraiser.

BA A447 International Marketing 3 CR
Contact Hours: 3 + 0
Prerequisites: BA A343.
Registration Restrictions: College of Business & Public Policy majors must be admitted to upper-division standing.
Emphasizes the planning, organizing, coordinating and controlling functions of international marketing management. Includes analysis of consumers and target markets, marketing research and promotion decisions applied to international markets.

BA A451 Security Analysis and Portfolio Theory 3 CR
Contact Hours: 3 + 0
Prerequisites: BA A360.
Registration Restrictions: College of Business & 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.

BA A452 Financial Derivatives 3 CR
Contact Hours: 3 + 0
Prerequisites: BA A325.
Registration Restrictions: College of Business & Public Policy majors must be admitted to upper-division standing.

BA A453 Bond Market Analysis 3 CR
Contact Hours: 3 + 0
Prerequisites: BA A325.
Registration Restrictions: College of Business & Public Policy majors must be admitted to upper-division standing.
Advanced course in investment management covering fixed income securities. Covers bond fundamentals, types of debt instruments, term structure of interest rates, interest rate risks and management, bond portfolio management, indexing, and performance evaluation.

BA A461 Negotiations and Conflict Management 3 CR
Contact Hours: 3 + 0
Prerequisites: BA A343 and [BA A310 or BA A350].
Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.
Marketing capstone course. Analyzes product, price, promotion, and distribution from a strategic marketing planning perspective. Emphasis on marketing decision models applied to profit and nonprofit organizations. For assessment purposes, the course will require both a portfolio preparation and a comprehensive exit exam comprising a weight of at least 5% of each of the total course grade.

BA A462 Strategic Management 3 CR
Contact Hours: 3 + 0
Prerequisites: BA A273 and BA A300 and BA A325 and BA A343 and BA A377.
Registration Restrictions: College of Business & Public Policy majors must be admitted to upper-division standing.
Study of negotiation, power, and conflict management from analytical viewpoints. Topics include the application of negotiation and conflict management processes and methodology associated with international negotiations, human resource structures, and corporate mergers. Computer exercises and role playing are included.

BA A463 Promotion Management 3 CR
Contact Hours: 3 + 0
Prerequisites: BA A343.
Registration Restrictions: College of Business & Public Policy majors must be admitted to upper-division standing.
Offered fall semesters.
Analysis of alternative persuasive communication strategies designed to promote consumer and/or industrial products or ideas. Includes determination of communication objectives, selection of media, brand positioning, media buying, campaign implementation, and measurement of promotion effectiveness.
COURSE DESCRIPTIONS

BA A606  Fundamentals of Production/Operations Management  2 CR
Contact Hours:  2 + 0
Prerequisites: BA A601.
Registration Restrictions: Graduate Standing.
Offered fall semesters.
Discusses decision making process as it relates to operations management.
Understanding assumptions and appropriate application of quantitative models; problem formulation and solution, interpretation of results, and application of
appropriate personal computer software.

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
Registration Restrictions: Admission to MBA Program or permission of instructor.
Designed to present students with opportunity to improve their negotiating skills. It
is oriented toward providing a forum conducive to practicing these skills and making
positive changes in behavior and habits in order to facilitate their success.

BA A628  Executive Leadership  3 CR
Contact Hours:  3 + 0
Registration Restrictions: Completion of MBA foundation course requirements and
graduate standing.
Offered fall semesters.
Introduction to the methodology of business environment scanning, analysis, and
forecasting; survey of the current business environment. Impacts of globalization of
competition and financial markets, technological change, changing political systems,
regulation, demographics, social change, and other change factors on business.
Examination of social responsibility, ethics, environmental protection and other
accountability issues.

BA A632  Organizational Behavior and Human Resource Management  3 CR
Contact Hours:  3 + 0
Registration Restrictions: Graduate Standing.
Offered fall and spring semesters.
A detailed interdisciplinary study of those organizational behavior and human
resource structures which contribute centrally to the firm's success. Current and future
developments regarding key concepts such as motivation, leadership, power and
authority, corporate dynamics and culture, selection and placement, performance
appraisal, compensation and human development will be examined.

BA A633  Problem Formulation and Decision Analysis  3 CR
Contact Hours:  3 + 0
Prerequisites: ECON A602 and CIS A605 and BA A601 and BA A606.
Registration Restrictions: Graduate Standing.
Offered spring semesters.
Identification and categorization of business problems with alternative approaches to
modeling and analysis. Presentation of results to enhance the probability of managerial
acceptance and implementation of potential solutions. Focus on formal quantitative
modeling with strong recognition of the behavioral and political contexts of decision
making in complex organizations.

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www.uaa.alaska.edu
BA A634 Creating the Successful Organization 3 CR
Contact Hours: 3 + 0
Prerequisites: BA A632. Registration Restrictions: Graduate Standing.
Offered spring semesters.
Exploration of the factors, conditions, and practices that lead to the creation and maintenance of organizational success. Alternative definitions of “Success” and the view of various “Stakeholders” will be evaluated. The role of organizational style, leadership, and structure in success. Cultural determinants of success. Examination of the Japanese approach to management. Adaptivity, entrepreneurship, and innovations as success factors. Case studies of successful organizations.

BA A635 Current Marketing Issues Seminar 3 CR
Contact Hours: 3 + 0
Prerequisites: BA A604. Registration Restrictions: Graduate Standing.
Offered fall semesters.
An analysis of the managerial relevance of current issues in marketing as found in the professional and/or popular marketing literature. A historical perspective will be provided through classic readings from the literature. Students will be expected to read, analyze, and discuss assigned readings in a seminar atmosphere with a view toward understanding the rationale of applied marketing management practices in such areas as theory, marketing mix, and ethics. The relation and role of marketing relative to other functional areas of the firm will be explored.

BA A636 Financial Decision Making 3 CR
Contact Hours: 3 + 0
Prerequisites: BA A601 and BA A603. Registration Restrictions: Graduate Standing.
Special Fees.
Offered fall semesters.
Advanced financial analysis with focus on making effective financial decisions. Analysis of business finance cases.

BA A637 Organizations and Their Environments 6 CR
Contact Hours: 6 + 0
Registration Restrictions: Admission to MBA Program or permission of MBA Program Director.

BA A652 International Comparison of Business Practices 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
A comparative study of the business philosophy, organization, management style, and business-society interaction in the major industrial nations. Specific study of the business systems of several of the following nations: Canada, France, Great Britain, Japan, People’s Republic of China, Russia, and Germany.

BA A653 International Finance 3 CR
Contact Hours: 3 + 0
Prerequisites: BA A601 and BA A603.
A study of the international dimensions of international financial management, and the financial markets. It covers topics such as Eurocurrency and foreign exchange markets, exchange risk, international capital budgeting, multicurrency financing decisions and sources of finance, international capital and money markets.

BA A655 Strategic Management Seminar 3 CR
Contact Hours: 3 + 0
Prerequisites: BA A631 and BA A632 and BA A635 and BA A636. Registration Restrictions: Graduate Standing.
Offered fall and spring semesters.
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.
Offered as Demand Warrant. Management research project, designed to integrate policy concepts, research methods, and practical problem solving techniques.

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 Current Topics in Business 1-6 CR
Contact Hours: 1-6 + 0
Registration Restrictions: Faculty permission and graduate standing.
Special Note: May be repeated for credit with a change in subtitle.
Study of specific current issues, techniques, and trends affecting business.

BA A692 Finance Workshop (Subtitle Varies) 3 CR
Contact Hours: 1 + 4
Prerequisites: BA A603. Registration Restrictions: Graduate standing.
Provides coverage of the products, analytical techniques for valuing investment securities and quantifying their exposure to changes in economic conditions, as well as portfolio strategies for achieving an investor’s objectives.

BA A695 Graduate Internship 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing; completion of MBA core courses.
Integrates classroom knowledge with supervised work experience.

BA A698 Individual Research 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing; completion of MBA core courses.
Independent primary research project conducted under the supervision of a faculty advisor.

BA A699 Thesis 3/6 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
Independent research project conducted under the 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
Engineering Building (ENGR), Room 333, 786-4770
http://biology.uaa.alaska.edu
The WWAMI/Biomedical program may be found at http://biomed.uaa.alaska.edu

BIOL A074 Field Natural History 1-3 CR
Contact Hours: 0 + 3-9
Grade Mode: Pass/No Pass.
Special Note: Field trips in any weather; walking through rough terrain is routine. May have overnight field trips. May be repeated for credit with a change in subtitle. Check schedules for specific offerings.
A short course on field natural history. Covers major plant and animal species of area. Experience gained in location and identification. May include extensive hiking and camping.

BIOL A075 Local Flora 1 CR
Contact Hours: 0 + 3
Grade Mode: Pass/No Pass.
Special Note: May include preparation of pressed plant specimens and field trips. Study of wild flowers and plants in the surrounding locale with emphasis on use and identification.

BIOL A100 Human Biology 3 CR
Contact Hours: 3 + 0
Special Note: Primarily for non-science majors. Not accepted for GER or biology major baccalaureate credit.
Survey of biological principles as applied to human anatomy, physiology, and genetics.
COURSE DESCRIPTIONS

BIOL A102 Introductory Biology 3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Natural Sciences Requirement.
Special Note: Primarily for non-science majors. Satisfies CAS B.S. degree requirements.
Selected introductory biological concepts including the chemical basis of life, cell structure, energetics, physiology, genetics, biotechnology, evolution, ecology and scientific methodology. This course will provide the non-biologist with a working knowledge of life science that will be useful in making informed decisions on health and the environment.

BIOL A103 Introductory Biology Laboratory 1 CR
Contact Hours: 0 + 3
Prerequisites: (BIOL A102 or concurrent enrollment).
Course Attributes: UAA GER Natural Sciences Lab Only. Specific Fees.
Special Note: Primarily for non-science majors. Satisfies CAS B.S. degree requirements.
Selected introductory biological concepts including the chemical basis of life, cell structure, energetics, physiology, genetics, biotechnology, evolution, ecology and scientific methodology. This course will provide the non-biologist with a working knowledge of life science that will be useful in making informed decisions on health and the environment. Laboratory supplement of BIOL A102. Exercises are designed to illustrate principles and concepts developed in BIOL A102.

BIOL A104 Natural History of Alaska 3 CR
Contact Hours: 3 + 0
Crosslisted with: GEOL A104.
Special Note: Acceptable as elective credit only.
Surveys important biological, physical and geological features of Alaska, and their development over time. Includes study of major landforms, ecosystems, wildlife and people. Local area will be emphasized.

BIOL A111 Human Anatomy and Physiology I 4 CR
Contact Hours: 3 + 3
Corequisite: BIOL A111L.
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.
Course Attributes: UAA GER Natural Science w/ Lab.
Special Note: Does not apply for Biology major credit. Satisfies CAS B.S. requirements.
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.
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.
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 or concurrent enrollment) and (CHEM A105L or concurrent enrollment) and (CHEM A106 or concurrent enrollment) and (CHEM A106L 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 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 course in biological sciences.
Continuation of topics addressed in BIOL A115, with emphasis on biodiversity, ecology, origin of life, cells structures and function in the context of evolution.

BIOL A124 Biota of Alaska: Selected Topics 1-4 CR
Contact Hours: 1-4 + 0
Special Fees.
Special Note: Community service course.
Explores special features of birds, mammals, insects or plants. Can include life history, habitat, ecology and behavior.

BIOL A126 Birds in Field and Laboratory 2 CR
Contact Hours: 1 + 3
Special Note: Community service course.
Field trips, study projects, lectures and laboratories form a beginning course in bird study. General biology, ecology and behavior of birds. Emphasis on characteristics, observation, and recording information about birds in Alaska and other areas.

BIOL A150 Introduction to Marine Biology 4 CR
Contact Hours: 3 + 3
Special Note: Community service course.
An elementary course in marine natural history with emphasis on intertidal invertebrates and algae. Other topics will include seabirds, marine mammals, fish, bottom organisms, and plankton.

BIOL A178 Fundamentals of Oceanography 3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A055.
Crosslisted with: GEOL A178.
Course Attributes: UAA GER Natural Sciences Requirement.
Principles of oceanography, with emphasis on the oceans’ biological, chemical, and geological processes, and how ocean processes affect the atmosphere.

BIOL A179 Fundamentals of Oceanography: Laboratory 1 CR
Contact Hours: 0 + 3
Prerequisites: MATH A055.
Crosslisted with: GEOL A179.
Course Attributes: UAA GER Natural Sciences Lab Only. Specific Fees.
Laboratory exercises designed to illustrate principles and concepts developed in BIOL A178.

BIOL A200 Introduction to Complexity 3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A107 or MATH A172.
Crosslisted with: CPLX 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.

BIOL A201 Field Identification of Alaskan Flora 3 CR
Contact Hours: 2 + 3
Offered only at Kenai Peninsula College.
Special Note: Does not satisfy BA degree requirements.
Field plant biology outlining the methods of identification based on leaf shape, fruit and flower form, bark and habitat. Covers all species that can be identified in the field including the lichens, mosses and liverworts, soft water algae and fleshy fungi.

BIOL A240 Introductory Microbiology for Health Sciences 4 CR
Contact Hours: 3 + 3
Registration Restrictions: Concurrent enrollment in BIOL A112 or 8 hours in biology or chemistry.
Corequisite: BIOL A240L.
Special Note: Recommended for associate and baccalaureate health science programs.
Laboratory exercises generally require students to return to the lab to record experimental results after 24 hours, throughout the semester. Accepted for biology major credit only by petition.
General introductory microbiology and virology with emphasis on those areas relating to health sciences, including host parasite interactions, host defense mechanisms, and epidemiology.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Contact Hours</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL A241</td>
<td>Lectures in Introductory Microbiology for Health Sciences</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0. Registration Restrictions: Concurrent enrollment in BIOL A112, or 8 hours in biology or chemistry. 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. Not open to students who have completed BIOL A240 or BIOL A340 during the previous five years. Lectures in general introductory microbiology and virology with emphasis on those areas relating to health sciences, including host parasite interactions, host defense mechanisms, and epidemiology.</td>
</tr>
<tr>
<td>BIOL A242</td>
<td>Fundamentals of Cell Biology</td>
<td>4 CR</td>
<td>Contact Hours: 3 + 3. Prerequisites: BIOL A116 and CHEM A106 and CHEM A106L. Corequisite: BIOL A242L. Special Note: Core course for Biology majors. One 3-hour lab per week. Examination of the structure, including ultrastructure, and function of cells. Isolation, composition, and biochemical properties of cell components.</td>
</tr>
<tr>
<td>BIOL A252</td>
<td>Principles of Genetics</td>
<td>4 CR</td>
<td>Contact Hours: 3 + 3. Prerequisites: BIOL A242 and [CHEM A106 and CHEM A106L] and MATH A107. Corequisite: BIOL A252L. Special Note: Core course for biology majors. One 3-hour lab per week. Principles of inheritance in prokaryotes and eukaryotes and physicochemical properties of genetic systems.</td>
</tr>
<tr>
<td>BIOL A271</td>
<td>Principles of Ecology</td>
<td>4 CR</td>
<td>Contact Hours: 3 + 3. Prerequisites: BIOL A252 and [STAT A253 or STAT A307]. Special Note: Core course for biology majors. One 3-hour lab per week. Environmental variables and concepts of environment. Adaptations and ecophysiology of individual organisms. Population dynamics and distributions, species interactions, diversity and community ecology, ecosystems, biomes, and human impacts on the global system.</td>
</tr>
<tr>
<td>BIOL A292</td>
<td>Plant Lore of Kachemak Bay</td>
<td>1 CR</td>
<td>Contact Hours: 1 + 0. Grade Mode: Pass/No Pass. Offered only at Kenai Peninsula College. Identification of plants in biotic systems ranging from spruce/hardwood forests and marine areas to bogs. Emphasis on traditional medicinal plants of Native and non-Native cultures.</td>
</tr>
<tr>
<td>BIOL A308</td>
<td>Principles of Evolution</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0. Prerequisites: BIOL A252 and BIOL A371. Special Note: Core course for biology majors. An introduction to the mechanisms of, and evidence for, the evolution of living systems. The coding and transmission of genetic information in populations, populations variability, change and stabilization.</td>
</tr>
<tr>
<td>BIOL A309</td>
<td>Biogeography</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0. Prerequisites: BIOL A308. 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>
</tr>
<tr>
<td>BIOL A310</td>
<td>Principles of Physiology</td>
<td>4 CR</td>
<td>Contact Hours: 3 + 3. Prerequisites: BIOL A242. Special Fees. Special Note: Satisfies physiology core curriculum requirement for biology majors. This course emphasizes the fundamental principles of cellular and system physiology of animals with emphasis on vertebrate and, in particular, human physiology.</td>
</tr>
<tr>
<td>BIOL A316</td>
<td>Introduction to Plant Physiology</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0. Prerequisites: BIOL A242. Special Note: Satisfies physiology core curriculum requirement for biology majors. Physiology of vascular plants, including growth, development, water relations, photosynthesis, material transport, and metabolism.</td>
</tr>
<tr>
<td>BIOL A327</td>
<td>Parasitology</td>
<td>4 CR</td>
<td>Contact Hours: 3 + 3. Prerequisites: BIOL A116 and CHEM A106 and CHEM A106L. Special Fees. The life history and ecology of parasites of medical significance and economic importance, including diagnosis and control. Emphasis on North American parasites.</td>
</tr>
<tr>
<td>BIOL A331</td>
<td>Systematic Botany</td>
<td>4 CR</td>
<td>Contact Hours: 3 + 3. Prerequisites: BIOL A116. Special Note: Saturday field trips. Offered alternate years. Identification and classification of vascular plants with an emphasis on circumpolar flora; discussion of taxonomic principles and both classical and experimental methods of taxonomic research.</td>
</tr>
<tr>
<td>BIOL A333</td>
<td>Biology of Non-Vascular Plants</td>
<td>4 CR</td>
<td>Contact Hours: 3 + 3. Prerequisites: BIOL A116. Special Fees. Offered alternate fall semesters. Comparative study of structure, development, phylogenetic trends, and life histories of the major groups of algae, fungi and bryophytes.</td>
</tr>
<tr>
<td>BIOL A334</td>
<td>General Microbiology</td>
<td>5 CR</td>
<td>Contact Hours: 3 + 6. Prerequisites: BIOL A242 and BIOL A252. Registration Restrictions: 8 additional biology credits. Corequisite: BIOL A340L. Special Note: Some additional laboratory work will be required to complete laboratory experiments. Offered spring semesters. Biology of prokaryotic and eukaryotic microorganisms and viruses, their relationships to other organisms, and to the ecosystem.</td>
</tr>
<tr>
<td>BIOL A335</td>
<td>Human Genetics</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0. Prerequisites: BIOL A252. Offered as warranted by demand. An introduction to human genetics with emphasis on medical and social aspects. Included will be the genetics of normal human traits, biochemical and cytogenetic diagnosis of hereditary diseases, and genetic screening and counseling.</td>
</tr>
<tr>
<td>BIOL A373</td>
<td>Conservation Biology</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0. Prerequisites: BIOL A271 or ENVI A202. Special Note: A service-learning course and includes field work outside of class time. Review of the human drivers of global environmental change (human population growth and consumption of resources), resulting environmental degradation, and tools to slow down or reverse environmental damage.</td>
</tr>
<tr>
<td>BIOL A378</td>
<td>Marine Biology</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0. Prerequisites: BIOL A371. The marine environment; biology and distribution of marine plants and animals; fisheries, aquaculture and pollution.</td>
</tr>
<tr>
<td>BIOL A403</td>
<td>Microtechnique</td>
<td>4 CR</td>
<td>Contact Hours: 2 + 6. Prerequisites: BIOL A242. Registration Restrictions: 8 additional credits in biology; and faculty permission. Demonstration and use of tissue techniques including procurement, preservation embedding, sectioning, staining, microscopy, photography, and illustration.</td>
</tr>
<tr>
<td>BIOL A415</td>
<td>Comparative Animal Physiology</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0. Prerequisites: BIOL A310 or 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. An examination of the physiological adaptations of marine, freshwater, and terrestrial organisms. The comparative approach will be used in order to better understand how animals are uniquely adapted to their physical environment.</td>
</tr>
</tbody>
</table>
### COURSE DESCRIPTIONS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL A23</td>
<td>Ichthyology</td>
<td>4 CR</td>
</tr>
</tbody>
</table>
| Contact Hours: 3 + 3  
Prerequisites: BIOL A252.  
Special Fees.  
Major groups of fishes, emphasizing the fishes of northwestern North America. Classification, structure, evolution, general biology, and importance to humans of the major groups. |

| BIOL A25    | Mammalogy                             | 4 CR    |
| Contact Hours: 3 + 3  
Prerequisites: BIOL A252.  
Survey of the class Mammalia, emphasizing systematics, morphology, physiology, ecology, evolution, behavior, and conservation. |

| BIOL A26    | Ornithology                           | 4 CR    |
| Contact Hours: 3 + 3  
Prerequisites: BIOL A252.  
Survey of the class Aves, emphasizing systematics, structure, physiology, ecology, evolution, behavior, and conservation. |

| BIOL A27    | Invertebrate Zoology                  | 4 CR    |
| Contact Hours: 3 + 3  
Prerequisites: BIOL A252.  
Special Fees.  
Special Note: Includes field trips.  
Functional anatomy and evolutionary adaptations of invertebrate animals. |

| BIOL A30    | Marine Mammal Biology                | 4 CR    |
| Contact Hours: 3 + 3  
Prerequisites: BIOL A271.  
May be stacked with: BIOL A630.  
Special Fees.  
Special Note: Students who completed BIOL A430 as part of their undergraduate degree cannot receive credit towards their graduate degree BIOL A630.  
An introduction to the biology and ecology of marine mammals, with an emphasis on understanding how marine mammals are adapted to their habitat, and the roles that they play in the marine ecosystem. |

| BIOL A39    | Plant Ecology Field Course           | 3 CR    |
| Contact Hours: 1 + 6  
Prerequisites: BIOL A252 and [CHEM A106 and CHEM A106L] and [STAT A253 or STAT A307].  
Special Fees.  
The interactions between plants and their environment. Theory and methodology for studying the responses of plants to various environmental conditions. |

| BIOL A41    | Animal Behavior                      | 4 CR    |
| Contact Hours: 3 + 3  
Prerequisites: BIOL A271 and [STAT A253 or STAT A307].  
Special Fees.  
Review of the ecological, evolutionary, physiology, and genetic basis of animal behavior. Research methods in lab. |

| BIOL A45    | Herbivore Ecology                    | 4 CR    |
| Contact Hours: 3 + 3  
Prerequisites: BIOL A371.  
May be stacked with: BIOL A645.  
Special Fees.  
Exploration of the concepts of nutritional ecology of herbivores and the implications of these concepts to management of animal populations and their habitats. Topics include the 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. Emphasis on arctic and boreal herbivores and their habitats. |

| BIOL A450   | Microbial Ecology                    | 3 CR    |
| Contact Hours: 3 + 0  
Prerequisites: BIOL A340.  
May be stacked with: BIOL A650.  
Diversity of the microbial world; the role of microorganisms in the cycling of elements in the soils, lakes, and oceans; bacterial consumption and production of trace gases; geomicrobiology; symbioses. |

| BIOL A452   | Human Genome                         | 3 CR    |
| Contact Hours: 3 + 0  
Prerequisites: BIOL A452 or BIOL A525 or BIOL A370.  
Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses and junior standing.  
Course Attributes: UAA GER Integrative Capstone.  
Special Note: Normally offered in alternate fall semesters.  
An in-depth exploration of the human genome with emphasis on social aspects. Topics will include the Human Genome Project, genome database searching, human chromosome and gene structure, developmental genetics, genetics of normal human traits, hereditary diseases, genetic screening and ethical issues, and genomic evidence of human evolution and migrations. |

| BIOL A461   | Molecular Biology Laboratory         | 1 CR    |
| Contact Hours: 0 + 3  
Prerequisites: BIOL A252 and (BIOL A461 with minimum grade of C or concurrent enrollment).  
Special Fees.  
A practical implementation of the theory learned in BIOL A461, which includes recombinant DNA techniques, gene expression/detection, and mutagenesis. |

| BIOL A462   | Virology                             | 3 CR    |
| Contact Hours: 3 + 0  
Prerequisites: BIOL A340.  
May be stacked with: BIOL A662.  
An in-depth examination of virus structure, gene expression, and replication, using selected bacterial, plant, and animal viruses; response of host cells to infection; control of virus replication via chemotherapeutic agents; and virus evolution. An understanding of cell biology is required. |

| BIOL A471   | Immunochemistry                      | 4 CR    |
| Contact Hours: 3 + 3  
Prerequisites: BIOL A340 and CHEM A321.  
Crosslisted with: CHEM A471.  
Special Fees.  
A study of the immune response including the biochemistry of antibodies, cellular and molecular events triggered by antigenic stimulation, regulation, immunopathology, transplantation, cancer and immunochemical techniques. |

| BIOL A475   | Arctic Tundra Ecosystems             | 3 CR    |
| Contact Hours: 3 + 0  
Prerequisites: BIOL A371.  
May be stacked with: BIOL A675.  
In-depth consideration of the Arctic landscape, its biota, and adaptations to environmental conditions. Understanding of ecological principals required. Examines the unique aspects of Arctic ecology and the relationship of Arctic ecosystems to global environmental issues and to the biosphere. |

| BIOL A476   | Boreal Ecosystems                    | 3 CR    |
| Contact Hours: 3 + 0  
Prerequisites: BIOL A27.  
May be stacked with: BIOL A676.  
A comprehensive analysis of boreal ecosytems with emphasis on system functions and dynamics. Comparisons with other terrestrial systems will be made and unique boreal characteristics will be emphasized. |
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL A478</td>
<td>Biological Oceanography</td>
<td>4 CR</td>
</tr>
<tr>
<td>Contact Hours:</td>
<td>3 + 3</td>
<td></td>
</tr>
<tr>
<td>Prerequisites:</td>
<td>BIOL A378.</td>
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<tr>
<td>Special Fees:</td>
<td>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.</td>
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</tr>
<tr>
<td>BIOL A485</td>
<td>Selected Topics in Biology</td>
<td>1-4 CR</td>
</tr>
<tr>
<td>Contact Hours:</td>
<td>1-4 + 0</td>
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<tr>
<td>Registration Restrictions:</td>
<td>16 credits in biology. May be stacked with: BIOL A685.</td>
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<tr>
<td>Special Note:</td>
<td>May be repeated for credit with a change of subtitle.</td>
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<tr>
<td>Detailed coverage of a selected topic in biology.</td>
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<tr>
<td>BIOL A487</td>
<td>Comparative Anatomy of Vertebrates</td>
<td>4 CR</td>
</tr>
<tr>
<td>Contact Hours:</td>
<td>3 + 3</td>
<td></td>
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<tr>
<td>Prerequisites:</td>
<td>BIOL A252.</td>
<td></td>
</tr>
<tr>
<td>Special Fees:</td>
<td>Functional anatomy, ecology, and evolution of chordates.</td>
<td></td>
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<tr>
<td>BIOL A488</td>
<td>Developmental Biology</td>
<td>4 CR</td>
</tr>
<tr>
<td>Contact Hours:</td>
<td>3 + 3</td>
<td></td>
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<tr>
<td>Prerequisites:</td>
<td>BIOL A252.</td>
<td></td>
</tr>
<tr>
<td>Special Fees:</td>
<td>A study of the molecular and cellular principles which underlie the development of tissues and organ systems in animals, including classical embryology.</td>
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</tr>
<tr>
<td>BIOL A492</td>
<td>Undergraduate Seminar</td>
<td>1 CR</td>
</tr>
<tr>
<td>Contact Hours:</td>
<td>1 + 0</td>
<td></td>
</tr>
<tr>
<td>Registration Restrictions:</td>
<td>Junior or senior standing.</td>
<td></td>
</tr>
<tr>
<td>Special Fees:</td>
<td>Topical subjects in biology presented by undergraduate students.</td>
<td></td>
</tr>
<tr>
<td>BIOL A495</td>
<td>Instructional Practicum: Laboratory</td>
<td>1 CR</td>
</tr>
<tr>
<td>Contact Hours:</td>
<td>0 + 3</td>
<td></td>
</tr>
<tr>
<td>Registration Restrictions:</td>
<td>20 credits in biology.</td>
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</tr>
<tr>
<td>Special Note:</td>
<td>May be repeated once for credit.</td>
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<tr>
<td>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.</td>
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<tr>
<td>BIOL A495A</td>
<td>Internship in the Biological Sciences</td>
<td>3 CR</td>
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<tr>
<td>Contact Hours:</td>
<td>3 + 0</td>
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<tr>
<td>Registration Restrictions:</td>
<td>Junior standing with a minimum of 12 credits in biology courses and faculty permission.</td>
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<tr>
<td>Special Note:</td>
<td>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.</td>
<td></td>
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<tr>
<td>Professional work experience in appropriate areas of the biological sciences. Open to qualified students receiving faculty recommendation, and as placements are available.</td>
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<tr>
<td>BIOL A498</td>
<td>Individual Research</td>
<td>1-6 CR</td>
</tr>
<tr>
<td>Contact Hours:</td>
<td>0 + 3-18</td>
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<tr>
<td>Registration Restrictions:</td>
<td>Faculty permission required.</td>
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</tr>
<tr>
<td>Special Fees:</td>
<td>May be repeated for a maximum of 6 credits.</td>
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</tr>
<tr>
<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 A499</td>
<td>Senior Thesis</td>
<td>3 CR</td>
</tr>
<tr>
<td>Contact Hours:</td>
<td>3 + 0</td>
<td></td>
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<tr>
<td>Registration Restrictions:</td>
<td>Faculty permission required; Senior status in Biology.</td>
<td></td>
</tr>
<tr>
<td>Special Note:</td>
<td>Required for Department Honors in Biology.</td>
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</tr>
<tr>
<td>Independent or collaborative research under faculty supervision. Culminates in a document prepared to publication standards. Presentation in a science forum is encouraged.</td>
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<tr>
<td>BIOL A610</td>
<td>Microscopic Anatomy</td>
<td>3 CR</td>
</tr>
<tr>
<td>Contact Hours:</td>
<td>2 + 3</td>
<td></td>
</tr>
<tr>
<td>Registration Restrictions:</td>
<td>Admission to graduate program in Biology. Biomedical Program Director and faculty approval.</td>
<td></td>
</tr>
<tr>
<td>Crosslisted with:</td>
<td>BIOM A610.</td>
<td></td>
</tr>
<tr>
<td>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.</td>
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</tr>
<tr>
<td>BIOL A611</td>
<td>Gross Anatomy I and Embryology</td>
<td>5 CR</td>
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<tr>
<td>Contact Hours:</td>
<td>3 + 6</td>
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<tr>
<td>Registration Restrictions:</td>
<td>Admission to graduate program in Biology. Biomedical Program Director and faculty approval.</td>
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<tr>
<td>Crosslisted with:</td>
<td>BIOM A611.</td>
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</tr>
<tr>
<td>Provides a broad understanding of the structural organization of the human body at the macroscopic level to provide a foundation for physical examination and functional assessment of the human organism. Integrates embryological development with study of the cadaver and examination of the normal living body. Concentrates on the exploration of body cavities and the viscera they contain. Emphasis on three-dimensional interrelationships and the general principles of blood and nerve supply rather than detailed anatomy of individual organs. Anatomy of the limbs, head, and neck is not touched upon. Embryology and general anatomical concepts are presented in lecture format but most learning takes place in the dissecting laboratory and living anatomy exercises, which students prepare and work through. Aims of the course include development of the faculty to extract essential information from textbooks, present knowledge in an organized fashion, and manipulate facts in problem solving.</td>
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</tr>
<tr>
<td>BIOL A612</td>
<td>Mechanisms in Cell Physiology</td>
<td>4 CR</td>
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<tr>
<td>Contact Hours:</td>
<td>4 + 0</td>
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<tr>
<td>Registration Restrictions:</td>
<td>Admission to graduate program in Biology. Biomedical Program Director and faculty approval.</td>
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</tr>
<tr>
<td>Crosslisted with:</td>
<td>BIOM A612.</td>
<td></td>
</tr>
<tr>
<td>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.</td>
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<tr>
<td>BIOL A614</td>
<td>Biochemistry I</td>
<td>4 CR</td>
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<tr>
<td>Contact Hours:</td>
<td>4 + 0</td>
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<tr>
<td>Registration Restrictions:</td>
<td>Admission to graduate program in Biology. Biomedical Program Director and faculty approval.</td>
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</tr>
<tr>
<td>Crosslisted with:</td>
<td>BIOM A614.</td>
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<tr>
<td>Coordinated course covering classical molecular and cellular biochemistry, cellular physiology, and molecular genetics. Metabolic interrelationships as these occur in the individual are stressed and related to disturbances in disease states.</td>
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</tr>
<tr>
<td>BIOL A615</td>
<td>Advanced Comparative Animal Physiology</td>
<td>4 CR</td>
</tr>
<tr>
<td>Contact Hours:</td>
<td>4 + 0</td>
<td></td>
</tr>
<tr>
<td>Registration Restrictions:</td>
<td>Graduate Standing.</td>
<td></td>
</tr>
<tr>
<td>May be stacked with:</td>
<td>BIOL A415.</td>
<td></td>
</tr>
<tr>
<td>Special Note:</td>
<td>Students who completed BIOL A415 as part of their undergraduate degree cannot receive credit towards their graduate degree from BIOL A615.</td>
<td></td>
</tr>
<tr>
<td>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.</td>
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<tr>
<td>BIOL A620</td>
<td>Cell and Tissue Responses to Injury</td>
<td>4 CR</td>
</tr>
<tr>
<td>Contact Hours:</td>
<td>3 + 3</td>
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<tr>
<td>Registration Restrictions:</td>
<td>Admission to graduate program in Biology. Biomedical Program director and faculty approval.</td>
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</tr>
<tr>
<td>Crosslisted with:</td>
<td>BIOM A620.</td>
<td></td>
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<tr>
<td>Disease processes that underlie clinical medicine. Five major sections covered: cellular pathology, inflammation, vascular pathology, genetics/developmental pathology/aging, and neoplasia. Aims of course are to introduce and to illustrate terminology, gross pathology, histopathology, etiology, pathogenesis, and clinical importance of major human disease processes.</td>
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</tr>
<tr>
<td>BIOL A621</td>
<td>Microbiology and Infectious Disease I</td>
<td>5 CR</td>
</tr>
<tr>
<td>Contact Hours:</td>
<td>5 + 5</td>
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</tr>
<tr>
<td>Registration Restrictions:</td>
<td>Admission to graduate program in Biology. Biomedical Program director and faculty approval.</td>
<td></td>
</tr>
<tr>
<td>Crosslisted with:</td>
<td>BIOM A621.</td>
<td></td>
</tr>
<tr>
<td>Pathogenesis and immunity of infection diseases and natural barriers. Microbiology; epidemiology; clinical manifestations; and control of representative bacterial, fungal, parasitic, and viral infectious diseases. Chemotherapeutics and principles of chemotherapy. Sterilization, principles of asperis, nosocomial and iatrogenic infections, and their presentation.</td>
<td></td>
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</tr>
</tbody>
</table>
COURSE DESCRIPTIONS

BIOL A623  Introduction to Immunology  2 CR
Contact Hours: 2 + 0
Registration Restrictions: Admission to graduate program in Biomedical Program and faculty approval.
Prerequisites: BIOL A445, BIOM A422.

BIOL A624  Biochemistry II  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Admission to graduate program in Biomedical Program and faculty approval.
Prerequisites: BIOL A623.

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.

BIOL A631  Gross Anatomy II  4 CR
(Head, Neck, Ear, Nose, and Throat)
Contact Hours: 4 + 0
Registration Restrictions: Admission to graduate program in Biomedical Program director and faculty approval.
Prerequisites: BIOL A631.

BIOL A632  Nervous System  5 CR
Contact Hours: 5 + 0
Registration Restrictions: Admission to graduate program in Biomedical Program director and faculty approval.
Prerequisites: BIOL A631.

BIOL A634  Microbiology and Infectious Disease II  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Admission to graduate program in Biomedical Program director and faculty approval.
Prerequisites: BIOL A631.

BIOL A645  Advanced Herbivore Ecology  4 CR
Contact Hours: 3 + 3
Prerequisites: BIOL A445.
May be stacked with: BIOL A445.
Special Fees.

BIOL A650  Advanced Microbial Ecology  3 CR
Contact Hours: 3 + 0
Prerequisites: BIOL A450.

BIOL A661  Advanced Molecular Biology  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
May be stacked with: BIOL A461.
Special Note: Lectures concurrent with BIOL A461. 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, to submit an extensive paper summarizing their findings including design for future experiments on the subject, and to give a seminar on the same topic. Not available for credit to students who have completed BIOL A461.

A 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.

Contact Hours: 1 - 5 + 0
Registration Restrictions: Graduate Standing.
May be stacked with: BIOL A461.
Special Note: Lectures concurrent with BIOL A461. In addition to meeting all requirements for BIOL A462, graduate students will be required to research the literature on a current topic in molecular biology, 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 A675  Advanced Arctic Tundra Ecosystems  3 CR
Contact Hours: 3 + 0
Prerequisites: BIOL A371.

Registration Restrictions: Graduate Standing.
May be stacked with: BIOL A475.

In-depth consideration of the Arctic landscape, its biota, and adaptations to environmental conditions. Advanced understanding of ecological principles is required. Examines the unique aspects of Arctic ecology and the relationship of Arctic ecosystems to global environmental issues and to the biosphere.

BIOL A676  Advanced Boreal Ecosystems  3 CR
Contact Hours: 3 + 0
Prerequisites: BIOL A271.

Registration Restrictions: Graduate Standing.
May be stacked with: BIOL A476.
Special Note: Not available for credit to students who have completed BIOL A476.

An in-depth analysis of boreal ecosystems with emphasis on system functions and dynamics. Comparisons with other terrestrial systems will be made, and unique boreal characteristics will be emphasized.

BIOL A679  Physiological Plant Ecology  4 CR
Contact Hours: 3 + 3
Registration Restrictions: Graduate Standing.

Analyzes interactions between the plant and its 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 A685  Advanced Topics in Biology  1-5 CR
Contact Hours: 1 - 5 + 0
Registration Restrictions: Graduate Standing.
Grade Mode: Pass/No Pass.
May be stacked with: BIOL A485.
Special Note: May be repeated for credit with a change of subtitle.

Intensive studies on narrowly defined topics in biological sciences. Emphasis on content as well as on instructional techniques.

BIOL A692  Graduate Seminar  1 CR
Contact Hours: 1 + 0
Registration Restrictions: Graduate Standing.
Grade Mode: Pass/No Pass.
Special Fees.
Special Note: May be repeated for a maximum of 2 credits.

Topical subjects in biology presented by graduate students, biology faculty, and guest speakers.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Contact Hours</th>
<th>Grade Mode</th>
<th>Registration Restrictions</th>
<th>Crosslisted With</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOM A609</td>
<td>Graduate Research Techniques</td>
<td>1 CR</td>
<td>1 + 0</td>
<td>Pass/No Pass</td>
<td>Permission of graduate advisor</td>
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<tr>
<td>BIOM A609</td>
<td>Directed Research</td>
<td>1-6 CR</td>
<td>0 + 3-18</td>
<td>Pass/No Pass</td>
<td>Permission of graduate advisor</td>
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<tr>
<td>BIOM A699</td>
<td>Thesis</td>
<td>1-6 CR</td>
<td>0 + 3-18</td>
<td>Pass/No Pass</td>
<td>Permission of graduate advisor</td>
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<tr>
<td>BIOM A610</td>
<td>Microscopic Anatomy</td>
<td>3 CR</td>
<td>2 + 3</td>
<td>Pass/No Pass</td>
<td>Permission of graduate advisor</td>
<td></td>
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<tr>
<td>BIOM A611</td>
<td>Gross Anatomy I and Embryology</td>
<td>5 CR</td>
<td>3 + 6</td>
<td>Pass/No Pass</td>
<td>Permission of graduate advisor</td>
<td></td>
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<tr>
<td>BIOM A612</td>
<td>Mechanisms in Cell Physiology</td>
<td>4 CR</td>
<td>4 + 0</td>
<td>Pass/No Pass</td>
<td>Permission of graduate advisor</td>
<td></td>
</tr>
<tr>
<td>BIOM A613</td>
<td>Introduction to Clinical Medicine I</td>
<td>4 CR</td>
<td>4 + 0</td>
<td>Pass/No Pass</td>
<td>Permission of graduate advisor</td>
<td></td>
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<tr>
<td>BIOM A614</td>
<td>Biochemistry I</td>
<td>4 CR</td>
<td>4 + 0</td>
<td>Pass/No Pass</td>
<td>Permission of graduate advisor</td>
<td>BIOL A614</td>
</tr>
<tr>
<td>BIOM A615</td>
<td>Introduction to Critical Reading and Evaluation</td>
<td>1 CR</td>
<td>1 + 0</td>
<td>Pass/No Pass</td>
<td>Permission of graduate advisor</td>
<td></td>
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<tr>
<td>BIOM A620</td>
<td>Cell and Tissue Responses to Injury</td>
<td>4 CR</td>
<td>3 + 3</td>
<td>Pass/No Pass</td>
<td>Permission of graduate advisor</td>
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<tr>
<td>BIOM A621</td>
<td>Microbiology and Infectious Disease I</td>
<td>5 CR</td>
<td>5 + 0</td>
<td>Pass/No Pass</td>
<td>Permission of graduate advisor</td>
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<tr>
<td>BIOM A622</td>
<td>Introduction to Clinical Medicine II</td>
<td>4 CR</td>
<td>4 + 0</td>
<td>Pass/No Pass</td>
<td>Permission of graduate advisor</td>
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<tr>
<td>BIOM A623</td>
<td>Introduction to Immunology</td>
<td>2 CR</td>
<td>2 + 0</td>
<td>Pass/No Pass</td>
<td>Permission of graduate advisor</td>
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<tr>
<td>BIOM A624</td>
<td>Biochemistry II</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Pass/No Pass</td>
<td>Permission of graduate advisor</td>
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<tr>
<td>BIOM A631</td>
<td>Gross Anatomy II</td>
<td>4 CR</td>
<td>4 + 0</td>
<td>Pass/No Pass</td>
<td>Permission of graduate advisor</td>
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</tbody>
</table>

**BIOM - BIOMEDICAL PROGRAM**

Offered through the College of Arts and Sciences Engineering Building (ENGR), Room 331, 786-4789
http://biomed.uaa.alaska.edu

Contact Hours: 4 + 0
Registration Restrictions: Permission of graduate advisor.
Crosslisted with: BIOL A614.

Coordinated course covering classical molecular and cellular biochemistry, cellular physiology, and molecular genetics. Metabolic interrelationships as these occur in the individual are stressed and related to disturbances in disease states.

Contact Hours: 1 + 0
Registration Restrictions: Permission of Biomedical Program-WWAMI.
Crosslisted with: BIOL A614.

An introduction to methods for identifying and retrieving Web-based, 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.

Contact Hours: 3 + 3
Registration Restrictions: Permission of Biomedical Program-WWAMI.
Crosslisted with: BIOL A620.

Disease processes that underlie clinical medicine. Five major sections covered: cellular pathology, inflammation, vascular pathology, genetics/developmental pathology/aging, and neoplasia. Aims of course are to introduce and to illustrate terminology, gross pathology, histopathology, etiology, pathogenesis, and clinical importance of major human disease processes.

Contact Hours: 4 + 0
Registration Restrictions: Permission of Biomedical Program-WWAMI.
Crosslisted with: BIOL A620.

Provides a broad understanding of the structural organization of the human body at the macroscopic level to provide a foundation for physical examination and functional assessment of the human organism. Integrates embryological development with study of the cadaver and examination of the normal living body. Concentrates on exploration of body cavities and the viscera they contain. Emphasis on three-dimensional interrelationships and the general principles of blood and nerve supply rather than detailed anatomy of individual organs. Anatomy of the limbs, head, and neck is not touched upon. Embryology and general anatomical concepts are presented in lecture format but most learning takes place in the dissection laboratory and living anatomy exercises, which students prepare and work through. Aims of the course include development of the facility to extract essential information from textbooks, present knowledge in an organized fashion, and manipulate facts in problem solving.

Contact Hours: 4 + 0
Registration Restrictions: Permission of Biomedical Program-WWAMI.
Crosslisted with: BIOL A611.

Provides a broad understanding of the structural organization of the human body at the macroscopic level to provide a foundation for physical examination and functional assessment of the human organism. Integrates embryological development with study of the cadaver and examination of the normal living body. Concentrates on exploration of body cavities and the viscera they contain. Emphasis on three-dimensional interrelationships and the general principles of blood and nerve supply rather than detailed anatomy of individual organs. Anatomy of the limbs, head, and neck is not touched upon. Embryology and general anatomical concepts are presented in lecture format but most learning takes place in the dissection laboratory and living anatomy exercises, which students prepare and work through. Aims of the course include development of the facility to extract essential information from textbooks, present knowledge in an organized fashion, and manipulate facts in problem solving.

Contact Hours: 4 + 0
Registration Restrictions: Permission of Biomedical Program-WWAMI.
Crosslisted with: BIOL A611.

Disease processes that underlie clinical medicine. Five major sections covered: cellular pathology, inflammation, vascular pathology, genetics/developmental pathology/aging, and neoplasia. Aims of course are to introduce and to illustrate terminology, gross pathology, histopathology, etiology, pathogenesis, and clinical importance of major human disease processes.

Contact Hours: 1 + 0
Registration Restrictions: Permission of Biomedical Program-WWAMI.
Crosslisted with: BIOL A614.

Coordinated course covering classical molecular and cellular biochemistry, cellular physiology, and molecular genetics. Metabolic interrelationships as these occur in the individual are stressed and related to disturbances in disease states.

Contact Hours: 3 + 3
Registration Restrictions: Permission of Biomedical Program-WWAMI.
Crosslisted with: BIOL A620.

Disease processes that underlie clinical medicine. Five major sections covered: cellular pathology, inflammation, vascular pathology, genetics/developmental pathology/aging, and neoplasia. Aims of course are to introduce and to illustrate terminology, gross pathology, histopathology, etiology, pathogenesis, and clinical importance of major human disease processes.

Contact Hours: 4 + 0
Registration Restrictions: Permission of Biomedical Program-WWAMI.
Crosslisted with: BIOL A620.

Provides a broad understanding of the structural organization of the human body at the macroscopic level to provide a foundation for physical examination and functional assessment of the human organism. Integrates embryological development with study of the cadaver and examination of the normal living body. Concentrates on exploration of body cavities and the viscera they contain. Emphasis on three-dimensional interrelationships and the general principles of blood and nerve supply rather than detailed anatomy of individual organs. Anatomy of the limbs, head, and neck is not touched upon. Embryology and general anatomical concepts are presented in lecture format but most learning takes place in the dissection laboratory and living anatomy exercises, which students prepare and work through. Aims of the course include development of the facility to extract essential information from textbooks, present knowledge in an organized fashion, and manipulate facts in problem solving.

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Contact Hours: 4 + 0
Registration Restrictions: Permission of Biomedical Program-WWAMI.
BIOM A632  Nervous System  5 CR
Contact Hours:  5 + 0
Registration Restrictions: Admission to Biomedical Program-WWAMI.
Grade Mode: Pass/No Pass.
Corequisite: CA A111.
C and CA A105 with minimum grade of C and CA A107 with minimum grade of C and
CA A111 Bakery Skill Development 4 CR
Contact Hours:  2 + 0
Placement test.
Contact Hours:  2 + 0
CA A107 Culinary Meats and Charcuterie 3 CR
Contact Hours:  3 + 0
Registration Restrictions: Admission to Biomedical Program-WWAMI.
Grade Mode: Pass/No Pass.
Corequisite: CA A111.
C and CA A105 with minimum grade of C and CA A107 with minimum grade of C and
CA A111 Gourmet Cooking, Healthy Style 1 CR
Contact Hours:  0 + 2
Grade Mode: Pass/No Pass.
Special Fees.
CA A115 Gourmet Cooking, Healthy Style 1 CR
Contact Hours:  0 + 2
Grade Mode: Pass/No Pass.
CA A201 A la Carte Kitchen 4 CR
Contact Hours:  2 + 8
Prerequisites: CA A103 with minimum grade of C and CA A111 with minimum grade of C.
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.
CA A204 Culinary Meats and Charcuterie 3 CR
Contact Hours:  3 + 0
Registration Restrictions: Admission to Biomedical Program-WWAMI.
Grade Mode: Pass/No Pass.
Special Fees.
CA A114 Beverage Management 3 CR
Contact Hours:  3 + 0
Registration Restrictions: Minimum age of 21 years.
Special Fees.
Special Note: Students have the option to become certified through an approved alcohol
training curriculum that will allow them to legally serve alcohol in the state of Alaska.
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.
Emphasizes cooking techniques and ingredients used in contemporary and classical
cuisines.
CA A204 Culinary Meats and Charcuterie 3 CR
Contact Hours:  3 + 0
Prerequisites: CA A103 with minimum grade of C and CA A111 with minimum grade of C.
Special Fees.
menu design and layout of professional foodservice facilities.
CA A295A  Foodservice Operations Practicum  1 CR
Contact Hours:  3 + 4
Prerequisites: CA A104 and CA A107 and (CA A220 or concurrent enrollment).
Registration Restrictions: Current immunizations.
Corequisite: CA A220.
Grade Mode: Pass/No Pass.
Special Note: Requires facility orientation.
Provides student with opportunity to interpret field experiences, differentiate between available strategies, recall and apply foodservice operations principles and skills. Interpret institutional protocols, manuals, guides, etc. Apply basic principles, estimate results or outcomes, and discuss work with site supervisor. Facilitates 50 hour field experience.

CA A295B  Foodservice Management Practicum  1 CR
Contact Hours:  3 + 4
Prerequisites: CA A104 and CA A107 and (CA A220 or concurrent enrollment).
Corequisite: CA A220.
Grade Mode: Pass/No Pass.
Special Note: Requires facility orientation.
Provides student with opportunity to interpret field experiences, differentiate between available strategies, recall and apply foodservice management principles and skills. Interpret institutional protocols, manuals, guides, etc. Apply basic principles, estimate results or outcomes, and discuss work with site supervisor. Facilitates 50 hour field experience.

CA A295C  Foodservice Internship  3 CR
Contact Hours:  1 + 15
Prerequisites: CA A201 with minimum grade of C and CA A202 with minimum grade of C and CA A224 with minimum grade of C and CA A230 with minimum grade of C.
Grade Mode: Pass/No Pass.
Provides supervised workplace training in selected foodservice industry settings. Integrates knowledge and skills through work designed to meet student's individual competency needs and career objectives. Requires minimum of 225 hours at worksite plus 15 hours of on-campus instruction.

CA A402  Transportation Engineering  3 CR
Contact Hours:  2 + 3
Prerequisites: CE A435.
Registration Restrictions: "Civil Engineering Professional" status or approval by the Civil Engineering department chair.
Offered as Demand Warrants.
Administration, economics, location, construction and maintenance of highways, railways, airports, and other transportation facilities.

CA A403  Arctic Engineering  3 CR
Contact Hours:  3 + 0
Registration Restrictions: Junior or senior standing in an accredited undergraduate program in engineering. May be stacked with: CE A603.
Introduces students to a broad spectrum of engineering challenges unique to cold regions. Physical principles and practical data collection methods, analyses, designs, and construction methods are discussed. Students gain a working knowledge of cold regions engineering problems and modern solutions as a basis for more detailed study.

CA A422  Foundation Engineering  3 CR
Contact Hours:  3 + 0
Prerequisites: CE A435 and ES A341.
The design, construction, operation, and maintenance of facilities for transporting people and goods by highway and the economic, social, and environmental consequences.

CA A431  Structural Analysis  4 CR
Contact Hours:  4 + 0
Prerequisites: ES A331.
Registration Restrictions: "Civil Engineering Professional" status or approval by the Civil Engineering department chair.
Special Fees.
Offered spring semesters.
Review of statically determinate beams and trusses. Discusses shearing, bending moment and influence line diagrams for statically determinate and indeterminate structures. Includes deflections, elastic lines, and an introduction to matrix and computer analyses.
COURSE DESCRIPTIONS

CE A432  Steel Design  3 CR  
Contact Hours: 3 + 0  
Prerequisites: CE A431.  
Registration Restrictions: "Civil Engineering Professional" status or approval by the Civil Engineering department chair.  
Offered fall semesters.  
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.  
Registration Restrictions: "Civil Engineering Professional" status or approval by the Civil Engineering department chair.  
Offered spring semesters.  
Essentials of structural design in reinforced concrete including building code requirements and standard practice for the design of basic structural elements.

CE A434  Timber Design  3 CR  
Contact Hours: 3 + 0  
Prerequisites: CE A431.  
Registration Restrictions: "Civil Engineering Professional" status or approval by the Civil Engineering department chair.  
Offered alternate fall semesters.  
Essentials of structural design in timber including building code requirements and standard practice for the design of basic structural elements, connections, and shearwall lateral force resisting systems.

CE A435  Soil Mechanics  3 CR  
Contact Hours: 2 + 3  
Prerequisites: ES A331 and CE A334.  
Registration Restrictions: "Civil Engineering Professional" status or approval by the Civil Engineering department chair.  
Corequisite: CE A435L.  
Special Fees.  
Offered fall semesters.  
Concepts, principles, and/or procedures related to soil formation and classification, soil compaction, flow of water in soils, stresses in a soil mass, soil settlement, shear strength of soil, subsoil exploration, and frost action.

CE A438  Design of Civil Engineering Systems  3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: Senior standing in the Civil Engineering Degree Program.  
Offered spring semesters.  
Capstone design course with students working in teams to design a large-scale civil engineering system using the concepts and procedures learned in their undergraduate curriculum. Cooperative work principles, design office procedures, designing in context of social and economic realities, working with regulatory agencies, safety and legal issues, and presentation of results and recommendations are discussed.

CE A441  Introduction to Environmental Engineering  3 CR  
Contact Hours: 3 + 0  
Prerequisites: CHEM A106 and (ES A341 or concurrent enrollment).  
Registration Restrictions: "Civil Engineering Professional" status or approval by the Civil Engineering Department Chair.  
Special Fees.  
Introduction to the fundamentals of environmental engineering. Includes the theory and application of water and wastewater engineering, water supply concepts, wastewater characteristics, treatment and disposal, solid waste management and air pollution control.

CE A442  Environmental Systems Design  3 CR  
Contact Hours: 3 + 0  
Prerequisites: CE A441.  
Offered spring semesters.  
An advanced course on the design of systems commonly used in environmental engineering practice with an emphasis on water and wastewater treatment and contaminated soils. Design of unit processes and operations will be performed. Selection of system components, design and performance calculations, and complete engineering reports are required.

CE A470  Civil Engineering Internship  1 CR  
Contact Hours: 0 + 3  
Registration Restrictions: Senior standing or permission of department coordinator.  
Special Fees.  
Designed to give students the opportunity to investigate the practical workings of engineering organizations. Assignments individually arranged with cooperating organizations and agencies.

CE A600  Fundamentals of Environmental Science and Engineering  3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: Registrants must be enrolled in the AEST or CE graduate programs, or gain instructor approval.  
A fundamental course in environmental science and engineering for students who have strong undergraduate training in the sciences or engineering. Provides basic and specialized understanding of essentially all fundamental aspects of the field with a focus upon aquatic and terrestrial environments. Emphasis is placed upon the fundamentals of biological, chemical, and physical science which underlie both natural and cultural environmental effects. Includes the use and application of equilibrium processes, mass and energy balances, processes that occur in natural systems and others.

CE A603  Arctic Engineering  3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: Graduate standing with a baccalaureate degree in engineering, May be stacked with: CE A403.  
Special Fees.  
Introduces a broad spectrum of engineering challenges unique to cold regions. Physical principles and practical data collection methods, analyses, designs, and construction methods are discussed. Students gain a working knowledge of cold regions engineering problems and modern solutions as a basis for more detailed study.

CE A605  Chemical and Physical Water and Wastewater Treatment Processes  3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: Registrants must be enrolled in the AEST or CE graduate programs, or gain instructor approval.  
The theory and design of chemical and physical unit processes utilizing the treatment of water and wastewater. Sedimentation and flotation, ion exchange, adsorption, coagulation, precipitation, filtration, disinfection, reverse osmosis and aeration theories will be studied. Design problems for all unit processes.

CE A606  Biological Treatment Processes  3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: Registrants must be enrolled in AEST or CE graduate programs, or gain instructor approval.  
Special Fees.  
Study of the theoretical and biological processes including activated sludge, trickling filters, lagoons, sludge digestion and processing, septic tanks, analysis and design, nutrient removal processes, biology of polluted waters, economics, state and federal regulations.

CE A631  Structural Finite Elements  3 CR  
Contact Hours: 3 + 0  
Prerequisites: ES A301 and CE A431.  
Introduction to finite element and computer methods in structural analysis. Matrix algebra, the slope-deflection and the direct stiffness methods will be reviewed. Topics include: finite elements and corresponding matrix equations for a truss, for a beam and for frame structures, organization of typical computer programs, two-dimensional stress-strain problems, eigenvalue problems, and practical applications of engineering software.

CE A633  Structural Dynamics  3 CR  
Contact Hours: 3 + 0  
Prerequisites: CE A431 and MATH A302.  
Special Fees.  
Covers the theory of structural dynamics, including single and multiple degree of freedom systems subjected to earthquake and other excitations. Application to analysis and design of civil engineering structures is emphasized.

CE A634  Earthquake Engineering  3 CR  
Contact Hours: 3 + 0  
Prerequisites: CE A431 and CE A432 and CE A433 and CE A633.  
Registration Restrictions: Good computer skills and basic understanding of finite element method is preferred.  
Introduces basic seismic concepts, design principles, criteria for design and construction of buildings subject to earthquake ground motions. Also includes technology of reducing earthquake loads through seismic isolation.

CE A662  Surface Water Dynamics  3 CR  
Contact Hours: 3 + 0  
Prerequisites: ES A341.  
Principles of open channel flow, ice covered flow, unsteady flow, and stream flow as a sediment and pollution transport agent.

CE A663  Ground Water Dynamics  3 CR  
Contact Hours: 3 + 0  
Prerequisites: ES A341.  
Fundamentals of geohydrology, hydraydynamics of flow through porous media, well hydraulics, ground water pollution, and ground water resources development.
CE A674 Waves, Tides, and Ocean Processes for Engineers 3 CR
Contact Hours: 3 + 0
Prerequisites: ES A341.
Registration Restrictions: Prerequisite and graduate standing, or instructor permission.
Introduction to the physical properties and behavior of water in the ocean basins, and the practice of ocean research and engineering. Introduction to the physical properties and behavior of free surface gravity waves, measurements and characterizations of ocean wave climate, and interactions of ocean waves with structures and natural coastal features.

CE A675 Design of Ports and Harbors 3 CR
Contact Hours: 3 + 0
Prerequisites: ES A341.
Registration Restrictions: Prerequisite and graduate standing, or instructor permission.
Introduction to planning and design of port and harbor facilities.

CE A676 Coastal Engineering 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Bachelor's degree in Civil Engineering.
Offered alternate spring semesters.
Review of deep and shallow water waves, littoral drift, coastal structures, pollution problems, and harbor seiches.

CE A677 Coastal Measurements and Analysis 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Upper class or graduate standing in Geomatics, Engineering, or Natural Sciences.
Special Fees.
Review of and practice with modern instrumentation, equipment, sampling and measurement techniques, and methods of analysis for quantitative study of coastal ocean physical processes.

CE A681 Frozen Ground Engineering 3 CR
Contact Hours: 3 + 0
Prerequisites: CE A435.
Registration Restrictions: Graduate standing, with a baccalaureate degree in engineering, or upper class standing in an accredited undergraduate program in engineering.
Special Fees.
Physical, thermal, and mechanical properties of frozen soils, frost action, heat flow in soils, thaw behavior of frozen ground, foundations in frozen ground, construction ground freezing, pavement design, earthwork, and field investigations for frozen ground.

CE A682 Ice Engineering 3 CR
Contact Hours: 3 + 0
Prerequisites: ES A331.
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.
Factors are reviewed governing design of engineering works which must contend with the presence of ice. Topics discussed include fundamental ice properties, river, lake, and sea ice processes, ice navigation and control of ice in channels, structural and non-structural ice control measures, ice jams, bearing capacity of floating ice sheets, ice forces on riverine and ocean structures.

CE A683 Arctic Hydrology and Hydraulic Engineering 3 CR
Contact Hours: 3 + 0
Prerequisites: CE A344.
Registration Restrictions: Graduate standing, with degree in engineering or physical science, or upper class standing in an accredited undergraduate program in these categories.
Special Fees.
Aspects of hydrology and hydraulics unique to engineering problems of the North. Emphasis on Alaskan conditions, information from Canada and other circumpolar countries included.

CE A684 Arctic Utility Distribution 3 CR
Contact Hours: 3 + 0
Prerequisites: ES A344.
Registration Restrictions: Graduate standing, with degree in engineering or physical science, or upper class standing in an accredited undergraduate program in these categories.
Special Fees.
Reviews physical principles and current practices associated with planning and design of safe, efficient, and affordable water supply, fire protection, wastewater collection and disposal, and solid waste disposal works in cold regions, with a view toward conditions of rural Arctic Alaska.

CE A686 Civil Engineering Project 1-6 CR
Contact Hours: 1-6 + 0
Registration Restrictions: Admission to candidacy for the master of civil engineering degree.
Arranged between the advisor, project committee, and the student. The student is required to take an oral exam defending the project.

CE A688 Snow Engineering 3 CR
Contact Hours: 3 + 0
Prerequisites: ES A331.
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.
Factors are reviewed governing design of engineering works which must contend with the presence of snow or use snow as a structural material. Topics include basic physical properties of snow, snow deposition and metamorphism, snow measurements, snow mechanical and thermal properties, snow-wind interactions, snow loads on buildings and other structures, snow control, and avalanches.

CE 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 at the MS level.

CE A699 Thesis 1-6 CR
Contact Hours: 1-6 + 0
Registration Restrictions: Graduate committee permission.
Individual study of an advanced engineering problem resulting in a thesis. The student must have been admitted to candidacy for the master of science in civil engineering. The student must take an oral exam defending the thesis.

CED - COMMUNITY EDUCATION

Offered through Chugiak-Eagle River Campus
(907) 694-3313
www.uaa.alaska.edu/ctc/programs/chugiak-eagleriver

CED A110 Employment Development Planning 1 CR
Contact Hours: 1 + 0
Grade Mode: Pass/No Pass.
Offered only at Kenai Peninsula College.
Designed to encourage and prepare single parents/displaced homemakers to pursue an education and/or employment, by establishing goals and utilizing available resources. Includes communication skills, resume writing, interviewing techniques, self-image and problem solving techniques. Emphasis in goal setting and career planning.

CED A115 Elderhostel: The Alaskan Adventure 1 CR
Contact Hours: 1 + 0
Grade Mode: Pass/No Pass.
Overview of components of the Alaskan adventure, history, natural history, anthropology, literature, geology. Emphasis on Kachemak Bay.

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 A123 Mind/Body Integration 1 CR
Contact Hours: 1 + 0
Grade Mode: Pass/No Pass.
Examines the mind/body connection in activities such as biofeedback, massage, relaxation exercises, meditation, Tai Chi, and Yoga.

CED A124 Herbal and Nutritional Studies 1 CR
Contact Hours: 1 + 0
Grade Mode: Pass/No Pass.
A survey of herbal remedies, homeopathy, nutritional treatments, and the role of vitamins and minerals in maintaining good health. Examines the Food and Drug Administration regulations for herbal and nutritional supplements.
CEA A125  Yoga: Study and Practice  1 CR
Contact Hours:  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.

CEA 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.

CEA A140  Calculator Workshop  1 CR
Contact Hours:  1 + 0
Grade Mode: Pass/No Pass.
Familiarize students with the operation of a graphics calculator. Specific uses of the calculator appropriate to arithmetic, algebra, trigonometry, a calculus will be presented.

CEA 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.

CEA A160  Appreciating Opera  1 CR
Contact Hours:  1 + 0
Introduces the major eras, composers, and styles of opera.

CEA 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.

CEA A180  Oil Painting Workshop  3 CR
Contact Hours:  0 + 6
Grade Mode: Pass/No Pass.
Community interest painting course emphasizing materials and techniques. Subject matter includes Alaskan scenes and other selections.

CEA A181  Drawing and Painting Wildlife  3 CR
Contact Hours:  0 + 6
Grade Mode: Pass/No Pass.
Community interest painting course emphasizing materials and techniques in drawing and painting wildlife. Subject matter includes Alaskan wildlife, their habitats, and other selections.

CEA A185  Presenting Art Lessons in K-12  1 CR
Contact Hours:  1 + 0
Grade Mode: Pass/No Pass.
Introduces students to community engagement principles, issues of poverty and environmental sustainability, ethics, and to the local community through intensive readings, community-exposure activities, and reflections.

CHEM - CHEMISTRY

CHEM A103  Contemporary Chemistry  3 CR
Contact Hours:  3 + 0
Prerequisites: MATH A055. 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.

CHEM A103L  Contemporary Chemistry Laboratory  1 CR
Contact Hours:  0 + 3
Prerequisites: (CHEM A055 or concurrent enrollment). Special Fees.

CHEM A104  Introduction to Organic Chemistry and Biochemistry  3 CR
Contact Hours:  3 + 0

CHEM A105  Survey of Chemistry  3 CR
Contact Hours:  3 + 0
Prerequisites: MATH A055 with minimum grade of C or MATH A060 with minimum grade of C. Course Attributes: UAA GER Natural Sciences Requirement. Covers units of measurement, periodic table, chemical equations, atomic and molecular structure, chemical bonding, radioactivity, oxidation-reduction reactions, solutions, acids, bases, and buffers. Introduction to organic chemistry including units covering alkanes, alkenes, alkynes, aromatic compounds, alcohols, phenols, ethers, and halides.

CHEM A105L  Survey of Chemistry Laboratory  1 CR
Contact Hours:  0 + 3
Prerequisites: (CHEM A103 or concurrent enrollment). Course Attributes: UAA GER Natural Sciences Lab Only. Special Fees.

CHEM A292  Introduction to Civic Engagement  3 CR
Contact Hours:  3 + 0
Introduces students to community engagement principles, issues of poverty and environmental sustainability, ethics, and to the local community through intensive readings, community-exposure activities, and reflections.

CEL A292  Introduction to Civic Engagement  3 CR
Contact Hours:  3 + 0
Introduces students to community engagement principles, issues of poverty and environmental sustainability, ethics, and to the local community through intensive readings, community-exposure activities, and reflections.

CEL A395  Civic Engagement Internship  3 CR
Contact Hours:  1 + 8-12
Prerequisites: CEL A292. Registration Restrictions: Formal enrollment in Certificate program.

CEL A450  Civic Engagement Capstone  3 CR
Contact Hours:  2 + 2
Prerequisites: CEL A292 and CEL A395. Registration Restrictions: Formal enrollment in Certificate program; completion of GER Tier 1 (basic college-level skills) courses. Course Attributes: UAA GER Integrative Capstone.

CEL A450  Civic Engagement Capstone  3 CR
Contact Hours:  2 + 2
Prerequisites: CEL A292 and CEL A395. Registration Restrictions: Formal enrollment in Certificate program; completion of GER Tier 1 (basic college-level skills) courses. Course Attributes: UAA GER Integrative Capstone.

CEL A395  Civic Engagement Internship  3 CR
Contact Hours:  1 + 8-12
Prerequisites: CEL A292. Registration Restrictions: Formal enrollment in Certificate program. Special Fees.

Special Note: May substitute a major-departmental internship if specified civic engagement instructional goals are achieved, the minimum number of hours is realized, and the Certificate Faculty Advisor approves.

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.
# COURSE DESCRIPTIONS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Contact Hours</th>
<th>Prerequisites</th>
<th>Special Fees</th>
<th>Course Attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM A104L</td>
<td>Introduction to Organic Chemistry and Biochemistry Laboratory</td>
<td>1 CR</td>
<td>0 + 3</td>
<td>Prerequisites: CHEM A103 and (CHEM A104 or concurrent enrollment).</td>
<td>Special Fees</td>
<td>UAA GER Natural Sciences Lab Only.</td>
</tr>
<tr>
<td>CHEM A105</td>
<td>General Chemistry I</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Prerequisites: MATH A105 with minimum grade of C.</td>
<td>Special Fees</td>
<td>UAA GER Natural Sciences Requirements.</td>
</tr>
<tr>
<td>CHEM A105L</td>
<td>General Chemistry I Laboratory</td>
<td>1 CR</td>
<td>0 + 3</td>
<td>Prerequisites: (CHEM A105 or concurrent enrollment).</td>
<td>Special Fees</td>
<td>UAA GER Natural Sciences Lab Only.</td>
</tr>
<tr>
<td>CHEM A106</td>
<td>General Chemistry II</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Prerequisites: CHEM A105 with minimum grade of C and [MATH A105 with minimum grade of C or MATH A107 with minimum grade of C].</td>
<td>Special Fees</td>
<td>UAA GER Natural Sciences Requirements.</td>
</tr>
<tr>
<td>CHEM A106L</td>
<td>General Chemistry II Laboratory</td>
<td>1 CR</td>
<td>0 + 3</td>
<td>Prerequisites: CHEM A106 or concurrent enrollment and CHEM A105L.</td>
<td>Special Fees</td>
<td>UAA GER Natural Sciences Lab Only.</td>
</tr>
<tr>
<td>CHEM A212</td>
<td>Quantitative Analysis</td>
<td>5 CR</td>
<td>3 + 6</td>
<td>Prerequisites: CHEM A106 with minimum grade of C and CHEM A106L with minimum grade of C.</td>
<td>Special Fees</td>
<td></td>
</tr>
<tr>
<td>CHEM A253</td>
<td>Principles of Inorganic Chemistry</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Prerequisites: CHEM A106 with minimum grade of C.</td>
<td>Special Fees</td>
<td></td>
</tr>
<tr>
<td>CHEM A311</td>
<td>Physical Chemistry: A Biological Orientation</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Prerequisites: CHEM A212 with minimum grade of C and MATH A200 with minimum grade of C.</td>
<td>Special Fees</td>
<td></td>
</tr>
<tr>
<td>CHEM A321</td>
<td>Organic Chemistry I</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Prerequisites: CHEM A106 with minimum grade of C and CHEM A106L with minimum grade of C.</td>
<td>Special Fees</td>
<td></td>
</tr>
<tr>
<td>CHEM A322</td>
<td>Organic Chemistry II</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Prerequisites: CHEM A321 with minimum grade of C.</td>
<td>Special Fees</td>
<td></td>
</tr>
<tr>
<td>CHEM A331</td>
<td>Physical Chemistry I</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Prerequisites: CHEM A331 with minimum grade of C and PHYS A303 with minimum grade of C and MATH A314 with minimum grade of C.</td>
<td>Special Fees</td>
<td></td>
</tr>
<tr>
<td>CHEM A331L</td>
<td>Physical Chemistry II Laboratory</td>
<td>2 CR</td>
<td>0 + 6</td>
<td>Prerequisites: CHEM A331 with minimum grade of C.</td>
<td>Special Fees</td>
<td></td>
</tr>
<tr>
<td>CHEM A333L</td>
<td>Physical Chemistry II Laboratory</td>
<td>2 CR</td>
<td>0 + 6</td>
<td>Prerequisites: CHEM A331 with minimum grade of C and PHYS A403 with minimum grade of C and PHYS A413 with minimum grade of C.</td>
<td>Special Fees</td>
<td></td>
</tr>
<tr>
<td>CHEM A334</td>
<td>Instrumental Methods</td>
<td>4 CR</td>
<td>2 + 6</td>
<td>Prerequisites: CHEM A212 with minimum grade of C.</td>
<td>Special Fees</td>
<td></td>
</tr>
<tr>
<td>CHEM A441</td>
<td>Principles of Biochemistry I</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Prerequisites: BIOL A115 with minimum grade of C and CHEM A322 with minimum grade of C.</td>
<td>Special Fees</td>
<td></td>
</tr>
<tr>
<td>CHEM A442</td>
<td>Principles of Biochemistry II</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Prerequisites: CHEM A441 with minimum grade of C.</td>
<td>Special Fees</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Special Note: Students who complete CHEM A441 as part of their undergraduate degree cannot receive credit towards their graduate degree from CHEM A641.</td>
<td>Special Fees</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>A study of the structure and function of amino acids, proteins, carbohydrates, nucleic acids, lipids and membranes.</td>
<td>Special Fees</td>
<td></td>
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</tbody>
</table>

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CHEM A443 Biochemistry Laboratory 2 CR
Contact Hours: 0 + 6
Prerequisites: CHEM A441 with minimum grade of C and (CHEM A442 or concurrent enrollment).
Special Fees.
Laboratory course designed to provide instruction in modern biochemical laboratory techniques.

CHEM A450 Environmental Chemistry 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Junior or senior standing in biology, chemistry, or engineering.
Special Note: This course is an introduction to environmental chemistry for all science majors.

The origin and evolution of the environment, energy, mineral resources, solid wastes, recycling, and the effects of foreign substances on living systems. Air and water pollution. Quantitative chemical principles will be applied. The interrelationships among these problems will be demonstrated.

CHEM A453 Advanced Inorganic Chemistry 5 CR
Contact Hours: 3 + 6
Prerequisites: CHEM A253 with minimum grade of C and CHEM A332.
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 3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A202 with minimum grade of C and [PHYS A124 with minimum grade of C or PHYS A202 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.

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 A460 Chemical Ecotoxicology 3 CR
Contact Hours: 3 + 0
Prerequisites: CHEM A322.
May be stacked with: CHEM A660.
May be stacked with: CHEM A442.
Prerequisites: CHEM A641.
Course Attributes: UAA GER Integrative Capstone.

A study of the immune response including the biochemistry of antibodies, cellular and molecular events triggered by antigenic stimulation, regulation, immunopathology, transplantation, cancer and immunotoxicological techniques.

CHEM A492 Undergraduate Seminar 1 CR
Contact Hours: 1 + 0
Registration Restrictions: Admission to the chemistry degree program and faculty permission.
May be stacked with: CHEM A692.
Topical subjects in chemistry and biochemistry presented by undergraduate students.

CHEM A498 Individual Research 3 CR
Contact Hours: 0 + 9
Registration Restrictions: Department permission.
Special Fees.
Research projects to be arranged with individual faculty members who will direct the study of research.

CHEM A634 Advanced Instrumental Methods 4 CR
Contact Hours: 2 + 6
Prerequisites: CHEM A212.
May be stacked with: CHEM A434.
Special Note: Not available for credit to students who have completed CHEM A434.
Lectures concurrent with CHEM A434. In addition to meeting all requirements for CHEM A434, 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 A641 Advanced Biochemistry I 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing; A course in Organic Chemistry and a course in Biology, or instructor permission.
May be stacked with: CHEM A441.
Special Note: Not available for credit to students who have taken CHEM A441.

In depth study of the structure and function of amino acids, proteins, carbohydrates, nucleic acids, lipids, and membranes.

CHEM A642 Advanced Biochemistry II 3 CR
Contact Hours: 3 + 0
Prerequisites: CHEM A641.
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, and lipids.

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
http://language.uaa.alaska.edu

CHIN A101 Elementary Chinese I 4 CR
Contact Hours: 4 + 0
Course Attributes: UAA GER Humanities Requirement.
Special Fees.
Designed to teach students Mandarin Chinese, Pu-Tong Hua or Guo Yu, utilizing the Beijing Pinyin Latinized phonetic systems. Utilizes a practical approach to language instruction. Experiences in reading and writing the simplified characters as well as cross-cultural activities, e.g., guest speakers and field trips to attend activities with the Chinese community.

CHIN A102 Elementary Chinese II 4 CR
Contact Hours: 4 + 0
Prerequisites: CHIN A101.
Course Attributes: UAA GER Humanities Requirement.
Special Fees.
A continuation of CHIN A101. Teaches conversational Chinese with Beijing Pinyin phonetized system and the simplified Chinese characters. Prepares one to transfer reading skills from Latinized pinyin to the characters. Beginning composition of basic conversations, stories, and simple speech scripts in Chinese taught throughout the class.

CIOS - COMPUTER INFORMATION & OFFICE SYSTEMS

Offered through the Community & Technical College
University Center (UC) Room 130, 786-6423
www.uaa.alaska.edu/cte/programs/applied/cios

CIOS A082 Clerical Accounting 3 CR
Contact Hours: 3+0 or 0+9
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: 0+3 or 0+9
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  1 CR
Contact Hours: 0+1 or 0+3
Special Fees. Special Note: Credit will not be counted for both CIOS A101 and (CIOS A101A and CIOS A101B and CIOS A101C).
Introduces the keyboard alphabet, number, and symbol keys. Emphasizes techniques and mechanics of keyboarding by touch.

CIOS A101B  Keyboarding B  1 CR
Contact Hours: 0+1 or 0+3
Prerequisites: CIOS A101A. Special Fees. Special Note: Credit will not be counted for both CIOS A101 and (CIOS A101A and CIOS A101B and CIOS A101C).
Introduces keyboarding of simple reports and tables in a word processing program and continues to develop keyboarding skill and accuracy.

CIOS A102  Keyboarding Skill Building  1 CR
Contact Hours: 0 + 3
Prerequisites: CIOS A101A. Grade Mode: Pass/No Pass. Special Fees. Special Note: May be repeated with only 1 credit in each semester.
Emphasizes development of keyboarding speed and accuracy.

CIOS A103  Introduction to Personal Computers  1 CR
Contact Hours: 0+1 or 0+3
Special Fees. Introduces personal computers to novice users. Includes basics of start-up, Windows commands and commonly used software programs in order for students to be able to use the computer for personal use.

CIOS A108  Graphic Design Fundamentals for Computer Applications  3 CR
Contact Hours: 3 + 0
Prerequisites: CIOS A113 and (CIOS A130A or CIOS A130B). Special Fees. Introduces the fundamentals of graphic design and art as they relate to media production.

CIOS A113  Operating Systems: MS Windows  1 CR
Contact Hours: 0+1 or 0+3
Special Fees. Introduces the MS Windows operating system. Includes file and disk management, the control panel, desktop, utilities, MS Windows setup, and maintenance.

CIOS A115  10-Key for Business Calculations  2 CR
Contact Hours: 0 + 4
Registration Restrictions: Proof of placement into MATH A055. Special Fees. Introduces the 10-key touch control method to solve business-related calculations while developing speed and accuracy.

CIOS A116  Business Calculations  3 CR
Contact Hours: 0+3 or 0+9
Prerequisites: MATH A054 with minimum grade of C or ASSET Numerical Skills with score of 43. Special Fees. Introduces business calculations and use of calculators by touch to solve problems in bank records, payroll, trade and cash discounts, mark-up and markdown, interest, consumer credit, depreciation, inventory, financial statements, insurance, and taxes.
COURSE DESCRIPTIONS

CIOS A140A  Databases I: MS Access  1 CR
Contact Hours: 0+1 or 0+3
Prerequisites: CIOS A101A and CIOS A113.
Special Fees.
Special Note: Students are strongly encouraged to complete CIOS A240A to gain a fuller understanding of this topic.
Introduces the fundamentals and concepts of a database, including tables, fields, sorting, keys, and relational database concepts.

CIOS A146  Internet Concepts and Applications  2 CR
Contact Hours: 0+1 or 2+4
Prerequisites: CIOS A101A and CIOS A113.
Special Fees.
Introduces and applies internet concepts, tools, and utilities. Includes use of electronic mail, search strategies for research, academic, and personal use, and study of security and ethics issues, basic HTML, and new Internet technologies.

CIOS A150A  Presentations: MS PowerPoint  2 CR
Contact Hours: 0+1 or 2+4
Prerequisites: CIOS A101A and CIOS A113.
Special Fees.
Covers presentation software and design techniques for creating professional presentations. Incorporates tools for enhancing presentations with various objects.

CIOS A152A  Digital Imaging Concepts and Applications: Photoshop  3 CR
Contact Hours: 3 + 0
Prerequisites: CIOS A101A and CIOS A146.
Special Fees.
Introduces the fundamentals, concepts, and applications of digital imaging techniques, including basic color theory, manipulating images, adding images to documents, and using digital images in animation and Web documents.

CIOS A153A  Web Site Design: HTML  1 CR
Contact Hours: 1 + 0
Prerequisites: CIOS A146.
Special Fees.
Introduces designing Web pages and documents using Hypertext Markup Language (HTML), the source language for every page/document formatted for the World Wide Web (WWW). Sound design principles will be emphasized. No programming experience required.

CIOS A153B  Web Site Design: Dreamweaver  3 CR
Contact Hours: 3 + 0
Prerequisites: CIOS A130A or CIOS A130B and CIOS A146 and (CIOS A152A or concurrent enrollment) and (CIOS A156 or concurrent enrollment).
Special Fees.
Introduces the concepts and skills used to create web pages and sites using HTML and web editors. Emphasis is given on good page layout from the perspective of commercial web site design. Dreamweaver software is introduced for students to utilize HTML code and web page design.

CIOS A153C  Web Site Design: MS FrontPage  1 CR
Contact Hours: 0+1 or 0+3
Prerequisites: CIOS A113.
Introduces planning, designing, and creation of a website. Covers basic Microsoft FrontPage commands and functions.

CIOS A154A  Desktop Publishing I: PageMaker  1 CR
Contact Hours: 0+1 or 0+3
Prerequisites: CIOS A101A.
Special Fees.
Introduces fundamentals and concepts of desktop publishing and design elements used to create a variety of documents for publication, including flyers, brochures, and newsletters.

CIOS A154B  Desktop Publishing II: MS Publisher  1 CR
Contact Hours: 0+1 or 0+3
Prerequisites: CIOS A101A.
Special Fees.
Introduces fundamentals and concepts of desktop publishing and design elements used to create a variety of documents for publication, including flyers, brochures, and newsletters.

CIOS A156  Web Graphics: Fireworks  1 CR
Contact Hours: 0+1 or 0+3
Prerequisites: (CIOS A130A or concurrent enrollment) and (CIOS A146 or concurrent enrollment) and (CIOS A152A or concurrent enrollment).
Special Fees.
Introduces the concepts and skills used to create web graphics such as animated GIFs, slices, and image maps. Teaches proper optimization of graphics and gives general guidance on proper use of graphics in a web site.

CIOS A160  Business English  3 CR
Contact Hours: 3 + 0
Prerequisites: [PRPE A086 with minimum grade of C or ASSET Writing Skills with score of 40].
Special Fees.
Special Note: Recommend CIOS A161A and CIOS A260A.
Analyze sentence structure and usage in business communications for application to proofreading and editing documents.

CIOS A161A  Proofreading  2 CR
Contact Hours: 0 + 4
Registration Restrictions: Proof of placement into ENGL A111; keyboarding skills of 30 wpm or higher.
Special Fees.
Introduces proofreading techniques applied to business communication. Develops skills in proofreading for content, usage, grammar, punctuation, and spelling.

CIOS A162A  Shorthand  3 CR
Contact Hours: 0+3 or 0+9
Prerequisites: CIOS A101.
Introduces an alphabetic shorthand system designed for fast note taking or dictation.

CIOS A164  Filing  1 CR
Contact Hours: 0+1 or 0+3
Special Fees.
Special Note: Students are encouraged to complete CIOS A264A to gain a fuller understanding of this topic.
Introduces terminology, filing techniques, and ARMA (American Records Management Association) filing rules as they apply to alphabetic, numeric, subject, and geographic filing systems.

CIOS A165  Office Procedures  3 CR
Contact Hours: 3 + 0
Prerequisites: CIOS A101 and [CIOS A130A or CIOS A130B].
Special Fees.
Introduces students to the duties and responsibilities of office employees in the following areas: mail, records management, office communications, reprographics, public relations, travel, meetings, conferences, and employment procedures.

CIOS A201A  Document Processing  3 CR
Contact Hours: 0+3 or 0+9
Prerequisites: CIOS A101A.
Applies keyboarding and word processing skills to letters, mail merges, tabulations, reports, business forms, and other office documents while building speed and accuracy.

CIOS A207  Machine Transcription  1 CR
Contact Hours: 0 + 3
Prerequisites: [CIOS A101B or CIOS A101C] and CIOS A161A.
Special Fees.
Applies word processing and proofreading skills to create quality documents using transcription equipment. Designed for students with no previous transcription experience.

CIOS A208  Medical Transcription  3 CR
Contact Hours: 0 + 9
Prerequisites: [CIOS A101B or CIOS A101C] and CIOS A161A.
Applies word processing and proofreading skills to machine transcription of medical dictation to produce accurate, quality documents. Designed for students with no previous transcription experience. Students will learn needed medical terminology.

CIOS A209A  Legal Transcription  1-3 CR
Contact Hours: 0 + 3-9
Prerequisites: CIOS A160 and CIOS A201A.
Registration Restrictions: Prerequisite or demonstrated equivalent skill and speed of 45 wpm.
Applies word processing and business English skills to machine transcription of legal dictation to produce accurate legal documents. Designed for students with no previous transcription experience.
CIOS A220A Bookkeeping Software Applications II: QuickBooks 2 CR
Contact Hours: 0+2 or 0+6
Prerequisites: CIOS A120A.
Special Fees.
Applies skills learned in CIOS A120A to more advanced applications of creating financial reports, period-end procedures, payroll, inventory, jobs and time tracking, accounting issues, and integration with other software.

CIOS A230A Word Processing II: MS Word 2 CR
Contact Hours: 0+2 or 0+6
Prerequisites: CIOS A130A.
Special Fees.
Applies skills acquired in CIOS A130A to learn intermediate and advanced word processing and desktop publishing features. Includes styles, graphics, merging documents, object linking and embedding, publishing as a web page, working with master documents, indexes, tables of contents, on-screen business forms, and macros.

CIOS A230B Word Processing II: WordPerfect 2 CR
Contact Hours: 0+2 or 0+6
Prerequisites: CIOS A130B.
Applies skill acquired in CIOS A130B to learn intermediate and advanced word processing and desktop publishing features. Includes styles, graphics, merging documents, object linking and embedding, publishing as a web page, working with master documents, indexes, tables of contents, on-screen business forms, and macros.

CIOS A235A Spreadsheets II: Excel 2 CR
Contact Hours: 0+2 or 0+6
Prerequisites: CIOS A135A.
Special Fees.
Applies skills learned in CIOS A135A to designing more complex spreadsheets. Includes concepts and techniques for problem-solving and the decision-making process. Topics include design and construction of spreadsheets and templates, macros, data exchange, database features, enhancing charts, and other advanced functions.

CIOS A240A Databases II: MS Access 2 CR
Contact Hours: 0+2 or 0+6
Prerequisites: CIOS A140A.
Special Fees.
Applies skills learned in CIOS A140A to more complex databases. Includes database concepts and techniques, queries, forms, filters, relationships, and integration with other applications.

CIOS A241 Integrated Applications 3 CR
Contact Hours: 0+3 or 0+9
Prerequisites: CIOS A151A and [CIOS A220A or CIOS A230B] and CIOS A235A and CIOS A240A.
Special Fees.
Applies the powerful integration capabilities of word processing, spreadsheet, database, and other applications, including the World Wide Web. Builds skill in application integration through a variety of projects that include using critical thinking, work organization, time management, and teamwork skills.

CIOS A251A Desktop Publishing Concepts and Applications: InDesign 3 CR
Contact Hours: 0+3 or 0+9
Prerequisites: CIOS A108 or concurrent enrollment and [CIOS A130A or CIOS A130B].
Special Fees.
Provides design techniques and the utilization of desktop publishing software to generate sophisticated publications. Topics include the mechanics of desktop publishing, graphic design and printing, and planning and implementation of publishing projects.

CIOS A254A Desktop Publishing II: PageMaker 2 CR
Contact Hours: 0+2 or 0+6
Prerequisites: CIOS A154A.
Special Fees.
Applies design techniques used in CIOS A154A to more advanced desktop publishing concepts and techniques. Presents design techniques and the use of desktop publishing software to generate sophisticated publications. Topics include scanning, graphic formats, typography and integration with other applications.

CIOS A254B Desktop Publishing II: MS Publisher 2 CR
Contact Hours: 0+2 or 0+6
Prerequisites: CIOS A154B.
Applies design techniques used in CIOS A154B to more advanced desktop publishing concepts and techniques. Presents design techniques and the use of desktop publishing software to generate sophisticated publications. Topics include scanning, graphic formats, typography, and integration with other applications.

CIOS A255 Multimedia Applications 3 CR
Contact Hours: 0+3 or 0+9
Prerequisites: [CIOS A130A or CIOS A130B] and CIOS A135A and CIOS A150A.
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: 0+1 or 0+3
Prerequisites: [CIOS A130A or CIOS A130B] and CIOS A146.
Special Fees.
Covers publishing documents in portable document format, 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 any media storage device.

CIOS A260A Business Communications 3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A111.
Special Fees.
Applies techniques of communications to business situations requiring problem solving and an understanding of human relations. Topics include communication principles, written communications (letters, memorandums, and reports), oral presentations, and technology used to enhance written and oral communications.

CIOS A261A Interpersonal Skills in Organizations 3 CR
Contact Hours: 3 + 0
Prerequisites: CIOS A165.
Special Fees.
Examines theories and practices of human behavior that deal with the work place. Emphasizes leadership theory; problems in communication and motivation; and interpersonal skills that enable the ability to function successfully with others in an organization.

CIOS A262A Professional Development 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Instructor permission.
Special Fees.
Special Note: Must be taken in final semester of program.
Focuses on the knowledge and attitudes necessary to develop critical job survival skills, increase productivity, and improve job satisfaction and success. Each student will assess individual talents and goals, and create a career portfolio.

CIOS A264A Records Management 2 CR
Contact Hours: 0+2 or 0+6
Prerequisites: [CIOS A140A or concurrent enrollment] 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
Prerequisites: CIOS A160 and CIOS A165.
Special Fees.
Examines workplace trends, management techniques, communication, conflict resolution, ethics, diversity, technology, legal issues, and changing roles of the administrative professional.

CIOS A266 Law Office Procedures: Litigation Documents 3 CR
Contact Hours: 3+0
Prerequisites: CIOS A220A and CIOS A230B.
Special Note: Students are encouraged to complete CIOS A267 and CIOS A269.
Applies computer skills to learn how to manipulate sound, digital video, and digital photography to create a multimedia presentation.

CIOS A267 Law Office Procedures: Client Documents 3 CR
Contact Hours: 3+0
Prerequisites: CIOS A201A and [CIOS A220A or CIOS A230B].
Special Note: Students are encouraged to complete the complementary course, CIOS A266.
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.
CIS - COMPUTER INFORMATION SYSTEMS

Offered through the College of Business & Public Policy
Eduard and Cathryn Rasmussen Hall (RH), Room 309, 786-4100
www.cbpp.uaa.alaska.edu/cis.asp

Students taking any ACCT, BA, CIS, ECON, LGOP, LOG, or PADM course will be charged a single lab fee of $25 for the semester. Applies to Elmendorf AFB or Fort Richardson classes only when specifically annotated. Does not apply to Eagle River.

CIS A105  Introduction to Personal Computers and Application Software 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Keyboarding skill of 30 wpm or better is recommended.
Introduction to computer literacy emphasizing basic hands-on use of personal computers, operating system, and application software to include word processing, spreadsheets, databases, presentation graphics, and Internet.

CIS A110  Computer Concepts in Business 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Recommended: MATH A105, CIS A105, familiarity with personal computers and basic software applications, and keyboarding of at least 30 wpm.
Introduction to computing concepts and productivity software from an end user's perspective. Course covers hardware, software, the information processing cycle, beginning programming concepts, and personal computer software packages. The course emphasizes solving business problems using spreadsheet and database applications.

CIS A185  Introduction to Programming Business Applications 3 CR
Contact Hours: 3 + 0
Prerequisites: CIS A110 and [MATH A107 or MATH A172].
Registration Restrictions: If prerequisite is not satisfied, approved UAA mathematics placement test score and current programming experience are required. Special Note: Class requires 6-hour midterm and 8-hour final scheduled by department on weekend. Specific dates announced in class.
Business programming concepts and techniques required to produce business reports, process files, program/code table handling and table look-up routines, and modularized large programs. Emphasizes structured program design, program testing and documentation for production.

CIS A201  Programming Business Applications 4 CR
Contact Hours: 4 + 0
Prerequisites: CIS A185.
Registration Restrictions: If prerequisite is not satisfied, approved UAA mathematics placement test score and current programming experience are required. Special Note: Class requires 8-hour midterm and 8-hour final scheduled by department on weekend. Specific dates announced in class.
Training and practice in writing programs for business applications using a current programming language. Emphasis on structured and object-oriented design, program testing and certification, and documentation for production. Students analyze and solve current business problems.

CIS A295A  Computer Operations Internship 1-6 CR
Contact Hours: 0 + 3-18
Prerequisites: CIS A185 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 Note: Requires 75 hours of work experience for each credit. May be taken more than once for credit. Maximum of 3 internship credits may be used to meet degree requirements.
Computer operations work experience in a faculty approved position.

CIS A295B  Computer Programming Internship 1-6 CR
Contact Hours: 0 + 3-18
Prerequisites: CIS A185 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 Note: Requires 75 hours of work experience for each credit. May be taken more than once for credit. Maximum of 3 internship credits may be used to meet degree requirements.
Computer programming work experience in a faculty approved position.

CIS A305  Managerial Presentations 3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A212 and CIS A110.
Registration Restrictions: Admission to upper-division standing.
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 A185 and CIS A305.
Registration Restrictions: Admission to upper-division standing.
Presents an overview of systems analysis concepts and computer-based tools for use in the analysis of business information systems. Directed towards the development of communication skills for determining business system requirements and conveying those requirements to developers. Concepts and tools will be applied to real-world student led projects.

CIS A330  Database Management Systems 3 CR
Contact Hours: 3 + 0
Prerequisites: CIS A185 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 A185.
Registration Restrictions: College of Business & Public Policy majors must be admitted to upper-division standing.
Introduces the rapidly changing environment of data communications over local area networks and over switched and private voice lines. Focuses on the control and management of data in a distributed environment, the technology issues associated with data communications, and current trends in the industry.
CIS A360  Object-Oriented Programming in .Net  3 CR
Contact Hours: 3 + 0
Prerequisites: CIS A201 and CIS A305 and (CIS A330 or concurrent enrollment) and CIS A376.
Registration Restrictions: College of Business & Public Policy majors must be admitted to upper-division standing.

CIS A361  Advanced Programming for Business Applications  3 CR
Contact Hours: 3 + 0
Prerequisites: CIS A201.
Registration Restrictions: Admission to upper-division standing.
Advanced topics in business programming, with an emphasis on current and next generation programming languages, and on interfacing with the UNIX, Linux, and AIX operating systems. Covers system call interface, standard and nonstandard routines, advanced data structures, pointers, system calls, inter-process communications, and introduction to X Windows.

CIS A376  Management Information Systems  3 CR
Contact Hours: 3 + 0
Prerequisites: CIS A201 with minimum grade of C.
Registration Restrictions: College of Business & Public Policy majors must be admitted to upper-division standing.
Covers basic concepts of Object-Oriented (OO) programming languages. Some of the recent relevant developments and applications will be discussed. The OO programming languages such as C++ or Java will be used as vehicles for illustrating the concepts discussed in the course. OO programming design and programming development patterns will be covered. Students will analyze and solve business problems and practice writing programs for business applications using a chosen programming language.

CIS A365  Object-Oriented Programming  3 CR
Contact Hours: 3 + 0
Prerequisites: CIS A201 with minimum grade of C.
Registration Restrictions: Admission to upper-division standing.
Covers basic concepts of Object-Oriented (OO) programming languages. Some of the recent relevant developments and applications will be discussed. The OO programming languages such as C++ or Java will be used as vehicles for illustrating the concepts discussed in the course. OO programming design and programming development patterns will be covered. Students will analyze and solve business problems and practice writing programs for business applications using a chosen programming language.

CIS A390  Selected Topics in Management Information Systems  1-6 CR
Contact Hours: 1-6 + 0
Prerequisites: CIS A201 with minimum grade of C.
Registration Restrictions: College of Business & Public Policy majors must be admitted to upper-division standing.
Special Note: May be repeated with change of subtitle/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  1-6 CR
Contact Hours: 0 + 3-18
Prerequisites: CIS A201 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 Note: Requires 75 hours of work experience for each credit. May be taken more than once for credit. Maximum of 3 internship credits may be used to meet degree requirements.
Programmer/Analyst work experience in a faculty approved position.

CIS A410  Project Management  3 CR
Contact Hours: 3 + 0
Prerequisites: CIS A310 and CIS A330 and CIS A376.
Registration Restrictions: Admission to upper-division standing.
Essentials of planning, scheduling, and managing information system projects; risk assessment and risk management; and project management tools. Involves students in the development of a project plan for a community-based information system development project.

CIS A420  Consulting and Training End Users  3 CR
Contact Hours: 3 + 0
Prerequisites: CIS A201 and CIS A376.
Registration Restrictions: Admission to upper-division standing.
Analyzes and applies the theories and strategies associated with consulting and training end users of business computer applications. Course projects are designed to advance and integrate competencies in communications skills (both oral and written) and computer technical skills obtained in prior applicable GER and CIS courses.

CIS A421  Multimedia Authoring  3 CR
Contact Hours: 3 + 0
Prerequisites: CIS A185 and CIS A376.
Registration Restrictions: Admission to upper-division standing.
Provides opportunities for the exploration of multimedia authoring using a variety of software tools. Stresses design theory and the integration of various multimedia forms into a coherent business product.

CIS A423  Specialized Business Information Systems  3 CR
Contact Hours: 3 + 0
Prerequisites: CIS A201 and CIS A376 with minimum grade of C.
Registration Restrictions: Admission 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 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 and CIS A376.
Registration Restrictions: Admission 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 inter-connectivity between commercially available software will be explored as well as the utilization of different communication protocols on the same network.

CIS A460  Web Development in the .Net Environment  3 CR
Contact Hours: 3 + 0
Prerequisites: CIS A360 and CIS A376.
Registration Restrictions: Admission to upper-division standing.
Development of Web sites, portals, applications, and services within the .Net environment. Uses ASP.Net as the development environment; XML, XSLT, schemas and ADO.Net for database processing; and either C# or Visual Basic for server-side code. Installation, maintenance security and other server issues will be covered.

CIS A489  Systems Design, Development and Implementation  3 CR
Contact Hours: 3 + 0
Prerequisites: CIS A376 and CIS A410 and [CIS A365 or CIS A430 or CIS A445 or CIS A460].
Registration Restrictions: Admission 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 A495  Systems Analyst/User Support Internship  1-6 CR
Contact Hours: 0 + 3-18
Prerequisites: CIS A201 with minimum grade of C and CIS A376 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 Note: Requires 75 hours of work experience for each credit. May be taken more than once for credit. Maximum of 3 internship credits may be used to meet degree requirements.
Systems Analyst or user-support work experience in a faculty approved position.
COURSE DESCRIPTIONS

CIS A498 Individual Research Project 1-6 CR
Contact Hours: 1-6 + 0
Prerequisites: CIS A201 with minimum grade of C and CIS A376 with minimum grade of C.
Registration Restrictions: Admission to upper division standing.
Special Note: May be taken more than once for a maximum of 3 elective credits. Offered as demand warrants.

In a simulated professional environment, students complete an MIS project, prepare a project report, and make a managerial presentation.

CIS A605 Information Systems for Managers 2 CR
Contact Hours: 2 + 0
Registration Restrictions: Graduate standing.
Offered spring semesters
Provides the knowledge and skills concerning Information Systems (IS) in a business setting to enable effective use of Information Technology (IT) in organizations. Topics include major industry trends, how information systems are developed and managed, system components, and the role of information systems in organizations.

CIS A692 Management Information Systems 3 CR
Seminar
Contact Hours: 3 + 0
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 (UTC) Room 130, 786-6423
www.uaa.alaska.edu/ctc/programs/applied/const_mgmt

CM A101 Fundamentals of CADD for Building Construction 4 CR
Contact Hours: 2 + 4
Registration Restrictions: Proof of eligibility for placement into MATH A105 and ENGL A111.
Croslisted 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.
Croslisted with: AET A102.
Special Fees.
Introduces basic knowledge of building materials, technical specifications, techniques, and systems. Outlines structural systems, construction processes, and assemblies. Includes a field project involving student team research of current Alaskan building type.

CM A123 Codes and Standards 3 CR
Contact Hours: 3 + 0
Prerequisites: CM A101 and CM A102.
Croslisted with: AET A123.
Special Fees.
Provides an introduction and overview of the fundamental provisions of the building codes used for plan review, life-safety evaluation of buildings, and community development.

CM A142 Mechanical and Electrical Technology 4 CR
Contact Hours: 3 + 2
Prerequisites: CM A101 and CM A102.
Croslisted with: AET A142.
Special Fees.
Introduces the basic mechanical and electrical systems required in all buildings for the safety, health, comfort, and convenience of the occupants. Emphasizes design criteria, code requirements, and interpretation of construction drawings.

CM A163 Building Construction Cost Estimating 3 CR
Contact Hours: 2 + 2
Prerequisites: CM A101 and CM A102 and MATH A105.
Special Fees.
Presents methods and techniques for preparing accurate cost estimates for building construction projects. Emphasizes quantity takeoffs, unit pricing, productivity factors, bidding and negotiation procedures, and cost reporting.

CM A201 Construction Project Management I 3 CR
Contact Hours: 3 + 0
Prerequisites: CM A101 and CM A102.
Special Fees.
Examines construction project management methods and processes. Includes project delivery systems introduction and contract types; contract administration procedures; jobsite planning and logistics; and managing labor, materials, and equipment.

CM A202 Project Planning and Scheduling 3 CR
Contact Hours: 2 + 2
Prerequisites: CM A201 and MATH A105.
Special Fees.
Examines concepts and methods for planning and scheduling of construction projects. Includes identifying work elements, estimating activity durations, preparing network schedules and schedule updates, analyzing planned vs. actual project progress and use of computer scheduling software.

CM A205 Construction Safety 3 CR
Contact Hours: 3 + 0
Prerequisites: CM A201.
Special Fees.
Examines safety and health practices for the construction industry. Includes developing and implementing construction project site-specific safety plans, analyzing the laws and regulations that govern safety, evaluating construction site hazards and environmental conditions, and incident investigation and reporting.

CM A213 Civil Technology 4 CR
Contact Hours: 2 + 4
Prerequisites: CM A101 and CM A102.
Croslisted with: AET A213.
Special Fees.
Outlines elements of civil design, including soils and soil mechanics, foundations, roads, utilities using local, state, and federal regulations. Students will also be introduced to elements of construction surveying.

CM A231 Structural Technology 4 CR
Contact Hours: 2 + 4
Prerequisites: CM A101 and CM A102.
Croslisted with: AET A231.
Special Fees.
Examines structural theory and the physical principles that underlie structural behavior. Includes the use of materials in a manner to maintain structural stability against the natural forces of gravity, wind, snow, and earthquakes. Covers connection detailing and code requirements for wood, steel, and reinforced concrete.

CM A263 Civil Construction Cost Estimating 3 CR
Contact Hours: 2 + 2
Prerequisites: CM A201 and MATH A105.
Special Fees.
Presents methods and techniques for preparing accurate cost estimates for earthwork, roads, highways, underground utilities, and site work. Emphasizes quantity surveys, unit costs, production factors, bidding, and construction equipment management.

CM A295 Construction Management Internship 3 CR
Contact Hours: 0 + 15
Registration Restrictions: Departmental approval.
Grade Mode: Pass/No Pass.
Special Fees.
Places students in building construction offices related to student educational program and occupational objectives. Direct supervision by contractor professional, program faculty, and Career Services coordinator.

CM A301 Construction Project Management II 3 CR
Contact Hours: 3 + 0
Prerequisites: CM A201 and ENGL A111.
Special Fees.
Analyzes advanced subjects in construction project management. Includes project procurement, project delivery methodology, managing project change, quality control, claims and disputes, and labor relations.
### Course Descriptions

#### CNT - COMPUTER & NETWORK TECHNOLOGY

Offered through the Community and Technical College University Center (UCT) 130, 786-6423  
www.uaa.alaska.edu/ctc/programs/applied/telecomm

**CNT A160**  
PC Operating Systems  
3 CR  
Contact Hours: 2 + 3  
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 A161**  
PC Architecture  
1 CR  
Contact Hours: 1 + .5  
Special Fees.  
Covers basic hardware associated with microcomputer operation, including, but not limited to, memory, motherboards, CPUs, chipsets, buses, expansion slots, and resource allocation.

**CNT A162**  
PC Building, Upgrading, and Architecture  
3 CR  
Contact Hours: 2 + 2  
Special Fees.  
Describes how 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, buses, expansion slots and resource allocations. Also demonstrates and practices PC disassembly, assembly, software installations, safety and maintenance.

**CNT A163**  
Introduction to Networking  
1 CR  
Contact Hours: 1 + .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 + .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  
Introduces basic customer service principles, including relationships, perceptions, telephone techniques, quality, ethics, record keeping, interpersonal relationships, and teamwork.

**CNT A170**  
CISCO Academy Network Fundamentals  
4 CR  
Contact Hours: 3 + 2.5  
Special Fees.  
Covers networking fundamentals and develops basic skills in designing, installing, and troubleshooting local area networks. Topics include cabling, cabling closets, Ethernet technologies, management devices, protocols, sub-netting, network device selection, installation and troubleshooting.

**CNT A180**  
PC Interfacing, Peripherals, Storage and A+ Certification  
4 CR  
Contact Hours: 3 + 2  
Prerequisites: CNT A160 and CNT A162.  
Special Fees.  
Covers PC peripheral devices, auxiliary storage devices and the interfaces used to connect them to the personal computer. Also covers the fundamentals topics necessary to prepare for the Core Hardware portion of the CompTIA A+ Certification.

**CNT A181**  
PC Auxiliary Storage  
1 CR  
Contact Hours: 1 + .5  
Prerequisites: CNT A160 and CNT A161 and CNT A162.  
Special Fees.  
Introduces PC storage devices and interfaces, including, but not limited to, magnetic storage, optical storage, disk drives, drive installation, configuration, and file systems.

**CNT A182**  
PC Peripheral Devices  
1 CR  
Contact Hours: 1 + .5  
Prerequisites: CNT A160 and CNT A161 and CNT A162.  
Special Fees.  
Introduces ancillary PC hardware, including keyboards, printers, pointing devices, video displays, video capture, scanners, and digital cameras.

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**CM A313**  
Soils in Construction  
3 CR  
Contact Hours: 3 + 0  
Prerequisites: CM A213 and MATH A107.  
Special Fees.  
Examines the properties and classifications of soils encountered and used in construction. Includes soils investigation, soils stress analysis, embankment construction, and excavation works and supports.

**CM A331**  
Statics and Strength of Materials  
3 CR  
Contact Hours: 3 + 0  
Prerequisites: CM A231 and [MATH A108 or MATH A109] and PHYS A123 and PHYS A123L.  
Special Fees.  
Analyzes forces and the mechanics of materials for structural elements and structural assemblies. Includes the fundamentals of statics; stress, strain, and deformation; shear and bending moment stresses in beams; and column analysis.

**CM A401**  
Construction Law  
3 CR  
Contact Hours: 3 + 0  
Prerequisites: CM A301 and [BA A241 or JUST A241].  
Special Fees.  
Examines the significant legal topics affecting general contractors, subcontractors, project owners and surety bond agents. Integrates legal issues with design and construction services, focusing on risk management and liability awareness.

**CM A422**  
Sustainability in the Built Environment  
3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses, junior standing, plus completion of one Tier 2 Natural Science course and one other Tier 2 GER course.  
Course Attributes: UAA GER Integrative Capstone.  
Special Fees.  
Examines sustainability concepts and the implementation of sustainability principles in the design and construction of the built environment. Evaluates human-constructed development and resource preservation challenges in the context of the local and global natural environment.

**CM A440**  
Financial Management for Construction  
3 CR  
Contact Hours: 3 + 0  
Prerequisites: CM A301.  
Special Fees.  
Analyzes financial management topics relevant to the construction management professional, including the interpretation of financial statements, financial ratios, applications of engineering economy, cash flow analysis, construction financing, and cost information systems.

**CM A450**  
Construction Management Professional Practice  
3 CR  
Contact Hours: 2 + 2  
Prerequisites: CM A301 and CM A495.  
Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) requirements.  
Course Attributes: UAA GER Integrative Capstone.  
Special Fees.  
Integrates educational and construction management principles using case studies. Emphasizes teamwork and professional competency. Includes the evaluation of project goals, conditions, and design documents to produce a plan for delivery and control.

**CM A460**  
Construction Equipment Management and Methods  
3 CR  
Contact Hours: 3 + 0  
Prerequisites: CM A263 and CM A313.  
Special Fees.  
Analyzes the management of construction equipment and methods employed in different sectors of the construction industry including buildings, heavy-highway, and utilities construction. Includes earthmoving operations, appropriate equipment selection, operating costs, and fleet management.

**CM A495**  
Advanced Construction Management Internship  
3 CR  
Contact Hours: 1 + 15  
Registration Restrictions: Departmental approval  
Special Fees.  
Provides career development through self-assessment and career exploration by placement in a construction management home or field office. Intern will perform duties directly related to construction management functions.
COURSE DESCRIPTIONS

CNT A183  Local Area Networks  3 CR
Contact Hours: 2 + 2
Prerequisites: CNT A160 and CNT A162.
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 A184  Introduction to TCP/IP  1 CR
Contact Hours: 1 + 1
Prerequisites: CNT A183.
Special Fees.
Provides transmission control protocol/internet protocol, including structure, addressing, data transfer, software, applications, and troubleshooting.

CNT A190  Selected Topics in MOUS Certifications  1 CR
Contact Hours: 5 + 1
Prerequisites: CNT A301.
Special Note: May be repeated for credit with a change of subtitle.
Provides advanced Microsoft training leading to MOUS certifications in selected software topics from the Office 2000 suite.

CNT A210  PC Technician Fundamentals  3 CR
Contact Hours: 3 + 0
Prerequisites: CIS A105.
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 A212  Network Technician Fundamentals  3 CR
Contact Hours: 1 + 2
Prerequisites: CNT A210.
Provides students with wireless networking fundamentals with focuses on the design, planning, implementation, operation and troubleshooting of wireless LANs. Also offers a comprehensive overview of wireless technologies and security.

CNT A240  Windows System Essentials  2 CR
Contact Hours: 1 + 2
Prerequisites: CNT A210.
Provides an introduction to networking concepts, features, and capabilities and their implementation within the Windows environment.

CNT A241  Administering and Supporting Windows Workstations and Server  3 CR
Contact Hours: 2 + 2
Prerequisites: CNT A240.
Provides students with the knowledge and experience required to pass the CompTIA Network+ exam.

CNT A242  Windows Network Infrastructure Administration  3 CR
Contact Hours: 2 + 2
Prerequisites: CNT A241.
Provides students with the knowledge and skills to design a security framework for small, medium, and enterprise networks using Microsoft Windows technologies.

CNT A243  Windows Directory Services Administration  3 CR
Contact Hours: 2 + 2
Prerequisites: CNT A242.
Provides students with the knowledge and skills to design a Microsoft Windows directory services infrastructure in an enterprise network.

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 Microsoft Windows directory services infrastructure in an enterprise network.

CNT A245  Windows Directory Services Design  2 CR
Contact Hours: 1 + 2
Prerequisites: CNT A243.
Provides students with the knowledge and skills to design a Microsoft Windows directory services infrastructure in an enterprise network.

CNT A246  Windows Network Infrastructure Design  2 CR
Contact Hours: 1 + 2
Prerequisites: CNT A244.
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  CISCO Academy Router Fundamentals  4 CR
Contact Hours: 3 + 2.5
Prerequisites: CNT A170.
Special Fees.
Provides details of CISCO routers and router interfaces, including router configuration, software controls, user modes, IP addressing, and routing protocols.

CNT A262  Computer Technical Support  2 CR
Contact Hours: 1.5 + 2
Prerequisites: CNT A165 and CNT A184.
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  CISCO Academy Switching and Intermediate Routing  4 CR
Contact Hours: 3 + 2.5
Prerequisites: CNT A261.
Special Fees.
Covers local area network management and provides skill development in managing traffic and network devices to ensure optimal throughput. Topics include router and switch configuration, advanced routing protocols, and identifying and resolving network congestion problems.

CNT A271  CISCO Academy WAN Management  3 CR
Contact Hours: 2 + 3
Prerequisites: CNT A270.
Special Fees.
Covers wide area networking services, design, and management. Topics include area network technology, devices, link options, frame encapsulation formats, designs, protocols and configurations.

CNT A272  CISCO Wireless Networking  3 CR
Contact Hours: 2 + 2.5
Prerequisites: CNT A261.
Special Fees.
Provides students with wireless networking fundamentals with focuses on the design, planning, implementation, operation and troubleshooting of wireless LANs. Also offers a comprehensive overview of wireless technologies and security.

CNT A276  Independent Project  3 CR
Contact Hours: 0 + 11
Registration Restrictions: Faculty Permission; and working knowledge of CNT topics.
Develops, implements, and completes a project based on a relevant technological issue. Student works closely with faculty to produce an end product and report.

CNT A280  Server Operating Systems  3 CR
Contact Hours: 2 + 3
Prerequisites: CNT A184.
Develops Windows 2000 Server operating system basics. Topics will include installation, troubleshooting, creation and administration of users and resources, and remote and internet accounts.

CNT A281  Certification Program  2 CR
Contact Hours: 1 + 2
Prerequisites: CNT A182 and CNT A184.
Special Fees.
Provides advanced computer and network training leading to CompTIA A+ and Network+ certifications.

CNT A282  Work Study  3 CR
Contact Hours: 0 + 11
Registration Restrictions: Faculty Permission; and successful completion of 12 credits in the CNT program.
Grade Mode: Pass/No Pass.
Provides supervised workplace experience in industry settings. Integrates advanced level knowledge and practice to demonstrate skill competencies.
COMM A240  Nonverbal Communication 3 CR
Contact Hours: 3 + 0
Prerequisites: COMM A101 or COMM A111 or COMM A235 or COMM A237 or COMM A241.
Covers theoretical and research literature pertinent to nonverbal communication behavior. Focuses on the persuasive role that movement plays in the formal and informal communication process.

COMM A346  Oral Interpretation 3 CR
Contact Hours: 3 + 0
Prerequisites: COMM A101 or COMM A111 or COMM A235 or COMM A237 or COMM A241.
Special Fees.
Theory and practice of the art of oral interpretation to stimulate an understanding and responsiveness to prose, poetry and drama, and to develop the ability to convey others, through oral readings, an appreciation of literature.

COMM A360  Forensics 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Prior experience in public speaking and faculty permission.
Special Note: May be repeated once for credit.
Advanced study for competitive speakers. Emphasis on individual competitive events: informative speaking, extemporaneous speaking, impromptu speaking, oratory, communication analysis, readers' theater, debate, and oral interpretation of literature.
Students develop competition-worthy speeches with faculty guidance.

COMM A380  Theories of Human Communication 3 CR
Contact Hours: 3 + 0
Special Note: May be repeated once for credit with a change of subtitle.
Covers 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 A101 or 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 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, and public contexts.

COUN - COUNSELING
Offered through the Advising and Testing Center
University Center (UC), Room 112, 786-4500
www.uaa.alaska.edu/advising-testing
COUN A101  Introduction to Career Exploration 1 CR
Contact Hours: 1 + 0
Grade Mode: Pass/No Pass.
Special Fees.
An introduction to career exploration. Includes exploring self-concept, values, interests, skills, aptitudes, work orientation, occupational information and decision making.

COUN A107  Managing Stress 1 CR
Contact Hours: 1 + 0
Examines general causes of stress and effective methods to eliminate or manage stress in your own life.

CPLX - COMPLEX SYSTEMS
Offered through the College of Arts and Sciences
Engineering Building (ENGR), Room 333, 786-4770
http://biology.uaa.alaska.edu
CPLX A200  Introduction to Complexity 3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A107 or MATH A172.
Crosslisted with: BIOL A200.
Course Attributes: UAA GER Natural Sciences Requirement.
An introduction to the science of complexity, currently used to predict system behavior in the physical, life, and social sciences.
**CS - COMPUTER SCIENCE**

**Offered through the College of Arts and Sciences**

**Social Sciences Building (SSB), Room 154, 786-1744**

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

Each student taking any Computer Science course will be charged a single lab fee for the semester. Does not apply to Eagle River, Ft. Richardson, Elmendorf, or extended site offerings.

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**CS A100  Introduction to Computers  3 CR**

Contact Hours: 3 + 0

Special Note: Not to be taken for credit by Computer Science majors or minors. An introductory course in computers and computing intended for non-Computer Science majors and minors. Includes an introduction to programming languages such as BASIC or LOGO. Emphasis is on vocabulary and concept development needed to be an effective computer user.

**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 Fees.

Special Note: Students who intend to major in computer science may take this course as preparation for their course of study.

Offers a broad overview of computer science designed to provide students with an appreciation for and an understanding of the many different aspects of computer science. Topics include discrete mathematics, an introduction to programming languages, algorithmic problem solving, basic concepts in hardware, operating systems, networks, graphics, and an overview of the social context of computing. The following basic computer skills are expected: how to use a web browser, send email, edit with a word processor, copy files, open and save documents, and open and close windows.

**CS A107  Programming Concepts I  3 CR**

Contact Hours: 3 + 0

Prerequisites: CS A101 or MATH A107 or MATH A108 or MATH A109.

Registration Restrictions: Meet prerequisites or placement into MATH 200 or MATH 272.

Special Fees.

An introduction to object-oriented programming techniques and problem solving. This includes basic syntax; sequential, branching, and looping execution; as well as concepts such as inheritance, encapsulation, and polymorphism.

**CS A109  Computer Programming (Languages Vary)  3 CR**

Contact Hours: 3 + 0

Prerequisites: MATH A105 with minimum grade of C.

Registration Restrictions: If prerequisite is not satisfied, appropriate SAT or ACT scores or approved UAA Placement Test required.

Special Fees.

Special Note: May be repeated twice for credit with a change in language.

Problem analysis and solution using a selected programming language.

**CS A110  Java Programming  3 CR**

Contact Hours: 3 + 0

Prerequisites: MATH A105 with minimum grade of C.

Registration Restrictions: If prerequisite is not satisfied, appropriate SAT or ACT scores or approved UAA placement test required.

Special Fees.

Introduction to the syntax of the Java language and object-orientation with an emphasis on writing programs to solve problems.

**CS A111  Visual Basic .NET Programming  3 CR**

Contact Hours: 3 + 0

Prerequisites: MATH A105 with minimum grade of C.

Registration Restrictions: If prerequisite is not satisfied, appropriate SAT or ACT scores or approved UAA Placement Test required.

Special Fees.

Introduction to the syntax and semantics of the Visual Basic .NET programming language with an emphasis on writing programs to solve problems.

**CS A201  Programming Concepts I  3 CR**

Contact Hours: 3 + 0

Prerequisites: CS A101 or [MATH A107 or MATH A108 or MATH A109].

Registration Restrictions: Meet prerequisites or placement into MATH 200 or MATH 272.

Special Fees.

An introduction to object-oriented programming techniques and problem solving. This includes basic syntax; sequential, branching, and looping execution; as well as concepts such as inheritance, encapsulation, and polymorphism.

**CS A202  Programming Concepts II  3 CR**

Contact Hours: 3 + 0

Prerequisites: CS A201.

Continuation of object-oriented programming. Topics include: inheritance, abstraction, interfaces, references, polymorphism, dynamic binding, class hierarchies, container classes, random access file I/O, serializability, graphical applications, event handling, UML, and object-oriented design.

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**CS A207  C Programming  3 CR**

Contact Hours: 3 + 0

Prerequisites: MATH A105 with minimum grade of C.

Registration Restrictions: If prerequisite is not satisfied, two years of high school algebra with a minimum grade of C or Math Placement Test is required.

Training and practice in writing programs in the C programming language.

**CS A221  Computer Organization and Assembly Programming  3 CR**

Contact Hours: 3 + 0

Prerequisites: CS A201.

An introduction into the hardware of computer systems and the low-level programming operations which computer systems provide. The course begins with an introduction to the hardware components of computer systems (e.g., CPU, cache, I/O bus, peripherals, etc.) and the organization of these components into computer systems. After the basic components of a computer are understood, the course turns to assembly programming. Several small assembly programs are created to give the student an understanding of how programs actually direct the computer to perform computations.

**CS A241  Computer Hardware Concepts  4 CR**

Contact Hours: 3 + 3

Prerequisites: CS A201 and [MATH A107 or MATH A172].

Crosslisted with EE A241.

Special Note: Cross-listed with EE A241.

Analysis and design of electronic devices used as building blocks for construction of simple digital systems. Presents formats for data storage, number systems and alphanumeric codes, and methods of implementing logical and arithmetic operations within computers. Relates hardware component’s capabilities and limitations to design requirements for computer processing, memory, and control functions.

**CS A304  Object-Oriented Analysis and Modeling  3 CR**

Contact Hours: 3 + 0

Prerequisites: CS A202.

Object-oriented approach to modeling real-world entities and designing a language-independent software application or system based on that model. The course will include selected programming assignments and projects in a current object-oriented language.

**CS A320  Operating Systems  3 CR**

Contact Hours: 3 + 0

Prerequisites: CS A202.

An introductory course on operating systems. Topics covered: process management and scheduling, threads, synchronization and deadlock, memory management and virtual memory, and file systems and I/O.

**CS A330  Algorithms and Data Structures  3 CR**

Contact Hours: 3 + 0

Prerequisites: CS A202.

Data structures and algorithms for their manipulation. The following topics will be covered: arrays, tables, stacks, queues, trees, linked lists, graphs, sorting, searching, and hashing.

**CS A331  Programming Language Concepts  3 CR**

Contact Hours: 3 + 0

Prerequisites: CS A221 and CS A330.

Study of the syntax and semantics of widely differing programming languages. Syntax specification, block structure, binding, data structure operators, and control structures. Comparison of several programming languages. The languages will be selected to cover the major topical areas of procedural, functional, logic, and scripting languages. Programming assignments will be given in each language studied.

**CS A342  Networks  3 CR**

Contact Hours: 3 + 0

Prerequisites: CS A221 and CS A330 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 A351  Automata, Algorithms, and Complexity  3 CR**

Contact Hours: 3 + 0

Prerequisites: CS A330 and MATH A231.

Study of the theory of computing and algorithm analysis and design. Topics in computing theory include: parsing, finite automata and regular languages, pushdown automata and context-free grammars, deterministic and nondeterministic Turing machines, decidability, and computability. Topics in the algorithm domain include: algorithm analysis and complexity, searching/sorting algorithms, mathematical algorithms, and graph theoretic algorithms.
CS A495  Internship Project  3 CR  
Contact Hours:  3 + 0  
Registration Restrictions: Junior or Senior Standing with minimum of 15 credits in courses and faculty permission.  
Special Note: Enrollment will be permitted after a plan for the completion of the project is submitted to and approved by the instructor. Internships are subject to availability of placement. May be taken more than once, but only 3 credits of the upper division credit requirement for the bachelor's degree in CS may be met with CS A495. Students wishing to earn internship credits without the project requirement should enroll in CS A395.  
Professional work experience in appropriate areas of computing. The student will analyze, design, and document a realistic computer science project of moderate complexity under the supervision of a qualified professional who has agreed in advance to undertake this role.  
Special Note: May be taken up to three times, but only 3 credits may be applied towards CS major requirements.  
Grade Mode: Pass/No Pass.  
Prerequisites: CS A202 and CS A221.  
Registration Restrictions: Faculty approval, and as placements are available.  
Special Note: This course is open to qualified students with faculty approval, and as placements are available.  
Special Note: May be taken up to three times, but only 3 credits may be applied towards CS major requirements.  
Application of computing skills in a professional work setting.  

CS A490  Topics in Computer Science  3 CR  
Contact Hours:  3 + 0  
Registration Restrictions: Faculty permission.  
Special Note: May be repeated for credit with a change of subtitle.  
Advanced topics in computer science not taught in other CS course offerings.  

COURSE DESCRIPTIONS  

CS A360  Database Systems  3 CR  
Contact Hours:  3 + 0  
Prerequisites: CS A202.  
Application of data modeling, relational database concepts and design, normalization theory, and SQL. Study of underlying data structures, and data processing architectures and implementations.  

CS A385  Computer Graphics  3 CR  
Contact Hours:  3 + 0  
Prerequisites: CS A330.  
Introduction to the principles, techniques, and tools used in 3D computer graphics programming.  

CS A395  Internship in Computing  3 CR  
Contact Hours:  3 + 0  
Prerequisites: CS A202 and CS A221.  
Registration Restrictions: Faculty approval.  
Grade Mode: Pass/No Pass.  
Special Note: This course is open to qualified students with faculty approval, and as placements are available.  
Special Note: May be taken up to three times, but only 3 credits may be applied towards CS major requirements.  

CSE - COMPUTER SYSTEMS ENGINEERING  
Offered through the School of Engineering  
Engineering Building (ENGR), Room 201, 786-1900  
www.engr.uaa.alaska.edu  

CS A445  Computer Design and Interfacing  4 CR  
Contact Hours:  3 + 3  
Prerequisites: EE A204 and EE A241 and CS A221 and CS A320.  
Develops the design and implementation of input and output (I/O) operations for computer systems. Creation of input and output ports, interrupt controls, communication schemes, timing, digital to analog and analog to digital conversions, and software control of connected devices are included. Lab projects include design, implementation, test, and demonstration of complete I/O systems built to accomplish a set of specified objectives.  

CS A451  Digital Signal Processing  3 CR  
Contact Hours:  3 + 0  
Prerequisites: MATH A231 and EE A351 and STAT A307.  
Develops properties and methods of analysis of discrete-time signals, and the techniques used in creating and processing those signals. Topics include discrete-time linear systems, Z-transforms, the Discrete Fourier Transform and Fast Fourier Transform algorithms, digital filter design, system performance analysis, and problem-solving. Methods and effects of signal processing are analyzed and evaluated.  

CS A465  Network Security  3 CR  
Contact Hours:  3 + 0  
Prerequisites: CSE A455.  
Analysis of network attack techniques and methods to defend against them, including firewalls, virtual private networks; network intrusion detection; and denial of service.  

CS A490  Topics in Computer Science  3 CR  
Contact Hours:  3 + 0  
Registration Restrictions: Faculty permission.  
Special Note: May be repeated for credit with a change of subtitle.  
Advanced topics in computer science not taught in other CS course offerings.  

CS A401  Software Engineering  3 CR  
Contact Hours:  3 + 0  
Prerequisites: CS A330.  
Extends the ideas of software design and development from the introductory programming sequence to encompass the problems encountered in large-scale programs. Topics include software engineering techniques for programming large problems, advanced issues in object-oriented programming, design patterns, client-server computing, and principles of interface design.  

CS A405  Artificial Intelligence  3 CR  
Contact Hours:  3 + 0  
Prerequisites: CS A330 and MATH A231.  
Introduction to concepts of artificial intelligence (AI). Topics include knowledge representation, predicate logic, heuristic search, natural language processing, machine learning and a survey of AI programming languages.  

CS A413  Computer and Data Security  3 CR  
Contact Hours:  3 + 0  
Prerequisites: CS A202.  
Fundamentals of computer and data security. Emphasizes the importance of proper data processing practices and management.  

CS A431  Compilers: Concepts and Techniques  3 CR  
Contact Hours:  3 + 0  
Prerequisites: CS A331.  
Top-down and bottom-up parsing, lexical analyzers, symbol tables, internal forms, intermediate languages, code generation, optimization. A compiler for a rudimentary language is constructed.  

CS A448  Computer Architecture  3 CR  
Contact Hours:  3 + 0  
Prerequisites: CS A221 and CS A230 and CS A331.  
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 A470  Applied Software Development Project  3 CR  
Contact Hours:  3 + 0  
Prerequisites: CS A331 and CS A401 and [(ENGL A312 or concurrent enrollment) or (ENGL A414 or concurrent enrollment)].  
Registration Restrictions: Senior standing, and completion of GER Tier 1 (basic college level skills) courses.  
Course Attributes: UAA GER Integrative Capstone.  
Application of software development concepts, principles, and practices to a comprehensive, realistic system. The student will analyze, design, document, implement, and deliver a presentation and written report of a software system of moderate complexity under the supervision of the instructor.  

CS A490  Topics in Computer Science  3 CR  
Contact Hours:  3 + 0  
Registration Restrictions: Faculty permission.  
Special Note: May be repeated for credit with a change of subtitle.  
Advanced topics in computer science not taught in other CS course offerings.  

CSE - COMPUTER SYSTEMS ENGINEERING  
Offered through the School of Engineering  
Engineering Building (ENGR), Room 201, 786-1900  
www.engr.uaa.alaska.edu  

CS A445  Computer Design and Interfacing  4 CR  
Contact Hours:  3 + 3  
Prerequisites: EE A204 and EE A241 and CS A221 and CS A320.  
Develops the design and implementation of input and output (I/O) operations for computer systems. Creation of input and output ports, interrupt controls, communication schemes, timing, digital to analog and analog to digital conversions, and software control of connected devices are included. Lab projects include design, implementation, test, and demonstration of complete I/O systems built to accomplish a set of specified objectives.  

CS A451  Digital Signal Processing  3 CR  
Contact Hours:  3 + 0  
Prerequisites: MATH A231 and EE A351 and STAT A307.  
Develops properties and methods of analysis of discrete-time signals, and the techniques used in creating and processing those signals. Topics include discrete-time linear systems, Z-transforms, the Discrete Fourier Transform and Fast Fourier Transform algorithms, digital filter design, system performance analysis, and problem-solving. Methods and effects of signal processing are analyzed and evaluated.  

CS A465  Network Security  3 CR  
Contact Hours:  3 + 0  
Prerequisites: CSE A455.  
Analysis of network attack techniques and methods to defend against them, including firewalls, virtual private networks; network intrusion detection; and denial of service.  

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www.uaa.alaska.edu  
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CTE - CAREER & TECHNICAL EDUCATION

Offered through the Community & Technical College
University Center (UC) Room 130, 786-6423
www.uaa.alaska.edu/ctc

CTE A611 Historcial and Philosophical Foundations of Career and Technical Education 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
Studies theory, development, and philosophical foundations of career and technical education. Looks at career and technical education in Alaska, including secondary, postsecondary, and applied programs along with models of career education including career clusters.

CTE A633 Current Issues in Career and Technical Education 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
Studies and analyzes recent trends, research, and issues concerning career and technical education, with a focus on evaluation, interpretation and sources. Identifies national and statewide problems, including legislation and special populations.

CTE A643A Career and Technical Education Methods I 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Departmental approval required.
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 A690 Selected Topics in Career and Technical Education 1-6 CR
Contact Hours: 1-6 + 0
Registration Restrictions: Graduate standing or faculty permission.
Special Note: A maximum of nine credits may be applied toward the M.S., Career and Technical Education. May be repeated for credit under a different topic.
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 A695A Internship I 3 CR
Contact Hours: 0 + 9
Prerequisites: (EDFN A478 or concurrent enrollment) and (EDFN A602 or concurrent enrollment).
Registration Restrictions: Departmental approval required.
Continued supervised internship in K-12 school. Requires participation in a bi-weekly seminar with an emphasis on theory-based inquiry into teaching and learning. Placement will be arranged and supervised by the university in partnership with staff from the school site.

CTE A695B Internship II 6 CR
Contact Hours: 0 + 18
Prerequisites: CTE A695A or EDFN A695A.
Registration Restrictions: Departmental approval required.
Continuation of supervised internship in K-12 school. Requires participation in a bi-weekly seminar with an emphasis on theory-based inquiry into teaching and learning. Placement was arranged and will continue to be supervised by the university in partnership with staff from the school site.

CTE A695C Advanced Professional Experiences 1-6 CR
Contact Hours: 0 + 5-3
Registration Restrictions: Graduate standing and faculty permission.
Special Fees.
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 + 5-3
Prerequisites: (EDAE A685 or concurrent enrollment) or (EDFN A627 or concurrent enrollment).
Registration Restrictions: Graduate standing and advisor permission.
Facilitates the development of a research paper/project or thesis, and presentation jointly approved by the student's graduate committee and the student. Supports research that coincides with the student's professional objectives.

CWLA - CREATIVE WRITING & LITERARY ARTS

Offered through the College of Arts and Sciences
Social Sciences Building (SSB), Room 352, 786-4330
http://cwla.uaa.alaska.edu

CWLA A259 Short Format Introduction to Creative Writing 1 CR
Contact Hours: 1 + 0
Special Fees.
Special Note: This course may be taken twice for credit.
Introduction to one type of creative writing conducted in short one-credit workshops.

CWLA A260A Introduction to Creative Writing: Poetry 3 CR
Contact Hours: 3 + 0
Special Fees.
Special Note: This course may be taken twice for credit.
Introduction to two or more types of creative writing, with close analysis of each student's work.

CWLA A260B Introduction to Creative Writing: Fiction 3 CR
Contact Hours: 3 + 0
Special Fees.
Special Note: This course may be taken twice for credit.
Introduction to techniques of writing fiction, with close analysis of each student's work.

CWLA A260C Introduction to Creative Writing: Nonfiction 3 CR
Contact Hours: 3 + 0
Special Fees.
Special Note: This course may be taken twice for credit.
Introduction to techniques of writing nonfiction, with close analysis of each student's work.

CWLA A260D Introduction to Creative Writing: Children's Stories 3 CR
Contact Hours: 3 + 0
Special Fees.
Special Note: This course may be taken twice for credit.
Introduction to various approaches to writing children's stories, with close analysis of each student's work.

CWLA A260E Introduction to Creative Writing: Women's Writing Workshop 3 CR
Contact Hours: 3 + 0
Special Fees.
Special Note: May be taken twice for credit.
Practice in two or more types of creative writing, with close analysis of each student's work. Participants examine the roles and challenges of women writers in society and explore narrative possibilities unique to writing by women.
An internship for students in the MFA Program. Students selected for this internship will work with the editor of Inklings, the campus literary magazine. They will supervise all aspects of the magazine and make editorial decisions concerning the contents of the magazine. They will also mentor undergraduates on the staff and/or undergraduates who are contributors to the magazine, as appropriate.

CWLA A652 Graduate Writer's Workshop: Poetry 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Faculty permission required and graduate standing. Special Fees.
Special Note: May be repeated for degree credit.
Advanced study and practice of the forms and techniques of poetry with close analysis of each student's work.

CWLA A662 Graduate Writer's Workshop: Prose Nonfiction 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Faculty permission required and graduate standing. Special Fees.
Special Note: May be repeated for degree credit.
Advanced study and practice in the writing of various fictional forms with close analysis of each student's work.

CWLA A662 Graduate Writer's Workshop: Drama for Stage and Screen 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Faculty permission required and graduate standing. Special Fees.
Special Note: May be repeated for degree credit.
Advanced study and practice of various dramatic structures of stage and screen with close analysis of each student's work. Emphasis will be on the process of developing work for production.

CWLA A690 Form and Theory 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing. Special Fees.
Special Note: May be repeated with change of subtitle.
A graduate level examination of one or more forms of literary art emphasizing formal elements discernible in craft and theory as it applies to both style and content.

CWLA A698 Individual Research 1-6 CR
Contact Hours: 3 + 0
Registration Restrictions: Faculty permission.
The student conducts an individual research project under the close supervision of an instructor.

CWLA A699 Thesis 1-6 CR
Contact Hours: 0 + 3-18
Registration Restrictions: Faculty permission. Special Note: May be repeated for credit.
A 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 and the oral defense of the thesis.

Special Fees.
DA - DENTAL ASSISTING

Offered through the Community & Technical College
Allied Health Sciences Building (AHS), Room 160, 786-6929
www.uaa.alaska.edu/cct/programs/alliedhealth/da

DA A100 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 A104 Dental Radiography 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Departmental approval.
Special Fees.
Defines radiation physics and biology with emphasis on radiation health, safety, protection, radiation production, x-ray machines, components and function, and image receptors. Includes study of essential radiographic techniques, film processing techniques, and identification of radiographic anatomy.

DA A110L Dental Radiography Laboratory 1 CR
Contact Hours: 0 + 2
Prerequisites: (DA A110 or concurrent enrollment).
Registration Restrictions: Departmental approval.
Special Fees.
Applies information learned in Dental Radiography (DA A110) lecture on radiation health, safety, protection, x-ray machines, components and function, and image receptors. Includes study of essential radiographic techniques, film processing techniques, and identification of radiographic anatomy.

DA A121 Chairside Procedures I 6 CR
Contact Hours: 3 + 6
Prerequisites: (DA A123 or concurrent enrollment).
Special Fees.
Beginning skills necessary to function as a chairside dental assistant in a general dentistry practice. Emphasizes on developing clinical skills in four-handed dentistry techniques.

DA A122 Chairside Procedures II 8 CR
Contact Hours: 4 + 8
Prerequisites: DA A110 and DA A121 and DA A123 and (DA A125 or concurrent enrollment).
Special Fees.
Emphasizes advanced dental assisting skills necessary in general dentistry. Panoramic procedures, exposing radiographs on patients, taking impression for study models, matrix assembly, rubber dam application, assisting with the administration of local anesthesia, temporary crown construction, and oral health and nutrition. Briefly introduces the specialties in dentistry.

DA A123 Biomedical Sciences for Dental Assistants 4 CR
Contact Hours: 4 + 0
Prerequisites: (DA A121 or concurrent enrollment).
Special Fees.
Microbiology as it applies to prevention of disease transmission; dental terminology as it relates to anatomy; anatomy and physiology of the head and neck; and the body systems as they relate to dentistry.

DA A124 Dental Materials and Application I 2 CR
Contact Hours: 1 + 2
Special Fees.
Physical and chemical properties of restorative dental materials. Prepares student for laboratory application of those materials.

DA A125 Dental Materials and Application II 2 CR
Contact Hours: 1 + 2
Prerequisites: DA A124.
Special Fees.
Properties and manipulation of gypsum material, impression materials and custom trays. Covers basic crown and bridge procedures.

DA A127 Dental Practice Management and Professionalism 3 CR
Contact Hours: 3 + 0
Prerequisites: DA A123.
Special Fees.
Introduces the responsibilities of the dental assistant or dental practice management assistant and professionalism and related topics.

DA A128 Dental Communication Skills 2 CR
Contact Hours: 2 + 0
Special Fees.
Introduces patient management, special needs patients, oral and written communication and applied psychology in the dental office setting.

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 alginates. Emphasis on developing clinical skills in four-handed dentistry techniques.

DA A150 Biomedical and Dental Sciences for Dental Assistants 3 CR
Contact Hours: 3 + 0
Prerequisites: DA A101.
Registration Restrictions: Departmental approval.
Special Fees.
Presents dental terminology, anatomy of oral structures, anatomy and physiology of the head and neck. Provides methodology in study and practice of dental assisting and related topics such as radiography.

DA A160 Materials in Dentistry 3 CR
Contact Hours: 2 + 2
Registration Restrictions: Departmental approval.
Special Fees.
Examines properties and manipulation of gypsum, impression materials, custom trays, night guards, sealants, and bleaching trays. Includes the physical and chemical properties of restorative materials.

DA A195A Dental Assisting Practicum I 1 CR
Contact Hours: 0 + 6
Prerequisites: (DA A110 or concurrent enrollment) and (DA A121 or concurrent enrollment) and (DA A126 or concurrent enrollment) and (DA A127 or concurrent enrollment).
Grade Mode: Pass/No Pass.
Special Fees.
Orientation and practice in dental assisting techniques under supervision in local dental offices or clinics. Emphasizes further development of chairside assisting skills. Students will spend 80-85 hours in an off-campus facility.

DA A195B Dental Assisting Practicum II 3 CR
Contact Hours: 0 + 16
Prerequisites: DA A195A and (DA A122 or concurrent enrollment) and (DA A128 or concurrent enrollment) and (DA A129 or concurrent enrollment).
Grade Mode: Pass/No Pass.
Special Fees.
A clinical, off-campus course for dental assisting students who have completed all program requirements in the fall and spring semesters. Students are placed in general and specialty dental offices. Direct supervision is provided by the participating dentist and program faculty. Seminars are held to discuss student progress and experiences.

DA A201 Chairside Techniques II 4 CR
Contact Hours: 2 + 4
Prerequisites: DA A110 and DA A110L and DA A130.
Registration Restrictions: Departmental approval.
Special Fees.
Continues Chairside Techniques I and Dental Radiography. Emphasizes advanced dental assisting skills and provides practice for those previously acquired. Covers advanced rubber dam application, panoramic procedures, exposing radiographs on patients, vital signs, medical and dental histories, temporary crown construction, and oral health and nutrition.

DA A202 Dental Specialties for Dental Auxiliaries 3 CR
Contact Hours: 2 + 2
Prerequisites: DA A101 and DA A130.
Registration Restrictions: Departmental approval.
Special Fees.
Expands and applies information and skills necessary in endodontics, oral and maxillofacial surgery, orthodontics, pediatrics, periodontics, and fixed/removable prosthetics.
### COURSE DESCRIPTIONS

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DA A295A</td>
<td>Clinical Practicum II</td>
<td>3 CR</td>
</tr>
<tr>
<td>Contact Hours:</td>
<td>0 + 15</td>
<td></td>
</tr>
<tr>
<td>Registration Restrictions:</td>
<td>Departmental approval.</td>
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<tr>
<td>Grade Mode:</td>
<td>Pass/No Pass</td>
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<tr>
<td>Special Fees:</td>
<td>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.</td>
<td></td>
</tr>
</tbody>
</table>

| DA A295B | Clinical Practicum III | 2 CR |
| Contact Hours: | 0 + 5 |
| Registration Restrictions: | Departmental approval. |
| Grade Mode: | Pass/No Pass |
| Special Fees: | Applies clinical dental assisting experience in an instructional setting. Students will participate in the dental assisting clinic working with novice students. |

### DH - DENTAL HYGIENE

**Offered through the Community & Technical College Allied Health Sciences Building (AHS), Room 160, 786-6929**

**www.uaa.alaska.edu/ctc/programs/alliedhealth/dh**

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>DH A111</td>
<td>Periodontics I</td>
<td>2 CR</td>
</tr>
<tr>
<td>Contact Hours:</td>
<td>2 + 0</td>
<td></td>
</tr>
<tr>
<td>Special Fees:</td>
<td>Introduction to embryology and histology of the periodontal tissues. Includes discussion on dental accretions and cariolog.</td>
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</tbody>
</table>

| DH A112 | Techniques I for Dental Hygienists | 7 CR |
| Contact Hours: | 3 + 8 |
| Registration Restrictions: | Current BLS Certification. |
| Special Fees: | A pre-clinical course introducing basic dental hygiene procedures to include data gathering, patient education and basic instrumentation. Emphasis is placed on skill development in basic instrumentation and infection control. |

| DH A113 | Issues in Dental Hygiene | 1 CR |
| Contact Hours: | 1 + 0 |
| Special Fees: | Introduces ethical and legal concerns of the dental hygiene profession. Patient management and teamwork are discussed. |

| DH A114 | Anatomy of the Orofacial Structures | 2 CR |
| Contact Hours: | 2 + 0 |
| Special Fees: | Provides students with knowledge to perform technical skills within the oral cavity. In particular, those relating to dental screening and record taking. |

| DH A121 | Periodontics II | 2 CR |
| Contact Hours: | 2 + 0 |
| Special Fees: | Introduction to periodontal disease. Emphasis placed on recognition of periodontal disease and treatment planning. |

| DH A122 | Techniques II for Dental Hygienists | 4 CR |
| Contact Hours: | 2 + 4 |
| Prerequisites: | DH A112. |
| Registration Restrictions: | Current BLS Certification. |
| Special Fees: | Introduces adjunctive techniques used in dental hygiene treatment. Basic manipulation of dental materials. Emphasis is placed on care of materials and restorations that are encountered intraorally during dental hygiene treatment. Radiology lab provides opportunity to develop competence in exposing radiographs on patients under direct faculty supervision. |

| DH A165 | Pharmacology for Dental Hygienists | 2 CR |
| Contact Hours: | 2 + 0 |
| Special Fees: | General concepts of pharmacology, nature of drug reactions, individual response to drugs, principles of neuropharmacology, toxicology, anti-infective therapy, effect of drugs on cardiovascular, endocrine and other body systems. Emphasis is placed on drugs used in dentistry. |

| DH A192 | Clinical Seminar I | 1 CR |
| Contact Hours: | 0 + 3 |
| Corequisite: | DH A195A. |
| Special Fees: | Discussion and evaluation of clinical experiences encountered in DH A195. Emphasis is placed on review of treatment plans and case presentation. |

| DH A195A | Clinical Practicum I | 4 CR |
| Contact Hours: | 0 + 12 |
| Registration Restrictions: | Current CPR certification, department permission, and current immunizations for Hepatitis B, Rubella, Rubovela, Tetanus/Diphtheria, and proof of a current negative PPD. |
| Corequisite: | DH A192. |
| Special Fees: | Provides opportunity for student to achieve clinical skill competency with individuals presenting themselves as periodontally healthy or with signs of gingivitis. |

| DH A211 | Current Periodontal Therapies | 2 CR |
| Contact Hours: | 2 + 0 |
| Special Fees: | Develops familiarity with current nonsurgical and surgical techniques in the treatment of periodontal disease. Nutrition and immunology as it relates to periodontal diseases are discussed. Case presentations made by students. |

| DH A212 | Techniques III for Dental Hygienists | 3 CR |
| Contact Hours: | 1 + 4 |
| Registration Restrictions: | Current BLS certification. |
| Special Fees: | Advanced dental hygiene instrumentation and intraoral techniques. Provides for discussion of patients with special needs. |

| DH A214 | Pathology of Oral Tissues | 2 CR |
| Contact Hours: | 2 + 0 |
| Special Fees: | Includes the signs, symptoms, contagion recognition of selected diseases of the oral cavity and systemic diseases that manifest themselves in the oral cavity. |

| DH A224 | Principles of Dental Health | 3 CR |
| Contact Hours: | 2 + 3 |
| Special Fees: | Provides a broad understanding of community dental health and dental epidemiology. Students develop and implement a basic community dental health project. |

| DH A292A | Clinical Seminar II | 1 CR |
| Contact Hours: | 0 + 3 |
| Corequisite: | DH A295A. |
| Special Fees: | Discussion and evaluation of clinical experiences encountered in DH A295A. Emphasis is placed on review of treatment plans and case presentations of patients exhibiting early periodontal disease. |

| DH A292B | Clinical Seminar III | 1 CR |
| Contact Hours: | 0 + 3 |
| Corequisite: | DH A295B. |
| Special Fees: | Discussion and evaluation of clinical experiences encountered in DH A295B. Emphasis is placed on review of treatment plans and case presentations of patients exhibiting moderate to advanced periodontal disease. |

| DH A295A | Clinical Practicum II | 5 CR |
| Contact Hours: | 0 + 15 |
| Registration Restrictions: | Current BLS certification, department permission, and immunizations. |
| Corequisite: | DH A292A. |
| Special Fees: | Provides opportunity for students to achieve clinical skill competency with individuals presenting themselves with mild to moderate periodontal disease. This course is conducted in a clinical setting with volunteer patients and individualized instruction. |

| DH A295B | Clinical Practicum III | 6 CR |
| Contact Hours: | 0 + 18 |
| Registration Restrictions: | Current BLS certification, department permission, and immunizations. |
| Corequisite: | DH A292B. |
| Special Fees: | Provides opportunity for student to achieve clinical skill competency with individuals presenting themselves with moderate to advanced periodontal disease. Learning occurs through student practice and individualized instruction. |
DLS - DISABILITY & LONG TERM SUPPORT

Offered through the College of Health & Social Welfare
UAA Center for Human Development
2702 Cambell Street, Suite 103, 272-8270
www.alaskachd.org

DLS A101 Introduction to Children's Residential Care 3 CR
Contact Hours: 2 + 2
Registration Restrictions: Students must provide proof of current criminal background check that meets industry standards.
Prerequisites: DLS A101.

Focuses on trauma in children. Topics covered include a review of trauma basics; trauma and its effects on children; strategies for trauma-informed care, professional safety and self-care. Includes a 30-hour practicum.

DLS A201 Skill Basics in Residential Services 3 CR
Contact Hours: 2 + 2
Registration Restrictions: Students must provide proof of current criminal background check that meets industry standards.
Explores ethics and ethical practices; legal requirements in residential care; boundaries in therapeutic relationships; culturally responsive treatment adaptations; recordkeeping and documentation standards. Includes a 30-hour practicum.

DLS A205 Teaching Social Skills to Youth in Residential Care 4 CR
Contact Hours: 2 + 4
Registration Restrictions: Students must provide proof of current criminal background check that meets industry standards.
Focuses on skills used to shape behavior with youth in therapeutic residential settings. Topics covered include communication skills, social skill development, teaching strategies, behavior contingency program, crisis prevention and intervention strategies. Includes a 60-hour practicum.

DLS A206 Positive Behavioral Supports in Residential Youth Care 3 CR
Contact Hours: 2 + 2
Prerequisites: DLS A205.
Registration Restrictions: Students must provide proof of current criminal background check that meets industry standards.
Focuses on assessments of behaviors and appropriate interventions. Topics covered include history and evolution of Positive Behavioral Supports (PBS); functional assessment and analysis strategies; and methods used in building behavioral support plans. Includes a 30-hour practicum.

DLS A385 Working with Traumatized Children 3 CR
Contact Hours: 2 + 2
Prerequisites: DLS A101.
Registration Restrictions: Students must provide proof of current criminal background check that meets industry standards.
Focuses on trauma in children. Topics covered include a review of trauma basics; trauma and its effects on children; strategies for trauma-informed care, professional safety and self-care. Includes a 30-hour practicum.

DN - DIETETICS & NUTRITION

Offered through the Community & Technical College
Lucy Cuddy Hall (CUDY), Room 126, 786-4728
www.alaska.edu/ctc/programs/culinaryarts

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 A146 Science of Weight Management 1 CR
Contact Hours: 1 + 0
Designed for those wanting to understand sound weight control techniques and wanting ability to evaluate popular fad diets.

DN A147 Geriatric Nutrition 3 CR
Contact Hours: 3 + 0
Focuses on the nutritional needs of the older person, based on physiological changes in aging, with emphasis on nutritionally related diseases, procuring and preparing food, and assistive care. Designed for those preparing for careers in elderly care and for those interested in learning how to care for themselves in later years.

DN A155 Survey of Alaska Native Nutrition 3 CR
Contact Hours: 3 + 0
Surveys traditional foods and their role in the physical, social, and mental health issues of Alaska Natives within six geo-social regions of Alaska (Arctic/Western, Interior, Aleutian Chain, Southeast, Southcentral, and Urban Alaska).

DN A203 Nutrition for Health Sciences 3 CR
Contact Hours: 3 + 0
Prerequisites: [(BIOL A112 or concurrent enrollment) and (BIOL A112L or concurrent enrollment)] or (CHEM A104 or concurrent enrollment).
Studies nutrition in the life cycle including food sources and requirements of nutrients; physiological and metabolic aspects of nutrient function. Reviews disease states, food selection, cultural and contemporary issues of concern to health professionals.

DN A215 Sports Nutrition 3 CR
Contact Hours: 3 + 0
Prerequisites: [BIOL A111 and BIOL A111L] or BIOL A113.
Examines nutrition guidelines and nutrient intakes with emphasis on the health and performance implications for the physically active individual, and the individual wanting to pursue increased physical activity. Includes review of body composition and weight control.

DN A250 Introduction to Diet Therapy 3 CR
Contact Hours: 3 + 0
Prerequisites: CA A102 with minimum grade of C or DN A203.
Special Fees.

Examine nutrition guidelines and nutrient intakes with emphasis on the health and performance implications for the physically active individual, and the individual wanting to pursue increased physical activity. Includes review of body composition and weight control.

DN A255 Nutrition Care Practicum 1 CR
Contact Hours: 3 + 4
Prerequisites: DN A250 with minimum grade of B.
Registration Restrictions: Current immunizations.
Grade Mode: Pass/No Pass.
Special Fees.

Provides opportunity to interpret field experiences, differentiate between available strategies, recall and apply basic nutrition care principles and skills, and trace effects of efforts. Interpret institutional protocols, manuals, guides, etc. Apply basic principles to specific client actions, estimate results or outcomes, and discuss work with site supervisor. Facilitates 50 hour field experience.
DN A303  Preventive and Therapeutic Nutrition  3 CR  
Contact Hours: 3 + 0  
Prerequisites: DN A101 with minimum grade of C or DN A203 with minimum grade of C.  
Explores role of food and dietary habits in prevention and management of diseases such as disorders of the upper and lower gastrointestinal tract, diabetes, heart disease, cancer, liver diseases, renal diseases, and HIV infection. Covers medical nutrition therapy for diseases by means of alterations in food consumption.

DN A415  Community Nutrition  3 CR  
Contact Hours: 3 + 0  
Prerequisites: [DN A101 or DN A203] and [DN A145 or DN A147].  
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 A692A  Seminar: Current Issues in Dietetics  2 CR  
Clinical and Community Nutrition  
Contact Hours: 8 + 0  
Registration Restrictions: Bachelor's degree that satisfies didactic program in dietetics (DPD) requirements set by the American Dietetic Association. Current immunizations are required for specific internship sites.  
Corequisite: DN 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 dietitians for professional practice as Registered Dieticians.

DN A692B  Seminar: Current Issues in Dietetics  1 CR  
Community Nutrition and Foodservice Administration  
Contact Hours: 4 + 0  
Registration Restrictions: Bachelor's degree that satisfies didactic program in dietetics (DPD) requirements set by the American Dietetic Association. Current immunizations are required for specific internship sites.  
Corequisite: DN A695E and DN A695F.  
Special Fees.  
Seminar in current dietetics, community nutrition, foodservice administration issues/topics intended for dietetic interns. Provides theoretical and conceptual learning along with practicum coursework, necessary to meet American Dietetic Association accreditation standards and to prepare future dietitians for professional practice as Registered Dieticians.

DN A695C  Practicum in Clinical Nutrition  4 CR  
Contact Hours: 0 + 22  
Registration Restrictions: Bachelor's degree that satisfies didactic program in dietetics (DPD) requirements set by the American Dietetic Association. Current immunizations are required for specific internship sites.  
Corequisite: DN A692A and DN A695D.  
Grade Mode: Pass/No Pass.  
Practicum experience in clinical nutrition for dietetic interns, necessary to meet American Dietetic Association accreditation standards and to prepare future dietitians for professional practice as Registered Dieticians.

DN A695D  Practicum in Community Nutrition  2 CR  
Contact Hours: 0 + 16  
Registration Restrictions: Bachelor's degree that satisfies didactic program in dietetics (DPD) requirements set by the American Dietetic Association. Current immunizations are required for specific internship sites.  
Corequisite: DN A692A and DN A695C.  
Grade Mode: Pass/No Pass.  
Practicum experience in community nutrition for dietetic interns, necessary to meet American Dietetic Association accreditation standards and to prepare future dietitians for professional practice as Registered Dieticians.

DN A695E  Advanced Practicum in Community Nutrition  2 CR  
Contact Hours: 0 + 16  
Registration Restrictions: Bachelor's degree that satisfies didactic program in dietetics (DPD) requirements set by the American Dietetic Association. Current immunizations are required for specific internship sites.  
Corequisite: DN A692B and DN A695F.  
Grade Mode: Pass/No Pass.  
Advanced practicum experience in community nutrition for dietetic interns, necessary to meet American Dietetic Association accreditation standards and to prepare future dietitians for professional practice as Registered Dietitians.

DN A695F  Practicum in Foodservice Administration  4 CR  
Contact Hours: 0 + 20  
Registration Restrictions: Bachelor's degree that satisfies didactic program in dietetics (DPD) requirements set by the American Dietetic Association. Current immunizations are required for specific internship sites.  
Corequisite: DN A692B and DN A695E.  
Grade Mode: Pass/No Pass.  
Practicum experience in foodservice administration for dietetic interns, necessary to meet American Dietetic Association accreditation standards and to prepare future dietitians for professional practice as Registered Dietitians.

DNCE - DANCE

Offered through the College of Arts and Sciences  
Fine Arts Building (ARTS), Room 302, 786-1792  
http://theatre.uaa.alaska.edu

DNCE A061  Elementary Ballet  1 CR  
Contact Hours: 1 + 1  
Special Fees.  
Special Note: May be repeated three times for credit.  
Introduction to classical ballet techniques for the avocational student with little or no background in dance. Simple exercises and combinations introduce fundamental ballet positions, movements, and terminology. Correct alignment stressed in basic exercises and elementary locomotor combinations.

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 fundamentals of jazz dance for the avocational student with little or no dance background. Simple exercises and movement combinations introduce elementary fundamentals of jazz style and basic dance technique. Correct alignment is stressed throughout class.

DNCE A100  Introduction to Dance  1 CR  
Contact Hours: 1 + 1  
Introduction to the art and discipline of dance movement. Classes are geared to the level of the participants. Enhanced physical agility and knowledge of basic dance vocabulary are goals. Three short sections offered in ballet, modern and jazz.

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. Correct alignment and injury prevention stressed. Exploration of dance aesthetics and ballet philosophy as well as social and historical influences.

DNCE A121  Fundamentals of Modern Dance I  2 CR  
Contact Hours: 1 + 2  
Special Fees.  
Special Note: May be repeated three times for credit.  
Beginning modern dance techniques. Correct alignment and injury prevention stressed. Introduces basic dance skills through warm-up exercises, locomotor movements and simple combinations. Exploration of dance aesthetics and modern dance philosophy, and historical and social influences.

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 Jazz I 2 CR
Contact Hours: 1 + 2
Special Fees.
Special Note: May be repeated three times for credit.
- Basic jazz dance technique rooted in the complexity, variety, and spontaneity of jazz music. Includes the concepts of rhythmic manipulation and swing with an introduction to musical movement qualities, improvisation, and jazz history. Warm-up exercises and movement combinations develop jazz skills and promote strength and flexibility. Correct alignment and injury prevention stressed throughout class.

DNCE A145 Dances of the West African Diaspora I 2 CR
Contact Hours: 1 + 2
Special Fees.
Special Note: May be repeated three times for credit.
- Beginning course in dances of the West African Diaspora including those of the Caribbean such as Haiti and Cuba. Movement fundamentals of these dance forms are developed through warm-up exercises and through execution of the dances themselves. Three to five dances will be learned each semester. History and cultural context of the dances will be stressed throughout the class.

DNCE A146 Introduction to Alaska Native Dance 1-2 CR
Contact Hours: 5+1 or 3+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 Beginning Tap Dance I 1 CR
Contact Hours: 1 + 1
Special Fees.
Special Note: May be repeated three times for credit.
- Learning and practicing basic tap dance steps and combinations. Begins with warm-up exercises at barre and across floor. Covers basic steps such as shuffle, flap, ball-change, front and back flaps.

DNCE A170 Dance Appreciation 3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Fine Arts Requirement.
Special Fees.
- Develops an appreciation of dance for observers and participants through course readings, lectures, videos, live performances, writing, movement, and discussion sessions. Explores dance in social and cultural contexts, and as an aesthetic and kinesthetic experience. Dances across cultures examined along with the development of dance as an art form in Europe and America. A lecture course with four - six dance studio movement session per semester.

DNCE A185 Design for Dance 3 CR
Contact Hours: 3 + 0
Special Fees.
- Processes and practices necessary for the preparation of scenery, lighting, and related areas of design for the stage. Provides hands-on experience to learn operational equipment basics and appropriate terminology to enable a successful mastery of the basic practices and techniques required for effective dance production work.

DNCE A205 Fundamentals of Ballet II 2 CR
Contact Hours: 1 + 2
Prerequisites: DNCE 101 with minimum grade of C.
Special Fees.
Special Note: May be repeated three times for credit.
- Technical, verbal, and theoretical knowledge of ballet enhanced by acquisition of new skills for control and movement. Concepts of dance aesthetics and style plus interrelationships between music and dance. Emphasis on correct anatomical alignment and science of movement.

DNCE A223 Fundamentals of Modern II 2 CR
Contact Hours: 1 + 2
Prerequisites: DNCE A121 with minimum grade of C.
Special Fees.
Special Note: May be repeated three times for credit.
- Modern dance techniques and vocabulary expanded by additional dance skills. Introduction of long warm-ups and movement combinations to increase body strength and flexibility. Exploration of modern dance history, philosophy, and aesthetics. Qualities of dance movement and music/dance relationships explored. Correct alignment and injury prevention stressed.

DNCE A224 Dance for Musical Theatre II 2 CR
Contact Hours: 1 + 2
Prerequisites: DNCE A124 with minimum grade of C or THR A124 with minimum grade of C.
Crosslisted with: THR A224.
Special Fees.
Special Note: May be repeated three times for credit.
- Continuation of Dance for Musical Theatre I, building on the foundation of vocabulary, movement styles, vocalizing, and performance techniques. Techniques in improving audition skills and perfecting performance ability. Encompasses a range of time periods, from the 1920s to the present.

DNCE A234 Fundamentals of Jazz II 2 CR
Contact Hours: 1 + 2
Prerequisites: DNCE A145 with minimum grade of C.
Special Fees.
Special Note: May be repeated three times for credit.
- 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 A253 Beginning Tap II 1 CR
Contact Hours: .5 + 1
Prerequisites: DNCE A151 with minimum grade of C.
Special Fees.
Special Note: May be repeated three times for credit.
- Continuation of Beginning Tap Dance I, building on the foundation of vocabulary, movement styles, vocalizing, and performance techniques. Techniques in improving audition skills and perfecting performance ability. Encompasses a range of time periods, from the 1920s to the present.

DNCE A262 Theory and Improvisation 2 CR
Contact Hours: 1 + 2
Prerequisites: DNCE A205 with minimum grade of C or DNCE A223 with minimum grade of C or DNCE A234 with minimum grade of C or THR A124 with minimum grade of C or THR A224 with minimum grade of C.
Special Fees.
Special Note: May be repeated three times for credit.
- Explores ensemble movement improvisation, providing opportunities for students to practice as soloists and to integrate vocal work with movement. Students practice improvisational skills they may be expected to use in rehearsal, as part of the composition/choreographic process, and/or in performance.

DNCE A290 Selected Topics in Dance 1-3 CR
Contact Hours: 1-3 + 0
Registration Restrictions: Prerequisites will vary according to topic.
Special Fees.
Special Note: May be repeated three times for credit.
- Introduction to current topics in dance performance and theory. Topics will depend on special demands of the dance season or faculty expertise.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>DNCE A301</td>
<td>Intermediate Ballet I</td>
<td>2 CR</td>
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<tr>
<td></td>
<td>Contact Hours: 1 + 2</td>
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<tr>
<td></td>
<td>Prerequisites: DNCE A205 with minimum grade of C.</td>
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<td>Special Fees.</td>
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<td>Special Note: May be repeated three times for credit. Elaboration of ballet technique through barre and center practice with an emphasis on body placement, flexibility, and strength. A serious ballet course requiring regular attendance.</td>
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<tr>
<td>DNCE A302</td>
<td>Intermediate Ballet II</td>
<td>2 CR</td>
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<td>Contact Hours: 1 + 2</td>
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<td>Prerequisites: DNCE A301 with minimum grade of C.</td>
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<td>Special Note: May be repeated three times for credit. Concentration on specific techniques fundamental to expertise in classical ballet. Emphasis on development of balance and endurance, and on building a strong knowledge of steps in combinations. Performance style and correct alignment and injury prevention stressed. Serious ballet course requiring regular attendance.</td>
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<tr>
<td>DNCE A321</td>
<td>Intermediate Modern I</td>
<td>2 CR</td>
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<td>Contact Hours: 1 + 2</td>
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<tr>
<td></td>
<td>Prerequisites: DNCE A223 with minimum grade of C.</td>
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<td>Special Fees.</td>
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<td>Special Note: May be repeated three times for credit. Increases the student's skill level and movement vocabulary in intermediate Modern I technique. Movement theory, phrasing and dynamics emphasized along with modern dance aesthetics. Structured technical exercises increase the student's strength, flexibility, and quality of movement. Correct alignment and injury prevention stressed.</td>
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<tr>
<td>DNCE A322</td>
<td>Intermediate Modern II</td>
<td>2 CR</td>
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<td></td>
<td>Contact Hours: 1 + 2</td>
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<td></td>
<td>Prerequisites: DNCE A321 with minimum grade of C.</td>
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<td>Registration Restrictions: Instructor permission required. Special Note: May be repeated three times for credit.</td>
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<td>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>
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<tr>
<td>DNCE A331</td>
<td>Intermediate Jazz I</td>
<td>2 CR</td>
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<td>Contact Hours: 1 + 2</td>
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<td>Prerequisites: DNCE A234 with minimum grade of C.</td>
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<td>Registration Restrictions: Instructor permission required. Special Note: May be repeated three times for credit.</td>
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<td>Increases skill level and movement vocabulary in intermediate jazz dance technique rooted in the complexity, variety, and spontaneity of jazz music. Concepts of swing, rhythmic manipulation and syncopation, tension, and release are examined with an emphasis on extended phrases, musicality, and structured improvisation. Historical and social influences in jazz expression explored. Correct alignment and injury prevention stressed.</td>
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<tr>
<td>DNCE A332</td>
<td>Intermediate Jazz II</td>
<td>2 CR</td>
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<tr>
<td></td>
<td>Contact Hours: 1 + 2</td>
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<td></td>
<td>Prerequisites: DNCE A331 with minimum grade of C.</td>
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<td>Registration Restrictions: Instructor permission required. Special Note: May be repeated three times for credit.</td>
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<td>Augmentation of skill level and movement vocabulary acquired in Intermediate Jazz I. Complex movement phrases and structured improvisation are explored with an emphasis on the creation of jazz music and dance arrangements, and on performance style. Conceptual understandings of the relationships between dance and music in jazz expression emphasized. Correct alignment and injury prevention stressed.</td>
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<tr>
<td>DNCE A351</td>
<td>Intermediate Tap I</td>
<td>1 CR</td>
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<tr>
<td></td>
<td>Contact Hours: 5 + 1</td>
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<td>Prerequisites: DNCE A254 with minimum grade of C.</td>
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<td>Special Note: May be repeated three times for credit. Increases student's skill level in Intermediate Tap I. Concepts of tap styles and the relationship of these styles with tap history explored. Concepts of improvisation, extended phrases, and musicality examined. Correct alignment and injury prevention stressed.</td>
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<tr>
<td>DNCE A352</td>
<td>Intermediate Tap II</td>
<td>1 CR</td>
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<td>Contact Hours: 5 + 1</td>
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<td>Prerequisites: DNCE A251 with minimum grade of C.</td>
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<td>Special Note: May be repeated three times for credit. Enhancement of skill level practiced in Intermediate Tap I. Exploration of tap styles with an emphasis on movement, time, space, and structural analysis, and on elements of style and performance. Structured improvisation emphasized. Historical and social importance of tap examined. Correct alignment and injury prevention stressed.</td>
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<tr>
<td>DNCE A360</td>
<td>Contemporary Techniques, Composition, and Repertory</td>
<td>1 CR</td>
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<td></td>
<td>Contact Hours: 5 + 1</td>
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<td></td>
<td>Prerequisites: DNCE A205 with minimum grade of C or DNCE A223 with minimum grade of C or DNCE A234 with minimum grade of C. Registration Restrictions: Instructor permission by audition required. Special Note: May be repeated three times for credit. Performance-oriented course taught by UAA Faculty and/or guest dance artists from the professional community. Class work may include a diverse complement of dance techniques. Essential movement qualities, performance skills, and compositional elements of the dance style under study explored. Class will culminate in performance.</td>
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<tr>
<td>DNCE A361</td>
<td>Approaches to Dance Composition</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: DNCE A205 with minimum grade of C or DNCE A223 with minimum grade of C or DNCE A234 with minimum grade of C or DNCE A245 with minimum grade of C. Registration Restrictions: Instructor permission by audition required. Special Fees. Special Note: May be repeated three times for credit.</td>
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<td>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>
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<tr>
<td>DNCE A365</td>
<td>Dance Repertory and Performance</td>
<td>3 CR</td>
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<td></td>
<td>Contact Hours: 1.5 + 3</td>
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<td></td>
<td>Prerequisites: DNCE A205 with minimum grade of C or DNCE A223 with minimum grade of C or DNCE A234 with minimum grade of C. Registration Restrictions: Instructor permission by audition required. Special Fees. Special Note: May be repeated three times for credit.</td>
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<td>Enhancement of dance technique and application of performance skills through performance repertory. Class work focuses on learning and refining works of choreography for performance. Involves an extensive rehearsal and performance schedule outside of the regularly scheduled class times.</td>
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<tr>
<td>DNCE A370</td>
<td>Interdisciplinary Dance Studies: Issues and Methods</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: DNCE A170 with minimum grade of C and [ENGL A211 with minimum grade of C or ENGL A213 with minimum grade of C or ENGL A214 with minimum grade of C]. Special Fees. Explores five approaches to contemporary dance scholarship: kinesthetic, ethnographic, historical, interpretive, and aesthetic. Students learn how scholars have used these approaches, and practice their application on video materials and live dance events. Case studies will vary from semester to semester to reflect opportunities for viewing dance locally, the instructor's area of expertise, and available guest artists.</td>
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<tr>
<td>DNCE A395</td>
<td>Advanced Practicum: Performance</td>
<td>1-3 CR</td>
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<td>Contact Hours: 0 + 3-9</td>
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<td>Registration Restrictions: Junior or senior standing. Audition and faculty permission. Special Note: May be repeated for up to 12 total credits.</td>
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<td>Performance practicum for juniors and seniors. Advanced participation in dance production as a dancer, performance artist, or choreographer.</td>
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<tr>
<td>DNCE A445</td>
<td>Advanced Performance and Choreography Workshop</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td></td>
<td>Prerequisites: DNCE A302 with minimum grade of C or DNCE A322 with minimum grade of C or DNCE A332 with minimum grade of C. Registration Restrictions: Instructor permission by audition required. Special Fees. Special Note: May be repeated three times for credit.</td>
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<td>Designed for the advanced student with a focus on multiple skills to assist in the growth of the movement artist as performer and creator. Advanced exploration of the spatial and qualitative aspects of dance technique with the refinement of complex patterning skills and attention to details of dramatic or emotional content. Techniques of improvisation, abstraction, and choreography applied to movement studies as an ongoing class activity. Explorations into the theoretical foundations of designing and structuring the dance class along with the aesthetics and history of contemporary dance techniques.</td>
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<tr>
<td>DNCE A490</td>
<td>Selected Topics in Dance</td>
<td>1-3 CR</td>
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<td>Contact Hours: 1-3 + 0</td>
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<td>Registration Restrictions: Junior or senior standing. Special Fees. Special Note: May be repeated for credit with change of topic. Special Note: Additional fees may apply depending on topic. Current topics in dance performance and theory resulting from special demands of the dance season or special faculty expertise.</td>
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<tr>
<td>ECON - Early Childhood Development</td>
<td>ECON - Economics</td>
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<tr>
<td>Offered through the College of Education</td>
<td>Offered through the College of Business &amp; Public Policy</td>
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<tr>
<td>Professional Studies Building (PSB), Room 220, 786-4481</td>
<td>Edward and Cathryn Rasmussen Hall (RH), Room 309, 786-4100</td>
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<td><a href="http://ece.uaa.alaska.edu">http://ece.uaa.alaska.edu</a></td>
<td><a href="http://www.cbpp.uaa.alaska.edu/economics.asp">www.cbpp.uaa.alaska.edu/economics.asp</a></td>
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<tr>
<td>Students taking any ACCT, BA, CIS, ECON, LGOP, LOG, or PADM course will be charged a single lab fee of $25 for the semester. Applies to Elmendorf AFB or Fort Richardson classes only when specifically annotated. Does not apply to Eage River.</td>
<td>Students taking any ACCT, BA, CIS, ECON, LGOP, LOG, or PADM course will be charged a single lab fee of $25 for the semester. Applies to Elmendorf AFB or Fort Richardson classes only when specifically annotated. Does not apply to Eagle River.</td>
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<tr>
<td>ECON A201 Principles of Microeconomics 3 CR</td>
<td>ECON A210 Principles of Microeconomics 3 CR</td>
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<td>Contact Hours: 3 + 0</td>
<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: MATH A105 or MATH A107 or MATH A172.</td>
<td>Prerequisites: ECON A201.</td>
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<td>Registration Restrictions: If prerequisite is not satisfied, suitable SAT score, ACT score, or UAA-approved Math Placement Test is required. Course Attributes: UAA GER Social Sciences Requirement. Introduction to economics including analysis and theory of national income, money and banking, public finance and taxation, economic growth, and international finance. Primary consideration on the capitalist system and the United States economy.</td>
<td>Theory of prices and markets, industrial organization, public policy, income distribution, contemporary problems of labor and business, and international trade.</td>
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<td>ECON A210 Environmental Economics and Policy 3 CR</td>
<td>ECON A212 Econometrics 3 CR</td>
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<td>Contact Hours: 3 + 0</td>
<td>Contact Hours: 3 + 2</td>
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<td>Prerequisites: MATH A105. Registration Restrictions: If prerequisite is not satisfied, instructor permission is required. Crosslisted with: ENV I A210.</td>
<td>Prerequisites: ECON A201 and ECON A202 and BA A273. Offered fall semesters. Application of statistical methods in testing economic theories and estimating economic relationships. Emphasizes multiple regression analysis. The student is expected to spend two hours per week utilizing the computer lab.</td>
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<td>ECON A300 The Economy of Alaska 3 CR</td>
<td>ECON A314 Politics and Economics of the Russian Far East 3 CR</td>
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<td>Contact Hours: 3 + 0</td>
<td>Contact Hours: 3 + 0</td>
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<tr>
<td>Registration Restrictions: Junior or senior standing.</td>
<td>Prerequisites: ECON A201 or INTL A335 or PS A112. Registration Restrictions: Junior standing. Crosslisted with: PS A418. Special Note: May not be used for satisfying upper-division economics electives requirements of the Economics major. Examines the political and economic system of the Russian Far East (RFE) during the pre-Soviet, Soviet, and post-Soviet periods; political and economic conditions in different regions of the RFE; and contemporary political and economic issues.</td>
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<td>ECON A321 Intermediate Microeconomics 3 CR</td>
<td>ECON A421 Labor Economics 3 CR</td>
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<td>Contact Hours: 3 + 0</td>
<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: ECON A201 and ECON A202 and [MATH A200 or MATH A272]. Analysis of demand and supply under various market structures; theory of production and cost; factor pricing and theory of distribution; and survey of welfare economics.</td>
<td>Prerequisites: ECON A201 and ECON A202. Labor market analysis; employment and unemployment, wage differences, structure and composition of the labor force; economic aspects of unionism; labor legislation; and social insurance.</td>
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</table>
ECON A425  History of Economic Thought 3 CR  
Contact Hours: 3 + 0  
Prerequisites: ECON A201 and ECON A202.  
Registration Restrictions: 3 credits of upper-division courses in economics or other social sciences.  
Economic thought from the physiocrats to the present; classical and neoclassical theory, exponents and critics; and contemporary development in economic theory.

ECON A429  Business Forecasting 3 CR  
Contact Hours: 3 + 3  
Prerequisites: ECON A201 and ECON A202 and CIS A110 and BA A273.  
Offered fall and spring semesters.  
Methods of business forecasting; theories and analysis of fluctuations in economic activity.  
The student is expected to spend two hours per week utilizing the computer lab.

ECON A435  Economics of Resources 3 CR  
Contact Hours: 3 + 0  
Prerequisites: ECON A201 and ECON A202.  
Economic analysis of resource use and development. Topics include economics of nonrenewable resources, forestry, and fisheries; environmental economics, and public resource management. Examples are presented of Alaska resource development and management experience.

ECON A445  Economics Internship 3 CR  
Contact Hours: 3 + 0  
Prerequisites: ECON A321 and ECON A324.  
Registration Restrictions: Junior standing as an economics major; and permission of faculty and dean.  
Work experience in an approved position with supervision and training in various phases of applied economics or economic research.

ECON A463  International Economics 3 CR  
Contact Hours: 3 + 0  
Prerequisites: ECON A201 and ECON A202.  
Offered fall semesters.  
Pure theory of international trade; comparative cost, terms of trade, and factor movements, international disequilibrium; balance of payments and its impact on national economy, capital movement, economic development through international trade.

ECON A488  Seminar in Economic Research 3 CR  
Contact Hours: 3 + 0  
Prerequisites: ECON A321 and ECON A324 and [ECON A412 or ECON A429].  
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 A460  Introduction to Economics for Managers 3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: Acceptance into the MBA program.  
Special Note: Does not satisfy the minimum 30 credit hour requirement of any Master's degree program at UAA. Students are expected to have a working knowledge of computer spreadsheet programs. Offered fall semesters.  
Introduction to the theory of prices and markets; national income analysis; and money and banking. Primary concentration on the fundamentals useful in the management of business.

ECON A425  Economics and Public Policy 3 CR  
Contact Hours: 3 + 0  
Prerequisites: ECON A201 and ECON A202.  
Offered fall semesters.  
An examination of economics in relation to public policy, both as a determinant of policy and a tool of administration.

ECON A460  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 A651  Selected Topics in Economics for Educators 1-3 CR  
Contact Hours: 1-3 + 0  
Registration Restrictions: Bachelor's degree in Education.  
Special Fees.  
Selected economics topics of special relevance to specific subjects in school curriculum, kindergarten through senior high school.

ECON A180  Beginning 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 mastery of the competencies required in the course.

ED A180  Intermediate Sign Language 1 CR  
Contact Hours: 1 + 0  
Prerequisites: ED A180.  
Offered only at Kenai Peninsula College.  
The goal of this course is to successfully tutor students. Introduction to tutoring lab serves as the practical experience for ED A200A, ED A200B, and ED A200C.

ED A200A  Beginning Tutor Training Seminar 1 CR  
Contact Hours: 1 + 0  
Registration Restrictions: Faculty permission.  
Offered only at Kenai Peninsula College.  
Students new to the tutor program develop skills for successfully helping students with their course work. Tutors learn and practice techniques for handling a variety of situations before tutoring begins. The framework for each semester tutor program is established during the course.

ED A200B  Advanced Tutor Training Seminar 1 CR  
Contact Hours: 1 + 0  
Prerequisites: ED A200A.  
Offered only at Kenai Peninsula College.  
Advanced tutors will hone their skills through seminars, workshops and projects.  
Tutors may qualify for assisting their peers in academic courses, adult basic education, and English-as-a-Second-Language, or in public schools.

ED A200C  Master Tutor Training Seminar 1 CR  
Contact Hours: 1 + 0  
Prerequisites: ED A200A and ED A200B.  
Registration Restrictions: 2 credits of ED A200 and faculty permission. Specific tutoring assignments may have other requirements.  
Offered only at Kenai Peninsula College.  
Master tutors will hone their skills through seminars, workshops, and projects.  
Tutors may qualify for assisting their peers in academic courses, adult basic education, English-as-a-Second-Language, or in the public schools.

ED A216  Children's Literature 3 CR  
Contact Hours: 3 + 0  
Intended for teachers, parents, librarians, or anyone interested in reading many books for preschoolers through 6th grade. Much attention to selection and best use of children's literature.

ED A222  Bilingual Education and Paraeducators 1 CR  
Contact Hours: 1 + 0  
Registration Restrictions: Department approval.  
Focuses on the dynamics and challenges of educating diverse populations.  
Provides working paraeducators the opportunity to develop ideas, define concepts, and to practice skills related to bilingual classrooms.

ED A223  Paraeducators and Developing Readers 2 CR  
Contact Hours: 2 + 0  
Registration Restrictions: Department approval.  
A discussion of current issues and practices in teaching K-12 reading for paraeducators. Special emphasis on the role of the paraeducator in describing and reporting students' reading problems and assisting in individual and group instruction.
COURSE DESCRIPTIONS

EDAE - EDUCATION - ADULT EDUCATION

EDAE A615 Introduction to Adult Education 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
Exploration and broad overview of the field. Topical areas include people, literature, terms, issues, sociocultural context, and adult education as a field of practice. Includes skills fost on academic reading, writing, and student portfolios.

EDAE A637 Design of e-Learning 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
Uses technology to facilitate teaching and learning in a postsecondary environment. Includes theory as well as hands-on production of artifacts with technology.

EDAE A640 e-Learning Course Development 3 CR
Contact Hours: 3 + 0
Prerequisites: EDAE A638 and EDAE A676.
Registration Restrictions: Graduate standing.
Examination of the curriculum development process and exploration of instructional design elements.

EDAE A650 Principles of Human Resource Development 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 A655 The Adult Learner 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
Examines major principles, problems and information about adults and adult learning. Includes psychological, physical, intellectual and other factors affecting adults and their ability to learn; motivation, participation of adult learners, principles and theories of adult learning; and traditional, non-traditional, and self-directed learning.

EDAE A656 Understanding and Facilitating Adult Learning 1 CR
Contact Hours: 1 + 0
Registration Restrictions: Graduate standing.
Examines developmental concepts, theories, and approaches to facilitating learning in adulthood. Explores the creation of teacher professional development environments that incorporate best practices for adult learning.

EDAE A665 History and Philosophy of Adult Education 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
Examines the historical foundations of adult education and explores the various philosophical approaches to adult education currently practiced in the United States. Compares and contrasts the theoretical and practical relationships of these philosophies.

EDAE A670 Current Topics in Adult Education 1-3 CR
Contact Hours: 1-3 + 0
Registration Restrictions: Bachelor's degree from an accredited university.
Specific current issues, techniques, and trends affecting or of interest to adult educators.

EDAE A675 Design of Programs for Adults 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
Examination of fundamental concepts of educational program planning for adults in informal, community, health care, higher education, and human resource settings.

EDAE A676 Curriculum and Instructional Design 3 CR
Contact Hours: 3 + 0
Prerequisites: EDAE A675.
Registration Restrictions: Graduate standing.
Examination of the curriculum development process and exploration of instructional design elements.

EDAE A679 Methods and Materials in Adult Education 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
Incorporates current information in the field of adult education and the wide variety of methods and techniques in use today, and of both print and mediated materials. Develops skills in creating materials appropriate for adults in differing settings, and participating in delivery of instruction using various methods to create stimulating and effective learning environments.

EDAE A685 Introduction to Qualitative Research 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
Methods and data collection techniques for learning about people, literature, and trends in the field with core literature of adult education. Provides the learner with the knowledge to effectively evaluate learning instruments through a variety of approaches. Evaluation of software and hardware instructional products is emphasized.

EDAE A686 Practical in Adult Education 1-3 CR
Contact Hours: 0 + 3-9
Prerequisites: EDAE A615 and EDAE A655 and EDAE A665 and EDAE A675.
Registration Restrictions: Instructor approval.
Grade Mode: Pass/No Pass.
Supervised field experience designed to facilitate exploration of the field and transfer of skills to an adult education practice setting.

EDAE A698 Inquiry Project 1-3 CR
Contact Hours: 0 + 3-9
Prerequisites: (EDAE A685 or concurrent enrollment) or (EDFN A627 or concurrent enrollment).
Registration Restrictions: Departmental approval.
Grade Mode: Pass/No Pass.
An inquiry project in an educational, community, or administrative setting related to the student's program concentration. The project, the culminating academic experience leading to the graduate degree, is original, creative work integrating theory and evidence-based practice.
EDCN A610 Foundations in Counseling 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
Overview of the professional, ethical, legal, theoretical, and practical aspects of professional counseling. Examines the roles and responsibilities of a variety of counseling professions; professional organizations and associations; and professional preparation standards and credentialing. Historical and social contexts along with emerging professional directions are included.

EDCN A611 Roles and Responsibilities of the Elementary Counselor 3 CR
Contact Hours: 3 + 0
Prerequisites: EDCN A610.
Registration Restrictions: Admission to the Counselor Education Program. Professional roles and program components of a comprehensive developmental counseling program at an elementary school. Knowledge and skill development to implement the Alaska School Counseling Program, based on national standards, will be the focus.

EDCN A614 Counseling Diverse Populations 3 CR
Contact Hours: 3 + 0
Prerequisites: EDCN A616 and EDCN A623.
Registration Restrictions: Admission into the Counselor Education Program. Explores emerging issues in counseling and builds on knowledge and skills of the novice or practicing counselor. Relevant areas of concern include counseling diverse populations, understanding family systems, improving counseling techniques, and advancing professional knowledge.

EDCN A615 Roles and Responsibilities of a Secondary School Counselor 3 CR
Contact Hours: 3 + 0
Prerequisites: EDCN A610.
Registration Restrictions: Admission to the Counselor Education Program. Professional roles and program components of a comprehensive developmental counseling program at a secondary school. Knowledge and skill development to implement the Alaska School Counseling Program, which is based on national standards will be the focus.

EDCN A616 Counseling Theories 3 CR
Contact Hours: 3 + 0
Prerequisites: COUN A610.
Registration Restrictions: Admission to the Counselor Education Program. Survey of the major theoretical systems of counseling including psychodynamic, cognitive, behavioral, family system, phenomenological, existential, and non-western approaches to healing and mental health. Integration of theories and techniques to form one's own theoretical foundation as well as multicultural and ethical issues in counseling are stressed. Course requires extensive reading and an ability to synthesize and logically discuss abstract concepts.

EDCN A623 Counseling Skills 3 CR
Contact Hours: 3 + 0
Prerequisites: EDCN A610 and EDCN A616.
Registration Restrictions: Admission into the Counselor Education Program. Emphasizes development and mastery of attending, exploring, and problem solving counseling skills with focus on the helping relationship. Students participate in video taped interviews to practice and refine counseling skills and techniques.
EDEC - EDUCATION - EARLY CHILDHOOD

Offered through the College of Education
Professional Studies Building (PSB), Room 224, 786-4412
http://coe.uaa.alaska.edu/programs/teaching/childhood

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
Registration Restrictions: Student must be employed or be a volunteer in a child development setting such as child care center, preschool, family day care home, or Head Start, etc.
Survey of historical, social, and philosophical foundations of the field. Discusses ethics, developmentally appropriate practices, survey of types of early childhood settings, and personal skills and professional competencies for the early childhood practitioner.

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 A111 Safe Learning Environments 1 CR
Contact Hours: 1 + 0
Registration Restrictions: Student must be employed or be a volunteer in a child development setting such as child care center, preschool, family day care home, or Head Start, etc.
Stresses importance of safe learning environments and competencies which enable students to provide such environments for young children. Emphasis on measures necessary to reduce and prevent accidents.

EDEC A112 Healthy Learning Environments 1 CR
Contact Hours: 1 + 0
Registration Restrictions: Student must be employed or be a volunteer in a child development setting such as child care center, preschool, family day care home, or Head Start, etc.
Prepares students to provide learning environments for young children which are free of factors contributing to or causing illness.

EDEC A113 Learning Environments 1 CR
Contact Hours: 1 + 0
Registration Restrictions: Student must be employed or be a volunteer in a child development setting such as child care center, preschool, family day care home, or Head Start, etc.
Emphasizes arrangement of environments conducive to learning styles of children. Includes selection of learning styles of children. Includes selection of materials and equipment, room arrangements, and scheduling.

EDEC A121 Physical Activities for Young Children 1 CR
Contact Hours: 1 + 0
Special Note: Student must be employed or be a volunteer in a child development setting such as child care center, preschool, family day care home, or Head Start, etc.
Stresses essentials of planning centers which provide space, materials, equipment, and activities to promote physical development of children. Includes planning and scheduling activities, selecting equipment and materials.

EDEC A122 Cognitive Activities for Young Children 1 CR
Contact Hours: 1 + 0
Registration Restrictions: Student must be employed or be a volunteer in a child development setting such as child care center, preschool, family day care home, or Head Start, etc.
Activities and experiences which encourage questioning, probing, and problem solving skills appropriate for different developmental levels and various learning styles of young children.

EDEC A123 Communication 1 CR
Contact Hours: 1 + 0
Registration Restrictions: Student must be employed or be a volunteer in a child development setting such as child care center, preschool, family day care home, or Head Start, etc.
Activities that help children acquire and use language to communicate their thoughts and feelings. Includes nonverbal communication and understanding others.

EDEC A124 Creative Activities for Young Children 1 CR
Contact Hours: 1 + 0
Registration Restrictions: Student must be employed or be a volunteer in a child development setting such as child care center, preschool, family day care home, or Head Start, etc.
Experiences, activities, and media that stimulate children to explore and express their creative abilities.

EDEC A131 Guidance and Discipline 1 CR
Contact Hours: 1 + 0
Registration Restrictions: Student must be employed or be a volunteer in a child development setting such as child care center, preschool, family day care home, or Head Start, etc.
Information and activities used in providing environments where young children learn and practice appropriate behaviors individually and in groups. Includes influences on behavior promoting self-control, inappropriate practices, and parent involvement.

EDEC A132 Social Development 1 CR
Contact Hours: 1 + 0
Registration Restrictions: Student must be employed or be a volunteer in a child development setting such as child care center, preschool, family day care home, or Head Start, etc.
Emphasis on social development of young children by the encouragement of empathy and mutual respect among children and adults. Also discussed is the development of cooperation among children and between children and adults.

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 A211 Development of a Sense of Self 1 CR
Contact Hours: 1 + 0
Registration Restrictions: Student must be employed or be a volunteer in a child development setting such as child care center, preschool, family day care home, or Head Start, etc.
Practices information and activities helping young children know, accept, and take pride in themselves, and to develop independence. Includes fostering children's self-knowledge and sense of pride, experiences of success, acceptance by others, and realization of their own effectiveness.

EDEC A221 Families 1 CR
Contact Hours: 1 + 0
Registration Restrictions: Student must be employed or be a volunteer in a child development setting such as child care center, preschool, family day care home, or Head Start, etc.
Emphasis on the importance of positive and productive relationships between families and child development programs. Also discussed is coordination of childrearing efforts of both family and program.

EDEC A222 Program Management 1 CR
Contact Hours: 1 + 0
Registration Restrictions: Student must be employed or be a volunteer in a child development setting such as child care center, preschool, family day care home, or Head Start, etc.
Information and activities teaching students to use available resources to ensure effective operation of children's programs. Emphasis on competent organization, planning, and record keeping.

EDEC A223 Exploring and Developing Personal Capabilities in Teaching 1 CR
Contact Hours: 1 + 0
Registration Restrictions: Student must be employed or be a volunteer in a child development setting such as child care center, preschool, family day care home, or Head Start, etc.
Stresses awareness of personal qualities, feelings, and values that affect teaching atmosphere, relationships with children, and individual teaching style.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Contact Hours</th>
<th>Registration Restrictions</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDEC A224</td>
<td>Professionalism</td>
<td>1 CR</td>
<td>1 + 0</td>
<td>Student must be employed or a volunteer in a child development setting such as child care center, preschool, family day care home, or Head Start, etc. Promotes professional and personal growth among caregivers of young children. Topics include developing philosophical basis for caregiving, goal ethics, networking, and continuing self-actualization.</td>
</tr>
<tr>
<td>EDEC A231</td>
<td>Screening</td>
<td>1 CR</td>
<td>1 + 0</td>
<td>Student must be employed or a volunteer in a child development setting such as child care center, preschool, family day care home, or Head Start, etc. Stresses activities to help teachers understand purposes of screening young children and use of screening procedures.</td>
</tr>
<tr>
<td>EDEC A232</td>
<td>Assessment/Recording</td>
<td>1 CR</td>
<td>1 + 0</td>
<td>Student must be employed or a volunteer in a child development setting such as child care center, preschool, family day care home, or Head Start, etc. Stresses activities to help teachers understand purposes of screening young children and use of screening procedures.</td>
</tr>
<tr>
<td>EDEC A233</td>
<td>Mainstreaming Preschool Children with Special Needs</td>
<td>1 CR</td>
<td>1 + 0</td>
<td>Student must be employed or a volunteer in a child development setting such as child care center, preschool, family day care home, or Head Start, etc. Stresses activities to help teachers understand purposes of mainstreaming special needs preschool children into regular classrooms. Emphasis on rights of special needs children to services and necessary procedures for providing those services under PL 94142.</td>
</tr>
<tr>
<td>EDEC A234</td>
<td>Administration of Early Childhood Programs</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Students should have 3 credits of child development, or concurrent enrollment in child development course work and instructor approval. Survey course designed for practicing and aspiring administrators of infant/toddler, preschool, or school-age child care programs. Course content includes: organizational leadership and management, financial and legal issues, program development, and community relations.</td>
</tr>
<tr>
<td>EDEC A241</td>
<td>Infant and Toddler Development</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>EDEC A105. Registration Restrictions: Departmental Approval; Admission to the College of Education, pre-major status or admission to Associate of Applied Science in Early Childhood Development. Examines the development of infants/toddlers, infant/toddler care programs, role of caregivers, and relationships with families. This course will emphasize cognitive, language, emotional, and motor development, and the importance of relationships in the care and education of infants and toddlers.</td>
</tr>
<tr>
<td>EDEC A242</td>
<td>Family and Community Partnerships</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>EDEC A210 and EDEC A241. Registration Restrictions: Departmental approval; Admission to the College of Education, pre-major status or admission to Associate of Applied Science in Early Childhood Development. Examines the importance and complexity of children's families and communities. The course will examine programs that support family-centered principles underlying program planning, implementation, and relationship building.</td>
</tr>
<tr>
<td>EDEC A289</td>
<td>CDA Assessment</td>
<td>1 CR</td>
<td>1 + 0</td>
<td>Student must be employed or a volunteer in a child development setting such as child care center, preschool, family day care home, or Head Start, etc. Stresses application and preparation procedures for final child development associate (CDA) credential assessment. Emphasizes steps taken to become CDA certified.</td>
</tr>
<tr>
<td>EDEC A292</td>
<td>Early Childhood Practicum Seminar</td>
<td>1 CR</td>
<td>1 + 0</td>
<td>Department approval Corequisite: EDEC A295. This seminar accompanies EDEC A295. Provides opportunity for exchange of ideas and experiences, evaluation and reflection concerning developmentally appropriate practice.</td>
</tr>
<tr>
<td>EDEC A295B</td>
<td>Practicum II</td>
<td>3 CR</td>
<td>1 + 2</td>
<td>EDEC A295A. Registration Restrictions: Faculty permission required. Must have faculty permission to take concurrently with EDEC A295A. 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.</td>
</tr>
<tr>
<td>EDEC A301</td>
<td>Observation and Documentation</td>
<td>4 CR</td>
<td>4 + 0</td>
<td>EDEC A301. Registration Restrictions: Departmental approval required: admission to the 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.</td>
</tr>
<tr>
<td>EDEC A303</td>
<td>Young Children in Inclusive Settings</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>EDEC A301. Registration Restrictions: Departmental approval required: admission to the 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.</td>
</tr>
<tr>
<td>EDEC A304</td>
<td>Environment, Spaces, and Relationships</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>EDEC A210 and EDEC A241. Registration Restrictions: Departmental approval required: admission to the College of Education, pre-major status or admission to Associate of Applied Sciences in Early Childhood Development. Examines the design of the environment. This course will cover the principles that transform space into engaging places for young children. The design, organization, use of materials, and relationships to curriculum will be covered.</td>
</tr>
<tr>
<td>EDEC A306</td>
<td>Assessment of Young Children</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>EDEC A301. Registration Restrictions: Departmental approval required: admission to the College of Education, pre-major status or admission to Associate of Applied Sciences in Early Childhood Development. Examines the design of the environment. This course will cover the principles that transform space into engaging places for young children. The design, organization, use of materials, and relationships to curriculum will be covered.</td>
</tr>
<tr>
<td>EDEC A308</td>
<td>Literature for Young Children</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>EDEC A301. Registration Restrictions: Departmental approval required: admission to the College of Education, pre-major status or admission to Associate of Applied Sciences in Early Childhood Development. Examines the design of the environment. This course will cover the principles that transform space into engaging places for young children. The design, organization, use of materials, and relationships to curriculum will be covered.</td>
</tr>
<tr>
<td>EDEC A401</td>
<td>Infant/Toddler Approaches and Programs</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>EDEC A210 and EDEC A241. Registration Restrictions: Departmental approval required: admission to the College of Education, pre-major status or admission to Associate of Applied Sciences in Early Childhood Development. Examines the design of the environment. This course will cover the principles that transform space into engaging places for young children. The design, organization, use of materials, and relationships to curriculum will be covered.</td>
</tr>
</tbody>
</table>
EDEC A402  Preschool Approaches and Programs  3 CR
Contact Hours: 3 + 0
Prerequisites: EDEC A305 and EDEC A306.
Registration Restrictions: Departmental approval required; admission to College of Education, admission to internship.
Corequisite: EDEC A495B.
Examines approaches and programs for preschool age children. This course will emphasize the design of curriculum and environment, and will include approaches for working with families and community agencies.

EDEC A403  Mathematics and Science in Early Childhood  3 CR
Contact Hours: 3 + 0
Prerequisites: EDEC A306.
Registration Restrictions: Department approval required; Concurrent enrollment in internship required.
Special Fees.
Examines the principles, developmental concepts, and curriculum designed to promote science and mathematics concepts. Analyzes how young children develop mathematical and scientific thinking. Methods of teaching mathematics and science to young children are covered.

EDEC A404  Literacy for Young Children  3 CR
Contact Hours: 3 + 0
Prerequisites: EDEC A306.
Registration Restrictions: Department approval required; Concurrent enrollment in internship required.
Examines the understanding and importance of language and literacy. The course will cover oral and written discourse as they relate to the development of methods, materials, and philosophy of reading curricula.

EDEC A402A  Senior Seminar in Early Childhood  1 CR
Contact Hours: 1 + 0
Registration Restrictions: Senior standing; department approval.
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 A405  Internship, Infant/Toddler  4 CR
Contact Hours: 0 + 12
Prerequisites: EDEC A305 and EDEC A306.
Registration Restrictions: Departmental approval required; admission to internship.
Corequisite: EDEC A401, EDEC A403 and EDEC A404.
Grade Mode: Pass/No Pass.
Special Note: Placement will be arranged and supervised by the Early Childhood Development/Child Care Program, in partnership with staff from the child care programs. The College of Education may withdraw any student whose work is evaluated by either partner as unsatisfactory.
Supervised internship in an infant/toddler setting. Interns work with mentor teachers and demonstrate development of their teaching proficiency. Weekly internship seminar is required.

EDEC A405B  Internship, Preschool  4 CR
Contact Hours: 0 + 12
Prerequisites: EDEC A495A.
Registration Restrictions: Departmental approval required; admission to internship.
Corequisite: EDEC A402, EDEC A405 and EDEC A406.
Grade Mode: Pass/No Pass.
Special Note: Placement will be arranged and supervised by the Early Childhood Development/Child Care Program, in partnership with staff from the child care programs. The College of Education may withdraw any student whose work is evaluated by either partner as unsatisfactory.
Supervised internship in a preschool classroom. Interns work with mentor teachers and demonstrate development of their teaching proficiency. Weekly internship seminar is required.

EDEC A495C  Internship I, Primary  3 CR
Contact Hours: 0 + 9
Prerequisites: EDEC A306.
Registration Restrictions: Department approval required; Admission to internship required.
Grade Mode: Pass/No Pass.
Special Fees.
Supervised internship in a primary (grades Pre-K-3) classroom. Interns work with mentor teachers and demonstrate development of their teaching proficiency. Weekly internship seminar is required.

EDEC A495D  Internship II, Primary  6 CR
Contact Hours: 0 + 18
Prerequisites: EDEC A495C.
Registration Restrictions: Department approval required. Admission to internship required.
Grade Mode: Pass/No Pass.
Special Fees.
Supervised internship in a primary (grades Pre-K-3) classroom. Interns will continue to work with their mentor teachers and demonstrate continued development of their teaching proficiency. Weekly internship seminar is required.

EDEC A601  Approaches in Early Childhood: Preschool  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Admission to the Master Teacher Program Specialty Option in Early Childhood.
Advanced class designed to examine the underlying principles and theory that guide current practices in the field of early childhood care and education. Emphasis will be placed on programs for toddlers and preschool age children. Students reflect on their own practices analyzing ways their teaching is guided by current principles. Emphasis placed on the contributions of the social constructivist view and the application to environments with young children with varying abilities.

EDEC A605  Early Childhood Education Principles and Practices  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Admission to the Master Teacher Program Specialty Option in Early Childhood.
Survey of current principles, practices, and research in early childhood education. Will cover an analysis of early childhood education theory and beliefs as it relates to teaching and curriculum decisions. Students will study their understanding of “Developmentally Appropriate Practices” in the classroom setting. Course assignments require students to analyze their teaching values, principles, and theory as embedded in their daily practices. Issues related to home, school, and community as it relates to the child are covered.

EDEC A652  How Young Children Learn: The Development and Learning Processes of Young Children  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Admission to the Master Teacher Program Specialty Option in Early Childhood.
Designed to cover the development and learning process that influence educational planning for young children (birth-eight years). Intended to extend the knowledge of the educator to integrate development information for the educational setting. Covers an overview of theories that inform practices to include Western and Non-Western childrearing perspectives. Analysis of child development research and trends that impact the ways educational programs are designed for young children in the educational (public school) and child care community.

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.
Course Descriptions

EDEL A426  Teaching Mathematics in Elementary Schools  3 CR
Contact Hours: 3 + 0
Prerequisites: EDFN A300 and EDFN A301 and EDEN A303 and EDSE A482 and MATH A205.
Registration Restrictions: Departmental approval required; Admission to Internship.
Special Fees.
Methodology and materials used in the elementary mathematics classroom. Focus is on the mathematics topics typically taught in elementary schools and research-based methods for teaching. Concurrent enrollment in internship required.

EDEL A427  Teaching Social Studies in Elementary Schools  2 CR
Contact Hours: 2 + 0
Prerequisites: EDEN A300 and EDFN A301 and EDEN A303 and EDSE A482.
Registration Restrictions: Departmental approval required; Admission to Internship.
Special Fees.
Methodology and materials used in the modern elementary school social studies classroom. Students will be exposed to current research regarding K-6 student learning and conceptual development in history and social studies, and corresponding pedagogy, such as inquiry and issues-based learning. Includes issues in content selection and curriculum development and standards-based curriculum design. Concurrent enrollment in internship required.

EDEL A428  Teaching Science in Elementary Schools  2 CR
Contact Hours: 2 + 0
Prerequisites: EDFN A300 and EDFN A301 and EDEN A303 and EDSE A482.
Registration Restrictions: Departmental approval required; Admission to Internship.
Special Fees.
The role of science in the educational environment. Focuses on building K-12 curriculum materials and strategies in the use of microcomputers and related educational technologies as they relate to national and state standards. Concurrent enrollment in internship required.

EDEL A429  Teaching Health Education in Elementary Schools  2 CR
Contact Hours: 2 + 0
Prerequisites: EDFN A300 and EDFN A301 and EDSE A482.
Registration Restrictions: Departmental approval required; Admission to Internship.
Special Fees.
Methodology and materials used in the elementary health classroom. Students will be exposed to the current research, issues, curriculum, and standards. Concurrent enrollment in internship required.

EDEL A430  Teaching Language Arts in Elementary Schools  3 CR
Contact Hours: 3 + 0
Prerequisites: EDFN A300 and EDFN A301 and EDEN A303 and EDSE A482.
Registration Restrictions: Departmental approval required; Admission to Internship.
Special Fees.
Students focus on theory and process of language arts: reading, writing, speaking, listening, viewing, and visually representing. Reflects a constructivist approach to teaching and learning and research-based practice. Concurrent enrollment in internship required.

EDEL A431  Creative Expression: Music, Art, and Drama for Elementary Teachers  3 CR
Contact Hours: 1 + 4
Prerequisites: EDFN A300 and EDFN A201 and EDEN A303 and EDSE A482.
Registration Restrictions: Departmental approval required; Admission to Internship.
Special Fees.
Principles, methods, and materials of teaching music, art, and drama at the elementary school level. A wide variety of creative activities that are basic to elementary curricula are explored. Includes the use of music, art, and drama in standards-based curriculum planning and assessment for the diverse student population in elementary classrooms. Concurrent enrollment in internship required.

EDEL A432  Physical Education for Elementary Classroom Teachers  1 CR
Contact Hours: 1 + 0
Prerequisites: EDFN A300 and EDFN A303 and EDSE A482.
Registration Restrictions: Departmental approval required; Admission to Internship.
Special Fees.
Examines the methodology and materials for implementing physical education in the elementary classroom. Focuses on movement education, integration, and developmentally appropriate activities. Concurrent enrollment in internship required.

EDEL A495A  Internship I  3 CR
Contact Hours: 0 + 9
Prerequisites: EDFN A300 and EDFN A301 and EDEN A303 and EDSE A482.
Registration Restrictions: Departmental approval required; Admission to Internship.
Grade Mode: Pass/No Pass.
Special Fees.
Supervised internship in an educational facility. Interns work with mentor teachers and demonstrate development of their teaching proficiency. Weekly internship seminar required.

EDEL A495B  Internship II  6 CR
Contact Hours: 0 + 18
Prerequisites: EDEL A495A.
Registration Restrictions: Departmental approval required; Admission to Internship.
Grade Mode: Pass/No Pass.
Special Fees.
Supervised internship in an educational facility. Internship II will continue the experiences begun in Internship I, students continuing to work with their mentor teachers and demonstrating continued development of their teaching proficiency. All students will teach an extended unit during this course and will be expected to assume complete responsibility for the classroom for an extended period. Weekly internship seminar is required.

EDET - EDUCATION - EDUCATIONAL TECHNOLOGY

Offered through the College of Education
Professional Studies Building (PSB), Room 224, 786-4412
http://coe.uaa.alaska.edu/tldept

EDET A626  Technology in Teaching and Learning  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing in the College of Education, and prior experience using a PC.
Special Fees.
The role of technology in restructuring learning environments. Explains how teaching and learning environments can be enhanced through different approaches to using technology. A broad range of technologies used in education will be explored, centering around microcomputers and optical hardware. Activities include hands-on experiences with applications software and hypermedia.

EDET A629  Multimedia Tools for Learning  3 CR
Contact Hours: 3 + 0
Prerequisites: EDET A626.
Registration Restrictions: Graduate standing in the College of Education.
Special Fees.
The role of multimedia learning technologies in supporting constructivist learning environments. Demonstrates how the effective use of multimedia learning technologies can improve student-centered learning and teachers' abilities to support active learning through the use of interactive multimedia. Participants will be trained to use a variety of multimedia technologies to develop and deliver multimedia presentations suitable to various subject areas and/or age/grade levels.

EDET A652  Educational Telecommunications and the Internet  3 CR
Contact Hours: 2 + 1
Prerequisites: EDET A626.
Special Fees.
The role of telecommunications in the educational environment. Covers the basic use of telecommunications and the Internet for educators and covers both skill-building and current research and theory on using on-line communication in the learning process.

EDET A655  Implementing the Standards: Integrating Educational Technology into the Curriculum  3 CR
Contact Hours: 3 + 0
Prerequisites: EDET A629 and EDET A652.
Registration Restrictions: Graduate standing.
Special Fees.
Focuses on building K-12 curriculum materials and strategies in the use of microcomputers and related educational technologies as they relate to national and state standards.
EDFN A101 Introduction to Education 3 CR
Contact Hours: 3 + 0
Special Fees.
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 A300 Philosophical and Social Context of American Education 3 CR
Contact Hours: 3 + 0
Prerequisites: (EDSE A212 or concurrent enrollment) or (PSY A245 or concurrent enrollment).
Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses and junior standing. Departmental approval.
Course Attributes: UAA GER Integrative Capstone.
Special Fees.
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: PSY A245.
Registration Restrictions: Departmental approval required; Admission to the College of Education.
Special Fees.
Explores how children learn language, similarities, and difference between first and second language acquisition, how culture influences language and literacy development, and how language is taught. Course tracks language acquisition from birth through the school years. Course includes field experience.

EDFN A302 Foundations of Educational Technology 2 CR
Contact Hours: 2 + 0
Prerequisites: PSY A245.
Registration Restrictions: Departmental approval required; Admission to the College of Education.
Grad Mode: Pass/No Pass.
Special Fees.
Provides prospective teachers with the general skills needed to integrate technology into their teaching and learning. Presents an overview of the issues, pedagogies, and skills needed to guide the effective use and assessment of technology in elementary school classrooms. Technologies used in schools as educational tools will be introduced.

EDFN A303 Foundations of Teaching and Learning 3 CR
Contact Hours: 3 + 0
Prerequisites: (EDFN A301 or concurrent enrollment) and [EDSE A212 or PSY A245].
Registration Restrictions: Departmental approval required; Admission to the College of Education.
Special Fees.
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 a developmentally appropriate teaching practice for inclusive classrooms. Course includes field experience.

EDFN A444 Positive Learning Communities in K-6 Classrooms 1 CR
Contact Hours: 1 + 0
Registration Restrictions: Departmental approval required.
Special Note: Concurrent enrollment in internship required.
Research-based strategies and practices in creating positive learning communities in K-6 classrooms. Provides realistic connections from theory to practice for implementing and evaluating strategies in classroom management.

EDFN A470 Electronic Portfolio Development 1-3 CR
Contact Hours: 1-3 + 0-9
Registration Restrictions: Intermediate computer skills required. This is not a course for beginning computer users. A “readiness survey” will be available to help students assess whether they have the minimum computer skills. Grade Mode: Pass/No Pass.
Special Fees.
Developing and using an electronic portfolio. For first credit, students create an electronic portfolio, selecting from a variety of strategies for development, organization, storage, and presentation. For second credit, students learn to add digital audio and video clips to the portfolio. For third credit, students will read the literature and become conversant with issues and research on electronic portfolio development for a variety of ages and situations, including useful criteria for evaluation portfolios based on national or local standards.

EDFN A478 Issues in Alaska Native Education, K-12 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Departmental approval required.
Special Fees.
Special Note: This course meets the Alaska Department of Education and Early Development Alaska Studies requirement for State certification.
Explores the role and responsibility of Alaska Native teachers in preparing children and youth and connects these to current research, theories, and practices in 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 and immigrant residents.

EDFN A487 Field Experiences: Teacher Education 1-11 CR
Contact Hours: 0 + 2-22
Registration Restrictions: Departmental approval required.
Grad 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.
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.
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 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.
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
Registration Restrictions: Graduate standing.
Significant and emerging theories of teaching and learning. Reviews current educational reform efforts and examines the research base of each initiative to assess potential effectiveness.

EDFN A647 Developing Literacies Across the K-12 Continuum 1 CR
Contact Hours: 1 + 0
Prerequisites: EDFN A478 and EDFN A602.
Registration Restrictions: Departmental approval required.
Analysis and evaluation of current learning theory, models, and best practices for developing literacies, including visual, literary, and performing arts, in order to design appropriate pedagogy across the K-12 continuum.

EDFN A649 Capstone Seminar: Inquiry in Teaching and Learning 2 CR
Contact Hours: 2 + 0
Prerequisites: CTE A695B or EDFN A695B.
Registration Restrictions: Departmental approval required.
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 A660 Fundamentals of Research in Education 2 CR
Contact Hours: 2 + 0
Registration Restrictions: Graduate standing.
Provides exposure to fundamental language and concepts of research. Helps students begin to read research articles and reports to enhance understanding of their fields and ability to practice. Lays foundation for additional research courses.

EDFN A661 Data-Informed Instruction 2 CR
Contact Hours: 2 + 0
Registration Restrictions: Graduate standing or permission of the instructor.
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.

EDFN A662 Action Research in Education 2 CR
Contact Hours: 2 + 0
Registration Restrictions: Graduate standing or permission of the instructor.
Empowers teachers, administrators, and other educators to participate in a socially responsive research process that seeks a solution to a problem. Emphasizes collaboration.

EDFN A663 Research Design 2 CR
Contact Hours: 2 + 0
Registration Restrictions: Graduate standing.
Thorough introduction to research design, with an emphasis on developing viable research proposals for the masters’ thesis.

EDFN A670 Current Topics in Education 1-3 CR
Contact Hours: 1-3 + 0
Registration Restrictions: Faculty permission.
Special Note: May be repeated for credit with a change of subtitle. Restricted enrollment may apply; see advisor for applicability to degree program.
Study of specific current issues, techniques and trends affecting educators.

EDFN A691 Current Topics in Second Language Education 1-3 CR
Contact Hours: 1-3 + 0
Registration Restrictions: Graduate standing; basic fluency in a second language desirable.
Crosslisted with: LANG A691.
Focuses on second-language education, based on current research and first-hand experience from successful, established programs. Intended for administrators; early-childhood, elementary, secondary modern language or ESL teachers; and others planning to implement a second-language education program or currently participating in an established program.

EDFN A695A Internship I 3 CR
Contact Hours: 0 + 9
Prerequisites: (EDFN A478 or concurrent enrollment) and (EDFN A602 or concurrent enrollment).
Registration Restrictions: Departmental approval required.
Grade Mode: Pass/No Pass.
Crosslisted with: CTE A695A.
Special Fees.
Special Note: This course follows the K-12 school year calendar, not the university academic year calendar.
Supervised internship in K-12 school. Requires participation in a bi-weekly seminar with an emphasis on theory-based inquiry into teaching and learning. Placement will be arranged and supervised by the university in partnership with staff from the school site.

EDFN A695B Internship II 6 CR
Contact Hours: 0 + 18
Prerequisites: CTE A695A or EDFN A695A.
Registration Restrictions: Departmental approval required.
Grade Mode: Pass/No Pass.
Crosslisted with: CTE A695B.
Special Fees.
Special Note: This course follows the K-12 school year calendar, not the university academic year calendar.
Continuation of supervised internship in K-12 school. Requires participation in a bi-weekly seminar with an emphasis on theory-based inquiry into teaching and learning. Placement was arranged and will continue to be supervised by the university in partnership with staff from the school site. Includes extensive teaching residency.

EDFN A695C K-12 Internship: Secondary 6 CR
Contact Hours: 0 + 18
Prerequisites: (EDFN A478 or concurrent enrollment) and (EDFN A602 or concurrent enrollment).
Registration Restrictions: Departmental approval required.
Grade Mode: Pass/No Pass.
Special Fees.
Special Note: This course follows the K-12 school year calendar, not the university academic year calendar.
Supervised internship in middle and/or high school for candidates seeking K-12 endorsements. Requires participation in a bi-weekly seminar with an emphasis on theory-based inquiry into teaching and learning. Placement will be arranged and supervised by the university in partnership with staff from the school site. Includes extensive teaching residency.

EDFN A695D K-12 Internship: Elementary 6 CR
Contact Hours: 0 + 18
Prerequisites: (EDFN A478 or concurrent enrollment) and (EDFN A602 or concurrent enrollment).
Registration Restrictions: Departmental approval required.
Grade Mode: Pass/No Pass.
Special Fees.
Special Note: This course follows the K-12 school year calendar, not the university academic year calendar.
Supervised internship in elementary school for candidates seeking K-12 endorsements. Requires participation in a bi-weekly seminar with an emphasis on theory-based inquiry into teaching and learning. Placement will be arranged and supervised by the university in partnership with staff from the school site. Includes extensive teaching residency.
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: (ED A627 or concurrent enrollment).  
Registration Restrictions: Faculty permission.  
Grade Mode: Pass/No Pass.  
As directed by graduate committee.

EDFN A699 Thesis  1-6 CR  
Contact Hours:  1-6 + 0  
Prerequisites: (ED A627 or concurrent enrollment).  
Registration Restrictions: Faculty permission.  
Grade Mode: Pass/No Pass.  
As directed by graduate committee.

EDL - EDUCATIONAL DEVELOPMENT & LEADERSHIP

Offered through the College of Education  
Professional Studies Building (PSB), Room 218, 786-4450  
http://coe.uaa.alaska.edu/programs/leadership

EDL A637 Educational Leadership and Organizational Behavior  3 CR  
Contact Hours:  3 + 0  
Special Fees.  
Leadership and decision-making through collegial relations and consensus building in school settings. Includes skills for facilitating site-focused teams and activities, with emphasis on improving student performance and enhancing a school's reputation. Contemporary theories of organizational development and change are presented.

EDL A638 Instructional and Curricular Leadership  3 CR  
Contact Hours:  3 + 0  
Special Fees.  
Knowledge, skills, and resources for instructional leaders to develop and implement activities that improve learning. Emphasizes contemporary practices in curriculum and assessment that assist school personnel in strengthening classroom instruction and enhance student academic performance.

EDL A639 The Politics of Education  3 CR  
Contact Hours:  3 + 0  
Special Fees.  
Historical, social, and cultural influences that have shaped political decisions affecting the national, state, and local educational program. Attention to federal, state, and local requirements as they pertain to decisions of a principal. Analysis of political groups, formal, and informal for impact on school organization and curriculum. Current trends for historical significance and impact on schools of the future.

EDL A640 Law and Ethics in Education  3 CR  
Contact Hours:  3 + 0  
Special Fees.  
Knowledge and skills for developing professionally-sound legal and ethical practices in school settings. Legal issues that impact the organization and delivery of public education, including professional practice commissions standards and constitutional, statutory, administrative, and case law.

EDL A641 Principal Internship  3-6 CR  
Contact Hours:  0 + 9-18  
Prerequisites: EDL 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.  
Fieldwork in an appropriate educational or agency setting. Assignment will be respective to the Standards for Alaska's Administrators.

EDL A642 Principal's Seminar I  3 CR  
Contact Hours:  3 + 0  
Prerequisites: EDL A637 and EDL A640.  
Registration Restrictions: Admission to Principal's Certification Program.  
Corequisite: EDL A641.  
Special Fees.  
Seminar presentations and discussions focus on urban/rural school-community relations and school facilities. Contributing school administrators augment academic instruction and offer a practical touchstone for students' research and writing.

EDL A643 Principal's Seminar II  3 CR  
Contact Hours:  3 + 0  
Prerequisites: EDL A637 and EDL A640.  
Registration Restrictions: Admission to Principal's Certification Program.  
Corequisite: EDL A641.  
Special Fees.  
School seminar presentations and discussions focus on school finance, personnel, and labor relations. Contributing school administrators augment academic instruction and offer a practical touchstone for students' research and writing.

EDL A652 Introduction to Teacher Leadership  3 CR  
Contact Hours:  3 + 0  
Registration Restrictions: Graduate standing.  
Exploration and broad overview of teacher leadership. Emphasizes collaborative processes, reflection, and school-based research as paths to improving professional practice.

EDL A652A Introduction to Teacher Leadership I  1 CR  
Contact Hours:  1 + 0  
Registration Restrictions: Graduate standing.  
Exploration and broad overview of teacher leadership. Emphasizes collaborative processes, reflection, and school-based research as paths to improving professional practice.

EDL A652B Introduction to Teacher Leadership II  2 CR  
Contact Hours:  2 + 0  
Prerequisites: EDL A652A.  
Registration Restrictions: Graduate standing.  
Extension of the exploration and broad overview of teacher leadership. Emphasizes collaborative processes, reflection, and school-based research as paths to improving professional practice, as a continuation of Introduction to Teacher Leadership I.

EDL A653 Leadership for Equity  3 CR  
Contact Hours:  3 + 0  
Registration Restrictions: Graduate standing.  
Focuses on implementing and practicing leadership. Emphasizes equity and excellence in schools. Candidates learn to challenge in themselves and in schools the intellectual structures, definitions and assumptions about people that lead to inequities.

EDL A654 Building Mentoring Relationships  3 CR  
Contact Hours:  3 + 0  
Registration Restrictions: Graduate standing.  
Focuses on the theories inherent in successful mentoring relationships and induction programs. Emphasizes the analysis and application of research and best practices in development of skills, understanding, and integration of theory in formal mentoring programs.

EDL A655 Professional Development and Teacher Learning  2 CR  
Contact Hours:  2 + 0  
Registration Restrictions: Graduate standing.  
Examines the ways in which organizational policies, leadership, and professional practices affect the quality of teaching and learning. The focus is on critical analysis of the complex nature of teacher learning and professional growth with application of this knowledge to designing organizational programs.

EDL A659 Teacher Leadership Capstone Project  3 CR  
Contact Hours:  3 + 0  
Prerequisites: EDAE A656 and EDL A637 and EDL A638 and EDL A659 and EDL A652 and EDL A653 and EDL A654 and EDL A655.  
Registration Restrictions: Admission to the Teacher Leadership Program.  
Special Note: May be repeated to six hours.  
Culminating demonstration of skills and applied theories for the improvement of professional practice through the initiation of a student-determined research project. Provides for structured demonstration and documentation of collaborative processes in all phases of the research project.
<table>
<thead>
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<tbody>
<tr>
<td>EDL A671</td>
<td>Superintendent Stewardship and Systematic Change</td>
<td>3 CR</td>
<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>
</tr>
<tr>
<td>EDL A672</td>
<td>Student Performance: Academic and Developmental</td>
<td>3 CR</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>
</tr>
<tr>
<td>EDL A673</td>
<td>Human Resource Management and Labor Relations</td>
<td>3 CR</td>
<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>
</tr>
<tr>
<td>EDL A674</td>
<td>Public School Finance and Facilities</td>
<td>3 CR</td>
<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>
</tr>
<tr>
<td>EDL A675</td>
<td>Superintendent Internship</td>
<td>3-6 CR</td>
<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>
</tr>
<tr>
<td>EDL A676</td>
<td>Superintendent Seminar I</td>
<td>3 CR</td>
<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>
</tr>
<tr>
<td>EDL A677</td>
<td>Superintendent Seminar II</td>
<td>3 CR</td>
<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>
</tr>
<tr>
<td>EDME A684</td>
<td>Algebra and Functions: Content and Pedagogy for K-8 Teachers</td>
<td>3 CR</td>
<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>
</tr>
<tr>
<td>EDME A685</td>
<td>Data Analysis and Probability: Content and Pedagogy for K-8 Teachers</td>
<td>3 CR</td>
<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>
</tr>
<tr>
<td>EDME A686</td>
<td>Calculus and Trigonometry: Concepts for K-8 Teachers</td>
<td>3 CR</td>
<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>
</tr>
<tr>
<td>EDME A687</td>
<td>Capstone: Advanced Topics in Mathematics for the K-8 Teacher</td>
<td>3 CR</td>
<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>
</tr>
</tbody>
</table>

**EDM - EDUCATION - MATHEMATICS**

Offered through the College of Education
Professional Studies Building (PSB), Room 224, 786-4412
http://coe.uaa.alaska.edu

<table>
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<tbody>
<tr>
<td>EDME A608</td>
<td>Mathematical Problem Solving: Overview for K-8 Teachers</td>
<td>3 CR</td>
<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>
</tr>
</tbody>
</table>

Contact Hours: 3 + 0
Registration Restrictions: Current Teaching Certificate.

Experiences underlying concepts of problem solving, identifies problem-solving strategies that can be introduced into K-8 classrooms. Instruction models appropriate teaching practices for K-8 classrooms. Licensed teachers enrolled in this course will have practice developing instruction and assessment plans that are research and standards based and that support a curriculum organized around a problem-solving approach.

Contact Hours: 3 + 0
Registration Restrictions: Current Teaching Certificate.

Provides the content for K-8 teachers to understand numbers, the ways of representing numbers, relationships among numbers, number systems, meanings of operations and how they relate to one another. Current instructional and assessment practices in mathematics that are research and standards based and which lead to number sense, reasonable estimation strategies, and efficient computational skills for K-8 students will be emphasized.

Contact Hours: 3 + 0
Registration Restrictions: Current Teaching Certificate.

Provides the content for K-8 teachers to understand numbers, the ways of representing numbers, relationships among numbers, number systems, meanings of operations and how they relate to one another. Current instructional and assessment practices in mathematics that are research and standards based and which lead to number sense, reasonable estimation strategies, and efficient computational skills for K-8 students will be emphasized.

Contact Hours: 3 + 0
Registration Restrictions: Current Teaching Certificate.

Provides the content for K-8 teachers to understand numbers, the ways of representing numbers, relationships among numbers, number systems, meanings of operations and how they relate to one another. Current instructional and assessment practices in mathematics that are research and standards based and which lead to number sense, reasonable estimation strategies, and efficient computational skills for K-8 students will be emphasized.
## EDPE - EDUCATION - PHYSICAL EDUCATION

*Offered through the College of Education*

**Professional Studies Building (PSB), Room 209, 786-4401**

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

**EDPE A200 Varsity Athletics** 1 CR

- **Contact Hours:** 0 + 3
- **Registration Restrictions:** NCAA
- **Grade Mode:** Pass/No Pass.
- **Special Note:** May be repeated three times. One credit per academic year per sport. Student-athletes will be required to successfully participate in team meetings, conditioning, practice, competition, and other required athletically related activities.

## EDRD - EDUCATION - READING

*Offered through the College of Education*

**Professional Studies Building (PSB), Room 224, 786-4412**

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

**EDRD A603 Developing Literacy: Early Childhood through Grade Twelve** 3 CR

- **Contact Hours:** 3 + 0
- **Prerequisites:** EDFN A621 and EDRD A603 and EDRD A610.
- **Registration Restrictions:** Current Teaching Certificate.

  - Study of the development of literacy from early childhood to grade twelve. Course work emphasis on continuum of reading, writing development, underlying social and cognitive processes, and the pedagogical implications based on literacy theory.

**EDRD A604 Content Area Literacy** 3 CR

- **Contact Hours:** 3 + 0
- **Prerequisites:** EDFN A621 and EDRD A603 and EDRD A610.
- **Registration Restrictions:** Current Teaching Certificate.

  - The development of knowledge of reading strategies that support literacy in the content area/disciplines for Kindergarten through grade twelve teachers. Focus will be on the interrelated processes of writing, reading, listening, and speaking in the literacy development of students across curricular areas. Emphasis will be given to the use of technology as a tool to enhance content area literacy. The role of teacher as researcher will also be explored.

**EDRD A606 Instruction and Assessment in Reading I** 3 CR

- **Contact Hours:** 2 + 3
- **Prerequisites:** EDFN A621 and EDRD A603 and EDRD A610.
- **Registration Restrictions:** Current Teaching Certificate.

  - The teaching and assessment of reading utilizing effective research-based practices for a broad range of students in Kindergarten through grade twelve. Students will develop competencies in assessment and instruction that are consistent with multiple models of reading. Strategies for instruction, school-wide literacy programs, multiple assessments and ways to communicate results of assessments are features of this course. The alignment of instruction with national standards, as well as Alaska Standards for English/Language Arts/Reading, is addressed.

**EDRD A609 Instruction and Assessment in Reading II** 3 CR

- **Contact Hours:** 2 + 3
- **Prerequisites:** EDRD A606.
- **Registration Restrictions:** Current Teaching Certificate.

  - The teaching and assessment of reading in grades Kindergarten through twelve, with a specific focus on the reading behaviors of individual students, and effective practices associated with developing those students’ skills. The emphasis of this course is on understanding reading difficulties, the analysis and use of information from reading assessments, the development of individual instructional plans, and communication of meaningful data to multiple audiences. Students will utilize multiple models of reading and focus on those factors that contribute to variations in reading ability.

**EDRD A610 Reading and Cognition** 3 CR

- **Contact Hours:** 3 + 0
- **Registration Restrictions:** Current Teaching Certificate.

  - 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.

**EDRD A618 Literature and Reading: Supporting Readers in Grades K-12** 3 CR

- **Contact Hours:** 3 + 0
- **Registration Restrictions:** Current Teaching Certificate.

  - Focus on reading, analyzing, and designing ways to use a wide variety of literature to support readers in Kindergarten through grade twelve. Critical and personal response to literature, knowledge of a wide range of appropriate reading material, classroom applications, and interdisciplinary study using children's literature will be a major feature of this course.

## EDSA - EDUCATION - SCHOOL-AGE CARE

*Offered through the College of Education*

**Professional Studies Building (PSB), Room 225, 786-6317**

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

**EDSA A101 Program Management for School-Age Care** 2 CR

- **Contact Hours:** 2 + 0
- **Prerequisites:** EDSA A102 and EDSN A212 and EDSN A212 and PSY A245.
- **Corequisite:** EDSA A212.

  - Provides an introduction to the operation of out-of-school programs for children ages 5-12.

**EDSA A102 School-Age Care Program Planning** 2 CR

- **Contact Hours:** 2 + 0
- **Prerequisites:** EDSA A101 and EDSA A102 and EDSN A212 and PSY A245.
- **Corequisite:** EDSA A212.

  - Provides introduction to theory, approaches and practice in developing programs for diverse groups of children in school-age care.

**EDSA A202 School-Age Care Program Planning** 2 CR

- **Contact Hours:** 2 + 0
- **Prerequisites:** EDSA A101 and EDSA A102 and EDSN A212 and PSY A245.
- **Corequisite:** EDSA A212.

  - Provides introduction to theory, approaches and practice in developing programs for diverse groups of children in school-age care.

**EDSA A212 Program Development for School-Age Care** 2 CR

- **Contact Hours:** 2 + 0
- **Prerequisites:** EDSA A202.

  - Provides more advanced approaches, methods and evaluation strategies for school-age care programs.

**EDSA A234 Administration and Supervision for School-Age Care** 3 CR

- **Contact Hours:** 3 + 0
- **Prerequisites:** EDSN A212 and PSY A245.
- **Corequisite:** EDSA A212 and PSY A245.

  - Focus on reading, analyzing, and designing ways to use a wide variety of literature to support readers in Kindergarten through grade twelve. Critical and personal response to literature, knowledge of a wide range of appropriate reading material, classroom applications, and interdisciplinary study using children's literature will be a major feature of this course.

**EDSA A234 Administration and Supervision for School-Age Care** 3 CR

- **Contact Hours:** 3 + 0
- **Prerequisites:** EDSN A212 and PSY A245.
- **Corequisite:** EDSA A212 and PSY A245.

  - Focus on reading, analyzing, and designing ways to use a wide variety of literature to support readers in Kindergarten through grade twelve. Critical and personal response to literature, knowledge of a wide range of appropriate reading material, classroom applications, and interdisciplinary study using children's literature will be a major feature of this course.

**EDSA A295A Practicum for School-Age Care** 2 CR

- **Contact Hours:** 0 + 10
- **Prerequisites:** EDSA A101 and EDSA A102 and EDSN A212 and PSY A245.
- **Corequisite:** EDSA A212.

  - Provides an introduction to the operation of out-of-school programs for children ages 5-12.

  - Supervised field experience in school-age care. Students develop, implement and evaluate elements of a comprehensive, developmentally appropriate care, recreation and learning environment.

**EDSA A295B Advanced Practicum for School-Age Care** 1 CR

- **Contact Hours:** 0 + 5
- **Prerequisites:** EDSA A212 and EDEC A242 and PSY A245.
- **Corequisite:** EDSA A242.

  - Provides an introduction to the operation of out-of-school programs for children ages 5-12.

  - Supervised field experience in school-age care. Students develop, implement and evaluate elements of a comprehensive, developmentally appropriate care, recreation and learning environment.
EDSE - EDUCATION - SPECIAL EDUCATION

Course Descriptions

EDSE A212 Human Development and Learning 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Department approval.
Corequisite: EDSE A212.
Emphasizes cognitive, physical, emotional, social, and communicative development of children and youth. Patterns and sequences of development are explored in terms of learning that is occurring in the home, school, or neighborhood. Students will become familiar with the major categories of disability. The information provided will be reviewed in relation to formal and informal school learning, including the need for accommodations, teaching, and curricular requirements and modifications.

EDSE A215 Introduction to Inclusive Early Education: Strategies 3 CR
Contact Hours: 3 + 0
Special Fees.
Introduction to early childhood settings which include children with special needs. Overview of inclusive strategies in the classroom, home, and community. Includes introduction to the Individualized Family Service Plan, Individual Education Plan, and interdisciplinary team roles.

EDSE A216 Family and Community Issues: Supporting a Child with Special Needs 3 CR
Contact Hours: 3 + 0
Special Fees.
Introduction to family and community dynamics in caring for and supporting children, birth to age eight, with special needs. Includes study of preventive strategies, rural settings and cultural issues.

EDSE A217 Behavioral Health: Young Children with Special Needs 3 CR
Contact Hours: 3 + 0
Special Fees.
Examination of behavioral health of children with special needs from birth to age eight. Topics include introduction to identification; classification of diagnosis; impact of special needs on behavior; child abuse and neglect; inclusion of children with challenging behaviors; team approach in behavioral health.

EDSE A218 Understanding Legal and Ethical Issues: Young Children with Special Needs 3 CR
Contact Hours: 3 + 0
Special Fees.
In-depth look at the legal issues involved in working with young children with special needs. Examination of laws ADA and IDEA; IFSP and IEP processes; crisis intervention; mandated reporting of child abuse and neglect; cultural issues; legal guardianship. Confidentiality and service delivery in rural and remote areas stressed.

EDSE A219 Early Childhood Special Needs: Applied Communication Strategies 3 CR
Contact Hours: 3 + 0
Special Fees.
Overview of basic components of early childhood communication disorders: speech sound development, grammar, vocabulary, nonverbal communication, and language disorders. Applied techniques with hands-on material preparation and practice with paraprofessional screening tools. Intervention techniques appropriate in early childhood settings that include children with special needs.

EDSE A336 Classroom Management and Collaboration 3 CR
Contact Hours: 3 + 0
Prerequisites: ED A201 and (ED A321 or concurrent enrollment) and (ED A320 or concurrent enrollment).
Registration Restrictions: Admission to Teacher Education.
Special Fees.
Theories of classroom management as they pertain to early childhood, elementary, middle school/teenage, and high school age groupings will be discussed, with special emphasis on strategies appropriate for a diverse classroom population. Techniques for creating a positive and preventive learning environment will be stressed. Students will learn how to be successfully involved in professional collaboration with school staff, support staff and outside agencies.

EDSE A410 Assessing Students with Disabilities 3 CR
Contact Hours: 3 + 0
Prerequisites: ED A301 and EDSE A482 and (ED A425 or concurrent enrollment) and (ED A426 or concurrent enrollment).
Registration Restrictions: Departmental approval required; Admission to the College of Education; Admission to the Special Education Program. Special Fees.
Techniques and methods for assessing students having disabilities. Focuses on the purpose and assumption of assessment; testing terminology and statistics; and the administration and interpretation of formal and informal assessment procedures. Course includes field experience.

EDSE A412 Curriculum and Strategies I: Low Incidence 3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A245.
Registration Restrictions: Departmental approval required; Admission to the College of Education; Admission to the Special Education Program. Corequisite: EDSE A482. Special Fees.
Development, implementation, and evaluation of IEPs for students with Intensive Needs (e.g., Autism, Multiple Disabilities, Physical Disabilities). Provides in-depth understanding of best practice strategies for supporting students with low incidence disabilities. Course includes field experience.

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 A422 Curriculum and Strategies II: High Incidence 3 CR
Contact Hours: 3 + 0
Prerequisites: ED A301 and EDSE A482 and (ED A425 or concurrent enrollment) and (ED A426 or concurrent enrollment).
Registration Restrictions: Departmental approval required; Admission to the Special Education program. Corequisite: EDSE A482. Special Fees.
Methods of instruction and strategies for addressing the needs of students with mild learning and behavior problems. A theoretical basis for selecting approaches is presented along with practical strategies that can be used in the classroom. Course includes field experience.

EDSE A460 Exceptional Learner 3 CR
Contact Hours: 3 + 0
Prerequisites: EDSE A312.
Registration Restrictions: Admission to College of Education. Special Fees.
Introduction to the field of special education. Covers the nature and characteristics of various physical and mental exceptions included in the special education population.

EDSE A474 Special Children from Birth through Five 3 CR
Contact Hours: 3 + 0
Special Fees.
Special Note: Students are expected to participate in experiences outside regular class periods (15 hours). Legislative, historical, and philosophical perspectives of early childhood special education. Includes principles and procedures for developing infant learning and preschool programs for children with special needs.

EDSE A480 Culture, Schools, and Society 3 CR
Contact Hours: 3 + 0
Prerequisites: ED A321.
Interdisciplinary study of cultural issues in contemporary schools and society. Considers the psychological and social factors in the educational process. Specific attention given to curricular improvement and teaching strategies appropriate for diverse populations.
EDSE A482  Inclusive Classrooms for All Children  3 CR
Contact Hours: 3 + 0
Special Fees.
Provides an in-depth understanding of concepts, strategies, and issues that surround supporting the needs of students who experience disabilities in the general education classroom. Course includes field experience.

EDSE A483  Language and Literacy: Assessment and Interventions  3 CR
Contact Hours: 3 + 0
Prerequisites: ED A301.
Registration Restrictions: Departmental approval required; Admission to the College of Education; Admission to the Special Education Program.
Special Fees.
Development, implementation, and evaluation of IEPs for students with language and literacy difficulties. Instructional procedures for designing and delivering reading instruction and writing in content areas that will include findings from brain research, emergent literacy, assessment, primary and intermediate decoding and comprehension strategies, and monitoring progress. Course includes field experience.

EDSE A484  Collaboration and Partnerships between Parents and Professionals  3 CR
Contact Hours: 3 + 0
Prerequisites: EDSE A424.
Registration Restrictions: Departmental approval required; Admission to the College of Education; Admission to the Special Education Program.
Special Fees.
Provides professionals with an in-depth understanding of concepts, strategies, and issues that surround working with families and other collaborative partners of students who experience disabilities. The course presents concepts and strategies necessary to prepare students for effective collaborative partnerships including family-professional interactions. Course includes field experience.

EDSE A495A  Beginning Internship in Special Education  3 CR
Contact Hours: 0 + 9
Prerequisites: EDSE A482.
Registration Restrictions: Departmental approval required; Admission to Internship.
Grade Mode: Pass/No Pass.
Special Fees.
Field experience in public schools and affiliated facilities with individuals who have disabilities. Assignments vary across areas of teaching specialization. Includes weekly seminar.

EDSE A495B  Advanced Internship in Special Education  3 CR
Contact Hours: 1 + 6
Prerequisites: EDSE A495A.
Registration Restrictions: Departmental approval required.
Grade Mode: Pass/No Pass.
Special Fees.
Advanced internship placement during which interns demonstrate increasing professional knowledge of and competence in teaching students with disabilities. Includes a weekly seminar.

EDSE A610  Clinical Assessment: Eligibility and Program Planning  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
Special Fees.
Provides a practical, applied approach for analyzing and synthesizing assessment for eligibility, program planning, and progress monitoring. Course includes techniques for formal and informal tools and procedures with a review of terminology and statistics. Emphasizes concepts related to assessment including response to intervention, culturally and linguistically diverse learners, academically diverse learners, and accommodations.

EDSE A610Y  Assessment: Early Childhood Special Education  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
Special Fees.
Techniques for assessing young children with special needs and their families. Historical development, basic purposes and assumptions of assessment, testing terminology and statistics, and the administration and interpretation of formal and informal procedures.

EDSE A614S  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 A620Y  Advanced Internship: Early Childhood Special Education  3-6 CR
Contact Hours: 1 + 6-15
Registration Restrictions: Admission to M.Ed. option in Early Childhood Special Education, instructor approval, and graduate standing.
Grade Mode: Pass/No Pass.
Special Fees.
Supervised field experience with exceptional children in Anchorage area facilities. Assignments vary across areas of specialization.

EDSE A622  Theories and Strategies  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
Special Fees.
Provides in-depth understanding of best practices in instruction of students in special education. Links learning theories and learner characteristics to instructional strategies. Emphasizes inclusive educational settings and collaboration skills needed to work effectively with other professionals.

EDSE A622Y  Strategies: Early Childhood Special Education  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
Special Fees.
Provides in-depth understanding of best-practice strategies in the field of early intervention. Presents concepts necessary to prepare students to work with infants, toddlers, and preschoolers with disabilities and their families.

EDSE A623  Language and Literacy: Best Practices in Assessment and Intervention  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
Special Fees.
Current research on literacy acquisition, assessment, and intervention. Emphasizes use of evidence-based practices in assessment and intervention. Identifies the link between language and literacy development and intervention. Considers academic, cultural, and linguistic diversity.

EDSE A624  Social/Emotional Development, Assessment, and Intervention  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
Special Fees.
Current research in both normal and abnormal social/emotional development. Emphasizes the use of research-based practices in assessment and intervention. Explores academic and cultural diversity in the social/emotional growth of students with learning differences.

EDSE A625  Teaching Mathematics to Special Learners  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
Special Fees.
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.

EDSE A632  Special Education Law: Principles and Practices  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
Special Fees.
Examines three federal laws that form the foundation of disability law: Individuals with Disabilities Education Act (IDEA) 2004; Section 504 of the Rehabilitation Act of 1973; and the Americans with Disabilities Act. Focuses on substantive principles that underlie procedural requirements. Includes due process issues and case law analysis. Includes creation of a legally defensible Individual Educational Program (IEP).

EDSE A633  Assessment and Interventions

EDSE A634  Best Practices in Assessment and Intervention

EDSE A635  Social/Emotional Development, Assessment, and Intervention

EDSE A636  Teaching Mathematics to Special Learners

EDSE A637  Special Education Law: Principles and Practices
EDSE A633 Autism: Communication and Social Disorders 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
Special Fees.
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.

EDSE A634 Support and Supervision of Paraeducators 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
Special Fees.
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.

EDSE A637 Inclusive Teaching and Learning 2 CR
Contact Hours: 2 + 0
Prerequisites: EDFN A478 and EDFN A602.
Registration Restrictions: Departmental approval required.
Special Note: Concurrent enrollment in internship required.
Focuses on the inclusion of students with special learning needs and disabilities in
the regular classroom. Attention will be paid to the philosophy of inclusion, compliance
requirements promoting inclusiveness, developmental, and instructional needs of
students with special education needs, and the role of the secondary teacher in providing
appropriate classroom instruction for all the students in the inclusive classroom.

EDSE A670 Topics in Special Education 1-3 CR
Contact Hours: 1-3 + 0
Registration Restrictions: Graduate standing.
Special Fees.
Special Note: May be repeated with a change in subtitle. A maximum of 6 credits may be
deployed to a degree program.
Explores issues of concern to professionals in special education and related fields.

EDSE A674 Families: Developing Parent Professional Partnerships 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Faculty permission and graduate standing.
Special Fees.
Concepts and practices related to providing family centered services to families who
have a member who experiences a disability. Professionals will be provided with an
in-depth understanding of concepts and strategies required to develop effective
parent/professional partnerships.

EDSE A681 Issues in Early Childhood Special Education 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
Special Fees.
Special Note: Students are expected to participate in experiences outside of the regular
class period (15 hours).
A critical study of theoretical and practical issues related to personal, curricular,
cultural, political, coordination, and service delivery needs of young children who
experience disabilities and their families.

EDSE A685 Young Children with Complex Needs 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
Special Fees.
Professionals working with families and their young children, who experience severe
medical- complex needs, will acquire basic knowledge and awareness of medical,
educational, and health issues.

EDSE A689 Special Populations of Gifted Students 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
Special Fees.
Topics will build upon the fundamental concepts addressed in EDSE 684 by focusing on
the underserved gifted population including gifted minority students, females,
students with disabilities, underachievers, and those in rural communities. The highly
gifted and those who possess unusual creativity and talents will also be discussed.

EDSY A690 Advanced Seminar: Special Education 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
Special Fees.
Special Note: Intended for the post special education certification/master’s student with
field experience. The content of the course varies and it may be repeated for credit.
Current issues of concern to professionals in special education and related fields.
Issues include ethics, philosophy, multidisciplinary emphasis, assessment and
intervention approaches, and new directions in the field of special education.

EDSE A695E Advanced Internship in Special Education 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 3-6 CR
Contact Hours: 0 + 9-18
Registration Restrictions: Graduate standing. Departmental approval.
Grade Mode: Pass/No Pass.
Special Fees.
Special Note: Must apply by specified deadline—see advisor.
Supervised internship in secondary school settings with children with disabilities.

EDSE A698 Individual Research 1-6 CR
Contact Hours: 0 + 3-18
Prerequisites: ED A627.
Registration Restrictions: Graduate standing.
Grade Mode: Pass/No Pass.
As directed by graduate committee.

EDSE A699 Thesis 1-6 CR
Contact Hours: 0 + 3-18
Prerequisites: ED A627.
Grade Mode: Pass/No Pass.
Special Fees.
As directed by graduate committee.

EDSY - EDUCATION - SECONDARY

EDSY A630 Language, Culture, and Teaching in Secondary Schools 2 CR
Contact Hours: 2 + 0
Prerequisites: EDSE A478 and EDFN A602.
Registration Restrictions: Departmental approval required.
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 Developing a Community of Learners in Middle/High School 3 CR
Contact Hours: 3 + 0
Prerequisites: EDSE A478 and EDFN A602.
Registration Restrictions: Departmental approval required.
Special Note: Concurrent enrollment in internship required.
Examines schools as complex social systems in order to empower practitioners to
develop strategies to meet the needs of all secondary students. The course will focus on
the teachers’ role and responsibilities in secondary students’ learning, development, and
academic achievement, with attention given to the development of classroom learning,
communities that meet the diverse needs of 7-12 students and teachers as members of
their own learning communities.
Special Note: Concurrent enrollment in internship required. Registration Restrictions: Departmental approval required.

EDSY A665A Middle/High School Mathematics I 3 CR Contact Hours: 3 + 0
Prerequisites: EDSY A664A.
Registration Restrictions: Departmental approval required.

EDSY A665B Middle/High School Mathematics II 2 CR Contact Hours: 2 + 0
Prerequisites: EDSY A665A.
Registration Restrictions: Departmental approval required.

EDSY A666A Middle/High School 2 CR Contact Hours: 2 + 0
Prerequisites: EDFN A478 and EDFN A602.
Registration Restrictions: Departmental approval required.

EDSY A666B Middle/High School 2 CR Contact Hours: 2 + 0
Prerequisites: (EDFN A478 or concurrent enrollment) and (EDFN A602 or concurrent enrollment).
Registration Restrictions: Departmental approval required.

EDSY A667A Middle/High School 3 CR Contact Hours: 3 + 0
Prerequisites: EDFN A478 and EDFN A602.
Registration Restrictions: Departmental approval required.

EDSY A667B Middle/High School 2 CR Contact Hours: 2 + 0
Prerequisites: EDFN A478 or LANG A667A.
Registration Restrictions: Departmental approval required.

EDSY A667C Middle/High School Methods for Teaching English as a Second Language 2 CR Contact Hours: 2 + 0
Prerequisites: EDSY A667A or LANG A667A.
Registration Restrictions: Departmental approval required.

EDSY A668 Developing Literacies in the Secondary Content Areas 1 CR Contact Hours: 1 + 0
Prerequisites: EDFN A478 and EDFN A602.
Registration Restrictions: Departmental approval required.

EDSY A668A Middle/High School Social Studies Methods I 3 CR Contact Hours: 3 + 0
Prerequisites: EDSY A663A.
Registration Restrictions: Departmental approval required.

EDSY A668B Middle/High School Social Studies Methods II 2 CR Contact Hours: 2 + 0
Prerequisites: EDSY A664A.
Registration Restrictions: Departmental approval required.

EDSY A669A Middle/High School Science Methods I 3 CR Contact Hours: 3 + 0
Prerequisites: (EDFN A478 or concurrent enrollment) and (EDFN A602 or concurrent enrollment).
Registration Restrictions: Departmental approval required.

EDSY A669B Middle/High School Science Methods II 2 CR Contact Hours: 2 + 0
Prerequisites: EDSY A669A.
Registration Restrictions: Departmental approval required.

EDSY A664A Middle/High School Social Studies Methods I 3 CR Contact Hours: 3 + 0
Prerequisites: EDFN A478 and EDFN A602.
Registration Restrictions: Departmental approval required.

EDSY A664B Middle/High School Social Studies Methods II 2 CR Contact Hours: 2 + 0
Prerequisites: EDSY A665A.
Registration Restrictions: Departmental approval required.

EDSY A665A Middle/High School Mathematics I 3 CR Contact Hours: 3 + 0
Prerequisites: EDFN A478 or concurrent enrollment) and (EDFN A602 or concurrent enrollment).
Registration Restrictions: Departmental approval required.

EDSY A666A Middle/High School Social Studies 3 CR Contact Hours: 3 + 0
Prerequisites: EDFN A478 and EDFN A602.
Registration Restrictions: Departmental approval required.

Contact 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 A665A Middle/High School English/Language Arts Methods I 3 CR Contact Hours: 3 + 0
Prerequisites: EDFN A478 and EDFN A602.
Registration Restrictions: Departmental approval required.

EDSY A665B Middle/High School Mathematics Methods II 2 CR Contact Hours: 2 + 0
Prerequisites: EDSY A665A.
Registration Restrictions: Departmental approval required.

Special Note: Concurrent enrollment in internship required.

Builds upon foundation of Middle/High School Mathematics Methods I. Provides candidates with the fundamentals of reflecting on and evaluating standards-based middle/secondary school mathematics teaching for the diverse student populations. Includes topics such as implementing standards-based instruction, assessing individual student learning, ensuring standards in equity and group assessments, and becoming a professional mathematics teacher.

EDSY A666A Middle/High School Social Studies 3 CR Contact Hours: 3 + 0
Prerequisites: EDFN A478 and EDFN A602.
Registration Restrictions: Departmental approval required.

Contact Note: Concurrent enrollment in internship required.

Standards-based curriculum planning and assessment for the diverse student population in second-language classrooms in the middle/high school. Includes an overview of language acquisition theories and instructional strategies typically used in the World Languages and English-as-a-Second Language (ESL) curriculum. Integrates technology, literacy, and education for special populations.

EDSY A667A Middle/High School Second-Language Teaching I 3 CR Contact Hours: 3 + 0
Prerequisites: EDSY A667A or LANG A667A.
Registration Restrictions: Departmental approval required.

Crosslisted with: LANG A667A.

Special Note: Concurrent enrollment in internship required.

Development of professional teaching practices for middle/high school world language classrooms. Specific emphasis on development of thematic units. Continued technology integration.

EDSY A667B Middle/High School Second-Language Teaching II 2 CR Contact Hours: 2 + 0
Prerequisites: EDSY A667A or LANG A667A.
Registration Restrictions: Departmental approval required.

Crosslisted with: LANG A667C.

Special Note: Concurrent enrollment in internship required.

Continued development of pedagogical content knowledge by connecting theoretical knowledge and understanding of human development and learning with both general principles of instruction and content-specific strategies.

EDSY A667C Middle/High School Methods for Teaching English as a Second Language 2 CR Contact Hours: 2 + 0
Prerequisites: EDSY A667A or LANG A667A.
Registration Restrictions: Departmental approval required.

Crosslisted with: LANG A667C.

Special Note: Concurrent enrollment in internship required.

Continued development of professional teaching practices for middle/high school social studies classrooms. Candidates will examine current research and scholarship regarding middle and high school students' learning and the conceptual development in history and social studies and corresponding pedagogy. Includes examination of social studies foundations, as well as content and materials evaluation and selection, standards-based curriculum design, and classroom-based performance assessment strategies.

EDSY A668 Developing Literacies in the Secondary Content Areas 1 CR Contact Hours: 1 + 0
Prerequisites: EDFN A478 and EDFN A602.
Registration Restrictions: Departmental approval required.

Contact 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 A669 Developing Literacies in the Secondary Content Areas 1 CR Contact Hours: 1 + 0
Prerequisites: EDFN A478 and EDFN A602.
Registration Restrictions: Departmental approval required.

Contact 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 A665A Middle/High School Mathematics I 3 CR Contact Hours: 3 + 0
Prerequisites: EDFN A478 and EDFN A602.
Registration Restrictions: Departmental approval required.

Contact 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 A665A Middle/High School Mathematics I 3 CR Contact Hours: 3 + 0
Prerequisites: EDFN A478 and EDFN A602.
Registration Restrictions: Departmental approval required.

Contact 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 A665A Middle/High School Mathematics I 3 CR Contact Hours: 3 + 0
Prerequisites: EDFN A478 and EDFN A602.
Registration Restrictions: Departmental approval required.

Contact 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.
EE - ELECTRICAL ENGINEERING

Offered through the School of Engineering Engineering Building (ENGR), Room 201, 786-1900 www.engr.uaa.alaska.edu

EE A102 Introduction to Electrical Engineering 3 CR
Contact Hours: 2 + 3
Prerequisites: (MATH A200 or concurrent enrollment).
Special Fees.
Offered fall semesters.
Introduces components, circuits, and methods of analysis of DC electrical systems and devices.

EE A203 Fundamentals of Electrical Engineering I 4 CR
Contact Hours: 3 + 3
Prerequisites: EE A102 and MATH A200 and (MATH A201 or concurrent enrollment).
Special Fees.
Offered fall semesters.
Introduces components, circuits, and methods of analysis of DC and AC electrical systems and devices using impedance and complex notation, frequency response, and Laplace analysis. Covers resonance, filters, power, transformers, and three phase circuits.

EE A204 Fundamentals of Electrical Engineering II 4 CR
Contact Hours: 3 + 3
Prerequisites: MATH A201 and EE A203.
Special Fees.
Offered fall semesters.
Introduces electronic devices, their characteristics, uses, and limitations. Covers methods of analysis of circuits containing solid state devices including diodes, bipolar junction transistors, field effect transistors, and operational amplifiers. Covers design and operation of primitive digital devices including logic gates and analog/digital converters.

EE A241 Computer Hardware Concepts 4 CR
Contact Hours: 3 + 3
Prerequisites: CS A201 and [MATH A107 or MATH A172].
Corequisite: CS A241.
Special Fees.
Special Note: Cross-listed with CS A241.
Analysis and design of electronic devices used as building blocks for construction of simple digital systems. Presents formats for data storage, number systems and alphanumeric codes, and methods of implementing logical and arithmetic operations within computers. Relates hardware component's capabilities and limitations to design requirements for computer processing, memory, and control functions.

EE A308 Instrumentation and Measurement 3 CR
Contact Hours: 2 + 3
Prerequisites: ES A309.
Crosslisted with: ES A208.
Instrumentation theory and concepts of digital and analog devices, transducers, data sensing transmission, recording, and display, instrumentation system, remote sensing, and hostile environmental conditions.

EE A314 Electromagnetics 3 CR
Contact Hours: 3 + 0
Prerequisites: PHYS A212 and PHYS A212L and MATH A302.
Crosslisted with: PHYS A314.
Electromagnetic theory and applications. Static electric fields in free space and material media; steady current systems and associated magnetic effects. Includes magnetostatics, Maxwell's Equations, electromagnetic radiation, transmission lines and relativity.

EE A314L Electromagnetics Laboratory I 1 CR
Contact Hours: 0 + 3
Corequisite: EE A314.
Laboratory experiments in transmission lines, impedances, bridges, scattering parameters, hybrids, and waveguides.

EE A324 Electromagnetics II 3 CR
Contact Hours: 3 + 0
Prerequisites: [EE A314 or PHYS A314] and MATH A302.
Crosslisted with: PHYS 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.

EE A324L Electromagnetics Laboratory II 1 CR
Contact Hours: 0 + 3
Corequisite: EE A324.
Laboratory experiments using Maxwell's equations in analysis of plane wave propagation, wave reflection, radiation and antennas, waveguides, cavity resonators, transmission lines, and radio propagation.

EE A353 Circuit Theory 3 CR
Contact Hours: 3 + 0
Prerequisites: EE A203 and MATH A302.
Circuit analysis by application of Laplace transform, state variable, Fourier methods, and includes convolution, frequency selective networks, and two-port circuits.

EE A354 Engineering Signal Analysis 3 CR
Contact Hours: 3 + 0
Prerequisites: EE A353 and MATH A302.
Analysis using discrete time signals and Fast Fourier Transform (FFT), random signals and noise, analog signals and Fourier transform. Application of probability theory and random variables to analog and discrete signals.

EE A407 Power Distribution 3 CR
Contact Hours: 3 + 0
Prerequisites: EE A308 and EE A351.
Analysis of electrical power distribution and control systems, power flow control, symmetrical faults, power interruption, voltage variations, distributed generation, and economic dispatch with computer-aided analysis.

EE A408 Dynamics of Systems 3 CR
Contact Hours: 2 + 3
Prerequisites: [ENGR A161 or ES A201] and [ES A208 or ES A210] and MATH A302.
Crosslisted with: ME A408.
Response of mechanical systems to internal and external forces. Free and forced vibration, random vibration. Discrete and continuous systems. Vibration parameter measurements and stability criteria.

EE A441 Integrated Circuit Design 3 CR
Contact Hours: 3 + 0
Prerequisites: EE A204 and CHEM A105 and PHYS A303.
Develops the design and fabrication of integrated circuits (IC's) used in computer electronics. Describes the material properties, methods of charge transport, energy exchanges within the devices, fundamentals of device fabrication for common device families, and fabrication process capabilities and limits. Electrical characteristics, timing considerations, heat and power considerations, and reliability of IC devices are analyzed and evaluated.

EE A465 Telecommunications 3 CR
Contact Hours: 3 + 0
Prerequisites: EE A351.
Emphasis in data transmission, guided and wireless transmission, signal encoding, digital data, multiplexing, and circuit and packet switching. Analyze data communications, networking, protocols, and standards.

EE A471 Automatic Control 3 CR
Contact Hours: 3 + 0
Prerequisites: EE A351 and MATH A302.
Use of linear system representation by transfer functions, signal flow graphics, and state equations. Feedback, time and frequency response of linear systems. Stability analysis by Routh-Hurwitz criterion and frequency domain methods, and system design and compensation.

EMT - EMERGENCY MEDICAL TECHNOLOGY

Offered through the Community and Technical College Allied Health Sciences Building (AHS), Room 165, 786-6476 www.uaa.alaska.edu/site/programs/alliedhealth/fire

EMT A110 Emergency Trauma Technician 3 CR
Contact Hours: 2 + 2
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.
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ENGL A116 Writing Life Stories 3 CR
Contact Hours: 3 + 0
Offered only at Matanuska-Susitna College.

Students will learn to write and record family history from a personal perspective, to preserve newspaper clippings and photos, and to create a genealogical chart for their family.

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.

ENGL A111 Introduction to Writing in Academic Contexts 3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A109 with minimum grade of C.

Registration Restrictions: Meet Prerequisite or appropriate score on English Placement Test.

Special Fees.

Preparation for ENGL A111 and alternative to PRPE A108. Introduces academic essay writing and technology skills in a computer classroom. Develops practical skills for writing and revising, including review of grammar and punctuation.

ENGL A212 Technical Writing 3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A111 with minimum grade of C.

Course Attributes: UAA GER Written Communication.

Special Fees.

Offered fall and spring semesters.

Instruction in composition of technical correspondence, informal and formal reports. Develops a broad range of expository writing skills. Research paper required.

ENGL A213 Writing in the Social and Natural Sciences 3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A111 with minimum grade of C.

Course Attributes: UAA GER Written Communication.

Special Fees.

Offered fall and spring semesters.

Instruction in academic writing based on close analysis of literature. Develops a broad range of expository writing skills, including composition of the empirical report. Research paper required.

ENGL A214 Persuasive Writing 3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A111 with minimum grade of C.

Course Attributes: UAA GER Written Communication.

Special Fees.

Offered fall and spring semesters.

Instruction in writing based on theories of persuasion and argument practiced in disciplines across the curriculum. Focuses on the rhetorical issues of audience, invention, evidence, and style. Develops a broad range of analytical, descriptive, and persuasive skills, with special attention to their application in a variety of academic environments. Research-supported papers required. Selection of readings may be coordinated with another discipline.
## Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ENGL A301</td>
<td>Literature of Britain I</td>
<td>3 CR</td>
</tr>
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</table>
| Contact Hours: 3 + 0  
Prerequisites: ENGL A211 with minimum grade of C or ENGL A212 with minimum grade of C or ENGL A213 with minimum grade of C.  
Course Attributes: UAA GER Humanities Requirement.  
Special Note: ENGL A201 and ENGL A202 strongly recommended. Offered fall semesters.  
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.  
Registration Restrictions: ENGL A201 and ENGL A202 strongly recommended.  
Course Attributes: UAA GER Humanities Requirement.  
Offered spring semesters.  
Study of significant writers of Britain from the Restoration to the present. |         |

| ENGL A305   | Topics in National 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.  
Registration Restrictions: ENGL A201 and A202 strongly recommended.  
Course Attributes: UAA GER Humanities Requirement.  
Special Note: Applies once toward national literatures requirement for English majors. May be repeated once for elective credit with a change of subtitle. Offered alternate fall semesters.  
Literature of a region or nation (other than Britain or the United States) in which publication is largely in the English language. Examples include literature of Canada, Ireland, Australia, New Zealand, Nigeria, or the Caribbean. |         |

| 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.  
Course Attributes: UAA GER Humanities Requirement.  
Offered fall semesters.  
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.  
Course Attributes: UAA GER Humanities Requirement.  
Offered spring semesters.  
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 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.  
Course Attributes: UAA GER Humanities Requirement.  
Offered spring semesters.  
Selected Biblical texts and Classical Western and ancient Oriental literature in English translations. |         |

| ENGL A311   | Advanced Composition                        | 3 CR    |
| Contact Hours: 3 + 0  
Prerequisites: ENGL A211 with minimum grade of C or ENGL A212 with minimum grade of C or ENGL A213 with minimum grade of C.  
Course Attributes: UAA GER Written Communication.  
Special Fees.  
Offered spring semesters.  
Advanced instruction in composing and reviewing written texts, with focus on multiple rhetorical situations. |         |

| ENGL A312   | Advanced Technical Writing                  | 3 CR    |
| Contact Hours: 3 + 0  
Prerequisites: ENGL A211 with minimum grade of C or ENGL A212 with minimum grade of C or ENGL A213 with minimum grade of C.  
Registration Restrictions: ENGL A212 recommended.  
Course Attributes: UAA GER Written Communication.  
Special Fees.  
Offered fall and spring semesters.  
Instruction in principles of textual and visual design in order to understand, analyze, evaluate, and design effective technical communication. Practice in standard editing for both print and online documents. |         |

| ENGL A313   | Professional Writing and Editing            | 1-3 CR  |
| Contact Hours: 1-3 + 0  
Prerequisites: ENGL A211 with minimum grade of C or ENGL A212 with minimum grade of C or ENGL A213 with minimum grade of C.  
Course Attributes: UAA GER Humanities Requirement.  
Special Note: ENGL A201 and ENGL A202 strongly recommended. Offered fall semesters.  
Instruction in analyzing the conventions of writing in varied professional fields.  
Concentration in editing, writing, and revising. Designed for professionals in the workplace, as well as students. |         |

| ENGL A315   | Medieval Literature                         | 3 CR    |
| Contact Hours: 3 + 0  
Prerequisites: ENGL A201 and ENGL A202.  
Offered fall semesters.  
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 A201 and ENGL A202.  
Offered alternate fall semesters.  
A selective survey of primarily Western literature from the fifteenth century through about 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.  
Offered alternate spring semesters.  
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.  
Offered spring semesters.  
A study of the Romantic movements from late eighteenth to mid-19th century. |         |

| ENGL A340   | The Victorian Period                        | 3 CR    |
| Contact Hours: 3 + 0  
Prerequisites: ENGL A201 and ENGL A202.  
Offered fall semesters.  
Studies in poetry and prose written by various English authors between 1830 and 1900, including such writers as Tennyson, Carlyle, Dickens, Browning, and Arnold. |         |

| ENGL A342   | The Modernist Period                        | 3 CR    |
| Contact Hours: 3 + 0  
Prerequisites: ENGL A201 and ENGL A202.  
Offered spring semesters.  
A study of significant works from the early to mid twentieth century, including selections from U.S. and international literature. |         |

| ENGL A343   | Contemporary Literature                     | 3 CR    |
| Contact Hours: 3 + 0  
Prerequisites: ENGL A201 and ENGL A202.  
Offered fall semesters.  
A study of significant works from the last third of the twentieth century to the present, including selections from U.S. and international literatures. |         |

| ENGL A351   | Poetry                                      | 3 CR    |
| Contact Hours: 3 + 0  
Prerequisites: ENGL A201 and ENGL A202.  
Offered fall and spring semesters.  
An intensive study of the forms and techniques used by poets. |         |

| ENGL A361   | The Novel                                  | 3 CR    |
| Contact Hours: 3 + 0  
Prerequisites: ENGL A201 and ENGL A202.  
Offered alternate spring semesters.  
The development of the novel with primary emphasis on major novelists such as Fielding, Richardson, Smollett, Sterne, Dickens, Zola, Dostoevski, Tolstoy, Joyce, James, Faulkner, and Sartre. |         |

| ENGL A363   | The Short Story                            | 3 CR    |
| Contact Hours: 3 + 0  
Prerequisites: ENGL A201 and ENGL A202.  
Offered spring semesters.  
An examination of the development of the short story as a separate genre and an intensive study of the techniques used by writers in this form. |         |
ENGL A371 Prose Nonfiction 3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A201 and ENGL A202.
Offered alternate fall semesters.

A study of the chief forms of prose nonfiction such as formal and informal essay, biography, letter, journal, and review.

ENGL A381 Drama 3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A201 and ENGL A202.
Offered alternate spring semesters.

An intensive study of the forms and techniques used by dramatists, including significant criticism from Aristotle to the present.

ENGL A383 Film Interpretation 3 CR
Contact Hours: 3 + 0
Prerequisites: (ENGL A211 or concurrent enrollment) or (ENGL A212 or concurrent enrollment) or (ENGL A213 or concurrent enrollment).
Course Attributes: UAA GER Humanities Requirement.
Special Fees.
Offered fall semesters.

An intensive study of the forms and techniques used in film. Includes an introduction to film theory and criticism.

ENGL A391 Genres of Subject and Theme 3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A201 and ENGL A202.

Special Note: Applies once toward genre requirement for English majors; can be repeated with a change of subtitle for elective credit. Offered alternate spring semesters.

Study of a genre defined in terms of subject or theme rather than form. Examples include the pastoral, the gothic, utopian literature, detective fiction, and science fiction.

ENGL A403 Topics in Autobiography 3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A211 with minimum grade of C or ENGL A212 with minimum grade of C or ENGL A213 with minimum grade of C. Registration Restrictions: ENGL A201 and A202 strongly recommended.

Special Note: Applies once toward the specialized studies requirement for English literature majors; may be repeated once with a change of subtitle for elective credit. Will be offered as a women's topic every other year. Offered spring semesters.

Study of autobiography and the techniques used and issues raised in this form, with readings focused on a selected theme. Practice writing autobiography.

ENGL A404 Topics in Women's 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.

Offered fall semesters.

Study of particular topics in literature by women writers.

ENGL A412 Computer Documentation 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.
Advanced study of professional writing practices, focusing on the various methodologies and forms of writing for the computer industry: user profiles and task analyses; engineering requirements; software specifications, computer software manuals and handbooks; tutorials; reference material and quick reference guides; online documentation; and usability tests.

ENGL A414 Research 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 A311 with minimum grade of C or ENGL A312 with minimum grade of C.
Course Attributes: UAA GER Written Communication.
Offered fall semesters.


ENGL A424 Shakespeare 3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A201 and ENGL A202.

Special Note: May be repeated once for credit with faculty permission. Offered fall and spring semesters.

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 and ENGL A202.

Special Note: May be repeated once for credit with a change of subtitle. Offered spring semesters.

Intensive study of a single author or relationship between authors. Course topics rotate among Chaucer, Milton, and other significant literary figures.

ENGL A434 History of Rhetoric 3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A111 and (ENGL A211 or ENGL A212 or ENGL A213).
Offered spring semesters.

A study of conceptions of rhetoric from ancient Greece and Rome to the present. Emphasis on analysis of works by major rhetorical figures throughout history. Research paper required.

ENGL A435 History of Criticism 3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A201 and ENGL A202.

Offered fall and spring semesters.

Critical theory from its classical origins to the present.

ENGL A440 Topics in 20th Century Comparative Literature 3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A201 and ENGL A202.

Special Note: May be repeated once for credit with a change of subtitle. Offered alternate spring semesters.

Comparative analysis of works from international or other special literatures, such as ethnic American literatures. Selections from literature and contextual readings in poetics and literary history.

ENGL A444 Topics in Native Literatures 3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A211 with minimum grade of C or ENGL A212 with minimum grade of C or ENGL A213 with minimum grade of C or ENGL A214 with minimum grade of C.

Special Note: Applies once toward requirement for English majors; may be repeated once for elective credit with a change of subtitle. Offered spring semesters.

In-depth studies of particular topics in Native literatures. Primary emphasis on American Indian and Alaska Native literatures, but topics may sometimes focus upon other indigenous literatures in the world.

ENGL A445 Alaska Native Literatures 3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A211 with minimum grade of C or ENGL A212 with minimum grade of C or ENGL A213 with minimum grade of C.
Course Attributes: UAA GER Humanities Requirement.
Special Note: Offered fall semesters.

Study of traditional, historical stories and contemporary texts written by Alaska Natives.

ENGL A450 Linguistics and Language Teaching 4 CR
Contact Hours: 3 + 2
Prerequisites: LING A101.
Offered alternate spring semesters.

Study of professional writing practices and methods for teachers of English, ESL, and other languages. Includes topics such as language structure, language variation, the linguistics of reading, and the linguistics of writing. Emphasis on developing practical teaching techniques. In addition to class time, requires two hours weekly practicum.

ENGL A452 English Grammar and Language Teaching 4 CR
Contact Hours: 3 + 2
Prerequisites: ENGL A211 or ENGL A212 or ENGL A213 or ENGL A214 and LING A201.
Offered alternate spring semesters.

An exploration of major features of American English grammar for teachers of English, ESL, and other languages. Includes topics such as theories about the development of grammar competence, the tense-aspect system, the article system, types of modification, and structures that show relationships between ideas. Emphasis on developing practical teaching techniques. In addition to class time, requires weekly two hour practicum.

ENGL A475 Modern Grammar 3 CR
Contact Hours: 3 + 0
Prerequisites: LING A201.
Special Note: Recommended for students in education with a teaching major or minor in English. Offered spring semesters.

An inductive modern linguistic analysis of English emphasizing transformational grammar.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Contact Hours</th>
<th>Registration Restrictions</th>
<th>Special Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL A476</td>
<td>History of English Language</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Offered fall semesters.</td>
<td>Origins and development of the English language from prehistoric times to the present.</td>
</tr>
<tr>
<td>ENGL A487</td>
<td>Standard Written English</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Offered fall semesters.</td>
<td>Analysis of English emphasizing traditional grammar, standard usage, and rhetoric.</td>
</tr>
<tr>
<td>ENGL A490</td>
<td>Selected Topics in English</td>
<td>3 CR</td>
<td>1-3 + 0</td>
<td>Registration Restrictions: Graduate Standing.</td>
<td>Current topics in English language and literature, arising from special circumstances of demand or faculty expertise.</td>
</tr>
<tr>
<td>ENGL A491</td>
<td>Topics in Composition and Rhetoric</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Registration Restrictions: Graduate Standing.</td>
<td>Advanced study of particular poetic forms, techniques, schools, or traditions.</td>
</tr>
<tr>
<td>ENGL A495</td>
<td>Internship in Professional Writing</td>
<td>3 CR</td>
<td>0 + 3-9</td>
<td>Registration Restrictions: Graduate Standing.</td>
<td>Special Note: Must be completed before the student advances to candidacy for the MA.</td>
</tr>
<tr>
<td>ENGL A499</td>
<td>English Honors Thesis</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Registration Restrictions: Graduate Standing.</td>
<td>Advanced study of particular topics and issues in American literature. Readings will include not only primary texts but also secondary discussions of theories of American literature and literary history.</td>
</tr>
<tr>
<td>ENGL A601</td>
<td>Introduction to Graduate Studies in English</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Registration Restrictions: Graduate Standing.</td>
<td>Advanced study of particular topics and issues in American literature. Readings will include not only primary texts but also secondary discussions of theories of American literature and literary history.</td>
</tr>
<tr>
<td>ENGL A602</td>
<td>Contemporary Critical Theory</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Registration Restrictions: Graduate Standing.</td>
<td>Spectrum of major types of critical theory currently practiced in American research universities and their specific role in shaping English departments and programs.</td>
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<tr>
<td>ENGL A604</td>
<td>Studies in Women's Literature</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Registration Restrictions: Graduate Standing.</td>
<td>Advanced study of significant works from the early to mid twentieth century, including selections from U.S. and international literature.</td>
</tr>
<tr>
<td>ENGL A606</td>
<td>Studies in the Development of the English Language</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Registration Restrictions: Graduate Standing.</td>
<td>Advanced study of significant works from the last third of the twentieth century to the present, including selections from U.S. and international literature.</td>
</tr>
<tr>
<td>ENGL A607</td>
<td>Studies in American Literature</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Registration Restrictions: Graduate Standing.</td>
<td>Advanced study of particular topics and issues in American literature. Readings will include not only primary texts but also secondary discussions of theories of American literature and literary history.</td>
</tr>
<tr>
<td>ENGL A615</td>
<td>Studies in Medieval Literature</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Registration Restrictions: Graduate Standing.</td>
<td>Advanced study of particular topics in Medieval Western literature.</td>
</tr>
<tr>
<td>ENGL A620</td>
<td>Studies in Renaissance Literature</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Registration Restrictions: Graduate Standing.</td>
<td>Advanced study of particular topics in the literature of the European Renaissance.</td>
</tr>
<tr>
<td>ENGL A625</td>
<td>Studies in Neoclassical Literature</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Registration Restrictions: Graduate Standing.</td>
<td>Advanced study of particular topics in the literature of the late seventeenth and eighteenth centuries.</td>
</tr>
<tr>
<td>ENGL A630</td>
<td>Studies in the Literature of Romanticism</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Registration Restrictions: Graduate Standing.</td>
<td>Advanced study of particular topics in the literature of the Romantic period.</td>
</tr>
<tr>
<td>ENGL A636</td>
<td>Studies in Modern Criticism</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Registration Restrictions: Graduate Standing.</td>
<td>Advanced study of particular topics in the literature of the Romantic period.</td>
</tr>
<tr>
<td>ENGL A640</td>
<td>Studies in the Victorian Period</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Registration Restrictions: Graduate Standing.</td>
<td>Advanced study of significant works from the early to mid twentieth century, including selections from U.S. and international literature.</td>
</tr>
<tr>
<td>ENGL A642</td>
<td>Studies in the Modernist Period</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Registration Restrictions: Graduate Standing.</td>
<td>Advanced study of significant works from the last third of the twentieth century to the present, including selections from U.S. and international literature.</td>
</tr>
<tr>
<td>ENGL A651</td>
<td>Studies in Poetry</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Registration Restrictions: Graduate Standing.</td>
<td>Advanced study of particular topics and issues in American literature. Readings will include not only primary texts but also secondary discussions of theories of American literature and literary history.</td>
</tr>
</tbody>
</table>
ENGL A699 Thesis 1-6 CR
Registration Restrictions: Faculty Permission.
Contact Hours: 1-6 + 0

ENGL A698 Individual Research 1-6 CR
Contact Hours: 1-6 + 0
Registration Restrictions: Faculty Permission.
Special Fees.

ENGR - ENGINEERING

Offered through the School of Engineering
Engineering Building (ENGR), Room 201, 786-1900
www.engr.uaa.alaska.edu

ENGR A151 Engineering Practices I 3 CR
Contact Hours: 3 + 0
Prerequisites: [MATH A107 and MATH A108] or MATH A109.
Provides an overview of the engineering profession and the fundamental tools for practicing engineering. Presents the basic skills required of engineers including an introduction to engineering mathematics, spreadsheets, analytical problem solving, word processing, communication, presentations, descriptive geometry, and computer graphics.

ENGR A161 Engineering Practices II 3 CR
Contact Hours: 3 + 0
Prerequisites: [MATH A107 and MATH A108] or MATH A109.
Presents the basic skills required of engineers for using computers to solve engineering problems and presenting results in a professional form. Application of computation methods and tools for practicing engineering. Introduction to computer programming and engineering problem solving softwares including visual basic in spreadsheets, Matlab, and Mathcad.

ENGR A192 Engineering Seminar I 1 CR
Contact Hours: 1 + 0
May be stacked with: ENGR A292 and ENGR A392.
Exploration of engineering design with presentations given by student interns, faculty, and leaders of industry about the engineering design as well as other aspects of engineering such as marketing, behavioral issues, and socio-economical issues facing today's engineer.

ENGR A251 Engineering Practices III 3 CR
Contact Hours: 3 + 0
Prerequisites: ENGR A151 and ENGR A161 and MATH A200.
Application of analytical and computational methods for solving engineering problems. Experimental problems will be solved and projects presented in technical reports.

ENGR A292 Engineering Seminar II 1 CR
Contact Hours: 1 + 0
Prerequisites: ENGR A192.
Registration Restrictions: Sophomore standing or instructor permission.
May be stacked with: ENGR A192 and ENGR A392.
Exploration of engineering design with presentations given by student interns, faculty, and leaders of industry about the engineering design as well as other aspects of engineering such as marketing, behavioral issues, and socio-economical issues facing today's engineer.

ENGR A392 Engineering Seminar III 1 CR
Contact Hours: 1 + 0
Prerequisites: ENGR A292.
Registration Restrictions: Junior standing or instructor permission.
May be stacked with: ENGR A192 and ENGR A292.
Exploration of engineering design with presentations given by student interns, faculty, and leaders of industry about the engineering design as well as other aspects of engineering such as marketing, behavioral issues, and socio-economical issues facing today's engineer.

ENGR A438 Engineering Systems Design 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Senior standing and instructor permission.
Engineering design of specific open-ended projects including design specifications.

ENGR A487 Topics in Professional Writing 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
Special Note: May be repeated once for degree credit with a change in subtitle.
Advanced study of professional writing practices, focusing on intersections with rhetorical theory.

ENGR A685 Studies in Rhetorical Strategy 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
Offered alternate spring semesters.
Advanced study of rhetorical strategies and traditions, focusing on theories of invention, audience, and evaluation.

ENGR A680 Studies in the History of Rhetoric 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
Offered alternate spring semesters.
Topics dealing with the historical development of rhetoric. Emphasizes readings of primary texts, understanding the conception of rhetoric particular to the time, and examining how that conception arose.

ENGR A681 Studies in Drama 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
Special Note: May be repeated once for degree credit with a change in subtitle. Offered alternate fall semesters.
Advanced study of dramatic forms, techniques, schools, and traditions.

ENGR A685 Studies in Rhetorical Strategy 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
Offered alternate spring semesters.
Advanced study of rhetorical strategies and traditions, focusing on theories of invention, audience, and evaluation.

ENGR A687 Composition Theory and Practice 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
Offered fall semesters.
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.

ENGR A688 Topics in Professional Writing 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
Special Note: May be repeated once for degree credit with a change in subtitle.
Advanced study of professional writing practices, focusing on intersections with rhetorical theory.

ENGR A681 Studies in Drama 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
Special Note: May be repeated once for degree credit with a change in subtitle. Offered alternate fall semesters.
Advanced study of relationships between cultural forces and the production, reception, and interpretation of texts. Focuses on both theory and analysis of selected texts.
ENVI - ENVIRONMENTAL STUDIES
Offered through the College of Arts and Sciences
Institute of Social and Economic Research, Diplomacy Building (DPL), Room 504, 786-1753
envistudies@uaa.alaska.edu
www.uaa.alaska.edu/ges

ENVI A201 Living on Earth: 3 CR
Introduction to Environmental Studies
Contact Hours: 3 + 0
Prerequisites: ENGL A111 and MATH A105.
Registration Restrictions: High-school biology or equivalent required.
Course Attributes: UAA GER Social Sciences Requirement.
Introduction to complex environmental issues, emphasizing human impacts, behavior, and institutions. Covers population, food, energy, air, and water resources, climate change, chemicals, forests and biodiversity, indigenous cultures, land use, current law, and human-nature relationships. Focuses on policy and politics, historical and cross-cultural perspectives, individual incentives, economic tradeoffs, and questions of fairness.

ENVI A202 Earth as an Ecosystem: 3 CR
Introduction to Environmental Science
Contact Hours: 3 + 0
Prerequisites: ENGL A111 and MATH A105.
Registration Restrictions: High-school biology or equivalent required.
Course Attributes: UAA GER Natural Sciences Requirement.
Introduction to science as a powerful but limited tool for understanding and solving environmental problems. The Earth as a system of systems. Weather and climate, natural cycles, energy flows, basic ecology, food, wildlife and biodiversity, chemicals, air and water quality, oceans, solid waste, cities, and land use. Uses Alaskan examples.

ENVI A210 Environmental Economics and Policy 3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A105.
Registration Restrictions: If prerequisite is not satisfied, instructor permission is required.
Crosslisted with: ECON A210.
Survey of environmental policy, emphasizing market- oriented approaches to problems. Present value, cost- benefit analysis, and nonmarket valuation tools are developed and applied to Alaskan and global environmental and natural resource issues.

ENVI A303 Environmental Ethics 3 CR
Contact Hours: 3 + 0
Crosslisted with: PHIL A303.
Introduction to 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 A492 Seminar in Environmental Studies 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Open to students pursuing the Minor in Environmental Studies who have completed ENVI A201- A202 and have completed all other requirements for the Minor by the end of the current semester.
Environmental problem-solving as a professional endeavor. Seminars with UAA researchers, business specialists, engineers, lawyers, regulators, consultants, and non-governmental organizations. Group and individual projects require the constructive application of knowledge and values to problems and effective communication to intended audiences. Capstone course for students pursuing the ENVI minor.

ES - ENGINEERING SCIENCE
Offered through the School of Engineering
Engineering Building (ENGR), Room 201, 786-1900
www.engr.uaa.alaska.edu

ES A103 Engineering Graphics 3 CR
Contact Hours: 1 + 6
Registration Restrictions: Open only to students who have been accepted into the undergraduate engineering program.
Corequisite: ES A103L.
Offered fall and spring semesters.
Introduction to use of AutoCAD as a tool for engineering graphics. Orthographic projections, auxiliary views, sectional views, dimensioning, Development of detail and working drawings. Three-dimensional modeling. One moderate scale design project required.

ES A111 Engineering Science 3 CR
Contact Hours: 3 + 0
Registration Restrictions: High school algebra and trigonometry or concurrent enrollment in MATH A200 required.
Special Fees.
Offered fall and spring semesters.
A survey of engineering science and problem solving techniques, including static and dynamic equilibria, presentation of results, and engineering ethics. Students will be introduced to the use of computers and will participate in a design project.

ES A201 Computer Techniques 3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A107 and MATH A108 or (MATH A200 or concurrent enrollment).
Special Fees.
Offered fall and spring semesters.
An introduction to programming using BASIC. Computer programming for solving problems in science and engineering, and applications using spreadsheets.

ES A208 Engineering Mechanics 4 CR
Contact Hours: 3 + 3
Prerequisites: [ENGR A151 or ES A111] and MATH A201.
Application of statics and dynamics for solving engineering type problems. Application of vector quantities, equilibrium including friction forces, moments of inertia, and the kinetics and kinematics of particles and rigid bodies.

ES A209 Engineering Statics 3 CR
Contact Hours: 3 + 0
Prerequisites: [ENGR A111 or PHYS A211] and MATH A201.
Offered fall and spring semesters.
Vector quantities, equilibrium including friction forces, structural mechanics, center of gravity, and moments of inertia are considered.

ES A210 Engineering Dynamics 3 CR
Contact Hours: 3 + 0
Prerequisites: ES A209.
Offered fall and spring semesters.
Kinematics and kinetics of particles and rigid bodies are studied. Newton's law of motion, momentum and work and energy concepts are studied.

ES A302 Engineering Data Analysis 3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A200 and ES A201.
Analytical and spreadsheet methods appropriate to the solution of engineering problems using the concepts from probability and statistics.

ES A309 Elements of Electrical Engineering 3 CR
Contact Hours: 3 + 0
Prerequisites: PHYS A212 and (MATH A302 or concurrent enrollment).
Offered fall semesters.
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 and (MATH A302 or concurrent enrollment).
Registration Restrictions: BSCE students require a “Civil Engineering Professional” status or approval by the Civil Engineering department chair.
Offered fall semesters.
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 4 CR
Contact Hours: 3 + 3
Prerequisites: MATH A201 and PHYS A211 with minimum grade of C.
Registration Restrictions: BSCE students require a “Civil Engineering Professional” status or approval by the Civil Engineering Department Chair.
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). Registration Restrictions: BSCE students require a “Civil Engineering Professional” status or approval by the Civil Engineering Department Chair.
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].
Registration Restrictions: BSCE students require a “Civil Engineering Professional” status or approval by the Civil Engineering department chair.
Offered spring semesters.
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/ctc/programs/college-prep

ESL A066 ESL Through Newspapers 1-4 CR
Contact Hours: 1-4 + 0
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 Fees.
Special Note: Required language lab work.
For intermediate to advanced students. Instruction in pronunciation, listening comprehension, and speaking strategies for academic and career settings. Emphasis on self-monitoring. Includes special practice in group discussion techniques.

ESL A104 College Reading and Writing I 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Appropriate score on English Placement Test or TOEFL.
Special Fees.
Special Note: Required language lab work.
For intermediate to advanced students. Extensive practice in reading and composition strategies for academic and career settings. Emphasis on alternatives to translation. Includes special practice in grammar.

ESL A105 Vocabulary Enhancement I 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Appropriate score on English Placement Test or TOEFL.
Special Fees.
Special Note: Required language lab work.
For intermediate to advanced students. Extensive practice in different methods of acquiring a larger, more precise vocabulary. Emphasis on using context clues and choosing words to match the occasion/audience. Includes special instruction in idioms used by adults.

ESL A106 College Grammar I 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Appropriate score on English Placement Test.
May be stacked with: ESL A110.
Special Fees.
Presents elements of English grammar for improving comprehension and accuracy. Provides focused instruction in intermediate grammar of Standard American English for academic and professional settings. Includes practice in editing. Designed for ESL students only.

ESL A107 Oral Fluency II 3 CR
Contact Hours: 3 + 0
Prerequisites: ESL A103.
Registration Restrictions: Appropriate score on TOEFL/TSE, or interview with ESL director.
Special Fees.
Special Note: Required language lab work.
For advanced students. Further instruction in pronunciation, listening comprehension, and speaking strategies for academic and career settings. Emphasis on self-correction. Includes special practice in formal presentation techniques.

ESL A108 College Reading and Writing II 3 CR
Contact Hours: 3 + 0
Prerequisites: ESL A104.
Registration Restrictions: Appropriate score on English placement test or TOEFL.
Special Fees.
Special Note: Requires language lab work.
For advanced students. Further practice in reading and composition strategies for academic and career settings. Emphasis on the use of on-campus resources for self-improvement. Includes additional practice in grammar.

ESL A109 Vocabulary Enhancement II 3 CR
Contact Hours: 3 + 0
Prerequisites: ESL A105.
Registration Restrictions: Appropriate score on English placement test or TOEFL.
Special Fees.
Special Note: Requires language lab work.
For advanced students. Further practice in different methods of acquiring a larger, more precise vocabulary. Emphasis on applying knowledge of word parts from Latin and Greek. Includes special instruction in academic vocabulary.

ESL A110 College Grammar II 3 CR
Contact Hours: 3 + 0
Prerequisites: ESL A106 with minimum grade of C.
Registration Restrictions: Appropriate score on English Placement Test or prerequisite course.
May be stacked with: ESL A106.
Special Fees.
Examines elements of English grammar for improving comprehension and accuracy. Provides focused instruction in high-intermediate and advanced grammar of Standard American English for academic and professional settings. Includes practice in editing. Designed for ESL students only.

ESM - ENGINEERING & SCIENCE MANAGEMENT
Offered through the School of Engineering Engineering Building (ENGR), Room 201, 786-1900 www.engr.uaa.alaska.edu

ESM A401 Cost Estimating 3 CR
Contact Hours: 3 + 0
Prerequisites: ESM A450.
May be stacked with: ESM A610.
Special Fees.
Offered alternate spring semesters.
Principles, practices and procedures used in the preparation of engineering cost estimates. Examination 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.

ESM A450 Economic Analysis and Operations 3 CR
Contact Hours: 3 + 0
Registration Restrictions: BSCE students require a “Civil Engineering Professional” status or approval by the Civil Engineering department chair.
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.
<table>
<thead>
<tr>
<th>COURSE DESCRIPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ESM A601</strong></td>
</tr>
<tr>
<td>Contact Hours: 3 + 0</td>
</tr>
<tr>
<td>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.</td>
</tr>
</tbody>
</table>

| **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 selection, income tax accounting, engineering evaluation and introduction to the problems of depreciation. |

| **ESM A606** | **Advanced Engineering Economy** | 3 CR |
| Contact Hours: 3 + 0 | Prerequisites: ESM A605. Special Fees. |
| Case studies and research problems in engineering economy. Examples in the following areas will be included: present worth, internal rate of return, public projects, mutually exclusive alternatives, capital budgeting, income taxes, inflation and geometric gradients, uncertainty, replacement and retirement, and sources of funds. |

| **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. May be stacked with: ESM A401. Special Fees. |
| Principles, practices and procedures used in the preparation of engineering cost estimates. Exposition of the basic concepts and steps required to develop engineering type, labor and material based, and parametric cost estimates. Preparation of cost proposals and study of bidding procedures. Students will manage the student project teams, prepare a research paper, and make a class presentation. |

| **ESM A613** | **Management of Technical People** | 3 CR |
| Contact Hours: 3 + 0 | Registration Restrictions: BS degree in Engineering or in a physical science. |
| 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 | Registration Restrictions: 9 credits in management and fiscal areas of ESM programs, or 9 credits beyond foundation courses in MBA program. 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: BA A601 or ESM A620. Crosslisted with: BA A619. 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. |
ET A162 A.C. 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 A.C. waveforms, sources, components, wiring diagrams, schematic symbols, and analysis of A.C. power distribution.

ET A163 A.C. Lab 1 CR
Contact Hours: 0 + 3
Prerequisites: ET A160 and ET A161.
Corequisite: ET A162.
Special Fees.
Prerequisites: CNT A164 and ET A165.
Contact Hours: 1 + .5
Special Fees.
Prerequisites: ET A164.
Contact Hours: 2 + 0
Special Fees.
Prerequisites: ET A165.
Contact Hours: 1 + .5
Special Fees.
ET A183 Data Communications 1 CR
Contact Hours: 1 + .5
Prerequisites: CNT A164 and ET A165.
Provides a survey of the field of microcomputers from a technical viewpoint. Coverage includes terminology, number systems, basic microcomputer architecture, assembly language programming, and MS/DOS operating system.

ET A184 Telecommunications 2 CR
Contact Hours: 1.5 + 2
Prerequisites: ET A162 and ET A163 and ET A183.
Examines the elements of telecommunications, including history, transmission methodology, multiplexing, media, and design criteria. Discusses telecommunication equipment, switching systems, subscriber services, and distribution techniques.

ET A185 Transmitters and Receivers 3 CR
Contact Hours: 2 + 3
Prerequisites: ET A184.
Examines 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.

ET A190 Selected Topics in Electronics Technology 1-4 CR
Contact Hours: 1-4 + 0-12
Special Note: Prerequisite may be imposed depending on topic. May be repeated for credit with a change in subtitle.
Prerequisites: ET A184.
Examines communications technology including microwave, radar, satellite, mobile and cellular telephone, VoIP, video, and other wireless systems.

ET A204 Application of Integrated Circuits 3 CR
Contact Hours: 3 + 0
Prerequisites: ET A126.
Offered only at Kenai Peninsula College.
Deals with the methods of communication between the computer operating system environment and the real-time, outside world. Specifically includes serial communication, analog/digital and digital/analog conversions, discrete input/output multiplexing, and bus architecture.

ET A224 Microprocessor Interfacing 3 CR
Contact Hours: 3 + 0
Prerequisites: ET A126.
Introduction of discrete input/output control including ladder diagrams and electromechanical relays. The use of programmable logic controllers to monitor and control discrete devices is the primary focus.

ET A225 Programmable Logic Controllers 3 CR
Contact Hours: 3 + 0
Prerequisites: ET A126.
Prerequisite: ET A245 and (MATH A101 or concurrent enrollment) and (MATH A105 or concurrent enrollment).
Offered only at Kenai Peninsula College.
Introduces semiconductor fundamentals and parameters. Covers semiconductor physics, diode and transistor characteristics and applications. Provides methods for analyzing and troubleshooting complex semiconductor circuitry. Component coverage includes specialty diodes, multi-layer control devices, bipolar transistors, JFETs, MOSFETS, and multistage coupling devices.

ET A226 Electronic Systems Troubleshooting 2 CR
Contact Hours: 1.5 + 2
Prerequisites: ET A160 and ET A161.
Provides the student with a survey of the field of microcomputers from a technical viewpoint. Coverage includes terminology, number systems, basic microcomputer architecture, assembly language programming, and MS/DOS operating system.

ET A276 Independent Project 3 CR
Contact Hours: 0 + 11
Registration Restrictions: Faculty Permission; and working knowledge of TES topics.
Prerequisites: ET A184 and ET A185.
Examines communications technology including microwave, radar, satellite, mobile and cellular telephone, VoIP, video, and other wireless systems.
### FD - FLORAL DESIGN

**FD A161**  
**Floral Design I**  
Contact Hours: 2 + 2  
Prerequisites: FD A160.  
Special Fees.  
Covers basic principles, techniques, and mechanics of floral design, flower identification and selection, and the use and care of equipment and supplies.

**FD A162**  
**Floral Design II**  
Contact Hours: 2 + 2  
Prerequisites: FD A161.  
Special Fees.  
Covers basic principles, techniques, and mechanics of floral design and specialty corsages using fresh plant materials. Includes pricing and cost control.

### FIRE - FIRE SCIENCE

**FIRE A101**  
**Principles of Emergency Services**  
Contact Hours: 3 + 0  
Special Fees.  
Introduces fire protection; career opportunities in fire protection and related fields; philosophy and history of fire protection/service; fire loss analysis; organization and function of public and private protection services; fire departments as part of local government; laws and regulations affecting the fire service; fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; introduction to fire protection systems; and fire strategy and tactics.

**FIRE A105**  
**Fire Prevention**  
Contact Hours: 3 + 0  
Special Fees.  
Introduces the fundamentals of the history and philosophy of fire prevention, organization, and operation of a fire prevention bureau, use of fire codes, identification and correction of fire hazards, and the relationships of fire prevention with built-in fire protection systems, fire investigation, and fire and life-safety education.

**FIRE A107**  
**Strategy and Tactics**  
Contact Hours: 3 + 0  
Prerequisites: FIRE A101.  
Special Fees.  
Provides an in-depth analysis of the principles of fire control through utilization of personnel, equipment, and extinguishing agents on the fireground.

**FIRE A117**  
**Rescue Practices**  
Contact Hours: 2 + 2  
Prerequisites: FIRE A121.  
Special Fees.  
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  
Special Fees.  
Introduces the theories and fundamentals of how and why fires start, why they spread, and how they are controlled.

**FIRE A122**  
**Fire Investigation I**  
Contact Hours: 3 + 0  
Prerequisites: FIRE A101 and FIRE A121.  
Special Fees.  
Introduces the fundamentals and technical knowledge needed for proper fire scene interpretations, including recognizing origin and cause, preservation of evidence and documentation, scene security, motives of the fire-setter, and types of fire causes.

**FIRE A131**  
**Firefighter I, Series I**  
Contact Hours: 3 + 0  
Special Fees.  
Introduces fire protection, fire organizations, types of fire equipment, emergency response services processes, and methods of their use. Includes orientation, safety, fire behavior, building construction, protective clothing, and self-contained breathing apparatus (SCBA).
FIRE A133  Firefighter I, Series II  3 CR
Contact Hours: 2 + 2
Prerequisites: FIRE A131. Special Fees.
Special Note: Successful completion of all four Firefighter I series will qualify/prepare the student to sit for Alaska State Fire Fighter I certification exam. All students are required to wear a complete set of fire department approved protective clothing (turnout gear) during skills training. (Turnout gear provided)
Provides 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  3 CR
Contact Hours: 2 + 2
Prerequisites: FIRE A133. Special Fees.
Special Note: Successful completion of all four Firefighter I series will qualify/prepare the student to sit for Alaska State Fire Fighter I certification exam. All students are required to wear a complete set of fire department approved protective clothing (turnout gear) during skills training. (Turnout gear provided)
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  3 CR
Contact Hours: 3 + 1
Prerequisites: FIRE A135. 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 wildfire chainsaw operations.

FIRE A151  Wildland Fire Control I  3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A105. 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 the knowledge and skills for fire behavior prediction. Introduces the manual method of fire behavior calculations. Provides an understanding of the determinants of fire behavior through studying input and how to interpret fire behavior output.

FIRE A155  Wildland Fire Behavior  3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A105. Special Fees.
Provides the knowledge and skills for fire behavior prediction. Introduces the manual method of fire behavior calculations. Provides an understanding of the determinants of fire behavior through studying input and how to interpret fire behavior output.

FIRE A157  Wildland Air Operations and Safety  3 CR
Contact Hours: 3 + 0
Prerequisites: FIRE A151. Special Fees.
Introduces aircraft types and capabilities, aviation management and safety for flying in and working with agency aircraft, tactical and logistical uses of aircraft, and requirements for helicopter take-off and landing areas. The regulations and policies addressed in this course are primarily those governing federal agency and ICS operations.

FIRE A159  Wildland Fire Operations Function  3 CR
Contact Hours: 3 + 0
Prerequisites: FIRE A151. Special Fees.
Assists the structure and wildland firefighters in the wildland/urban interface tactical decision making process. Introduces the duties associated with the single resource boss position from initial dispatch through demobilization to the home unit.

FIRE A170  Occupational Safety and Health for Fire Service  3 CR
Contact Hours: 3 + 0
Prerequisites: FIRE A101 and FIRE A121 and (MATH A105 or concurrent enrollment). Special Fees.
Introduces the basic concepts of occupational health and safety as they relate to emergency service organizations. Topics include risk evaluation and control procedures for fire stations, training sites, emergency vehicles, and emergency situations involving fire, EMS, hazardous materials, and technical rescue.

FIRE A201  Principles of Emergency Management  3 CR
Contact Hours: 3 + 0
Prerequisites: FIRE A101. Special Fees.
Examines the history of emergency management. Identifies and determines risk assessments for natural and technological hazards. Identifies and assesses the disciplines of emergency management. Examines international disaster management, emergency management and terrorism, and discusses the future of emergency management.

FIRE A202  Fire Protection Hydraulics and Water Supply  3 CR
Contact Hours: 3 + 0
Prerequisites: FIRE A101 and FIRE A121 and (MATH A105 or concurrent enrollment). Special Fees.
Examines the knowledge and skills for fire behavior prediction. Introduces the manual method of fire behavior calculations. Provides an understanding of the determinants of fire behavior through studying input and how to interpret fire behavior output.

FIRE A214  Fire Protection Systems  3 CR
Contact Hours: 3 + 0
Prerequisites: FIRE A101 and FIRE A121 and (MATH A105 or concurrent enrollment). Special Fees.
Examines the knowledge and skills for fire behavior prediction. Introduces the manual method of fire behavior calculations. Provides an understanding of the determinants of fire behavior through studying input and how to interpret fire behavior output.

FIRE A223  Fire Investigation II  3 CR
Contact Hours: 3 + 0
Prerequisites: FIRE A123. Special Fees.
Examines the knowledge and skills for fire behavior prediction. Introduces the manual method of fire behavior calculations. Provides an understanding of the determinants of fire behavior through studying input and how to interpret fire behavior output.
FIRE A230  Fire Department Organizational Theory and Behavior  3 CR
Contact Hours: 3 + 0
Prerequisites: FIRE A101.
Special Fees.
Examines various theories developed to explain and predict employee behavior in an organizational context. Develops analytical thinking capabilities by comparing and contrasting conflicting theories of organizations.

FREN - FRENCH
Offered through the College of Arts and Sciences Administration/Humanities Building (ADM), Suite 287
786-4030
http://language.uaa.alaska.edu

FREN A101  Elementary French I  4 CR
Contact Hours: 4 + 0
Course Attributes: UAA GER Humanities Requirement.
Prerequisites: FREN A101.
Introduction to the French language. This course presents the alphabet, basic phonetics, and fundamentals of grammar, and goes on to cover the regular and irregular verb conjugation of the present and past tenses. It includes basic vocabulary, cognates and idiomatic expressions. Oral exercises and repetition are emphasized to obtain correct pronunciation.

FREN A102  Elementary French II  4 CR
Contact Hours: 4 + 0
Prerequisites: FREN A101.
Course Attributes: UAA GER Humanities Requirement.
Special Fees.
Continuing study of grammar and vocabulary. The conjugation of the remaining verbal forms: imperfect, future, conditional and various compound tenses will be studied as well as the imperative and the subjunctive moods. Practice in reading, speaking, and writing on themes of contemporary interest will stress good accent along with style.

FREN A201  Intermediate French I  4 CR
Contact Hours: 4 + 0
Prerequisites: FREN A102.
Course Attributes: UAA GER Humanities Requirement.
Special Fees.
Review of the more complex grammatical structures and expansion of the vocabulary. This course will emphasize the reading of graded literary excerpts by contemporary French authors. Students will attempt to interpret their content while analyzing the structures and the expression. French pronunciation will be enhanced through classroom practice in reading and discussing materials and topics of current interest. 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.
Completion of the grammar review. The four skills: reading, listening, speaking and writing will be intensified in order to achieve normal speech fluency for understanding and being able to engage in an ordinary conversation. The students will also endeavor to write short prose compositions or poetry to perfect their expression. Conducted in French.

FREN A301  Advanced French I  4 CR
Contact Hours: 3 + 2
Prerequisites: FREN A202 with minimum grade of C.
Special Fees.
Further development of speaking, listening, reading and writing proficiency with marked emphasis on listening, reading, and speaking. More sophisticated grammatical structures. Wide range of discussion topics. Conducted in French.

FREN A302  Advanced French II  4 CR
Contact Hours: 3 + 2
Prerequisites: FREN A301 with minimum grade of C.
Special Fees.
Continuation of FREN 301. Further development of speaking, listening, reading and writing proficiency with marked emphasis on listening, reading, and speaking. More sophisticated grammatical structures. Wide range of discussion topics. 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 one-, two-, or three-credit segments. Repeatable for credit with change of subtitle. Up to three credits may count toward a minor or major in languages with an emphasis in French.

FREN A310  Selected Topics in Advanced French  3 CR
Contact Hours: 3 + 0
Prerequisites: FREN A202.
Special Fees.
Special Note: May be repeated for credit with a different subtitle.
An advanced course for students interested in conversation, writing skills, cultural information about the French-speaking world. There will be a different topic each time the course is offered. Conducted in French.

FREN A432  Studies of Literature and Culture  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Reading ability in French equivalent to three years of college study.
Special Fees.
Intensive study of authors, literary movements, periods, and/or genres. Students will also analyze cultural material other than texts. The course is conducted in French and may be repeated for credit when topics vary.

FSA - FIRE SERVICE ADMINISTRATION
Offered through the Community & Technical College
Allied Health Sciences Building (AHS), Room 161, 786-6928
http://alliedhealth.uaa.alaska.edu/fire

FSA A212  Related Codes and Ordinances  3 CR
Contact Hours: 3 + 0
Special Fees.
Background and interpretation of national, state, and local codes, ordinances, and laws which influence fire prevention field.

FT - FISHERIES TECHNOLOGY
Offered through Kodiak College
117 Benny Bensen Dr., Kodiak, Alaska, 99615, (907) 486-4161.
www.koc.alaska.edu

FT A103  Outboard Maintenance and Repair  1 CR
Contact Hours: 0 + 2
Special Note: Student supplies used outboard motor.
Preventive maintenance and troubleshooting of basic outboard motors.

GEO - GEOMATICS
Offered through the School of Engineering
Engineering Building (ENGR), Room 201, 786-1900
www.engr.uaa.alaska.edu

GEO A137  Principles of Mapping  3 CR
Contact Hours: 2 + 2
Registration Restrictions: Computer competency (see admission requirements) or instructor approval.
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.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Contact Hours</th>
<th>Prerequisites/Restrictions</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEO A146</td>
<td>Surveying Computations</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Contact Hours: MATH A108 with minimum grade of C. Registration Restrictions: See admission requirements. Special Fees. Offered spring semesters. Prerequisites: MATH A108 with minimum grade of C.</td>
</tr>
<tr>
<td>GEO A155</td>
<td>Fundamentals of Surveying</td>
<td>3 CR</td>
<td>2 + 3</td>
<td>Contact Hours: 2 + 3. Prerequisites: MATH A108 with minimum grade of C. Registration Restrictions: See admission requirements. Special Fees. Offered fall 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 retraction surveys. Computations of circular curves. Introduction to the current industry standard hand held calculator.</td>
</tr>
<tr>
<td>GEO A157</td>
<td>Analytical and Digital Cartography</td>
<td>3 CR</td>
<td>2 + 2</td>
<td>Contact Hours: 2 + 2. Prerequisites: GEO A137. Registration Restrictions: See admission requirements. Special Fees. Offered spring semesters. Introduction to Geomatics and survey measurement techniques, including the use of levels, teedolities, 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.</td>
</tr>
<tr>
<td>GEO A158</td>
<td>Geomatics Computer Fundamentals</td>
<td>3 CR</td>
<td>2 + 2</td>
<td>Contact Hours: 2 + 2. Prerequisites: GEO A155 with minimum grade of C. Registration Restrictions: See admission requirements. Special Fees. Special Note: Offered spring semesters. Introduction to IBM compatible PCs - including both hardware and software components - specifically directed to Geomatics applications. Topics covered include PC O/S, word processing, spreadsheets, databases, graphing, image manipulation, text and graphic presentation, data and internet searches, HTML authoring, and resume preparation.</td>
</tr>
<tr>
<td>GEO A167</td>
<td>Remote Sensing and Image Analysis</td>
<td>4 CR</td>
<td>4 + 0</td>
<td>Contact Hours: 4 + 0. Registration Restrictions: Computer competency (see admission requirements) or instructor approval. Special Fees. Offered spring semesters. Introduction to photo interpretation and imaging systems. Geometry of photogrammetry. Theory of electromagnetic spectrum. Application of remote sensing in engineering, archaeology, agriculture, and forestry using image analysis software.</td>
</tr>
<tr>
<td>GEO A248</td>
<td>Digital Terrain Cartography</td>
<td>3 CR</td>
<td>2 + 2</td>
<td>Contact Hours: 2 + 2. Prerequisites: GEO A157. 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.</td>
</tr>
<tr>
<td>GEO A256</td>
<td>Municipal and Civil Geomatics</td>
<td>4 CR</td>
<td>3 + 3</td>
<td>Contact Hours: 3 + 3. Prerequisites: MATH A200 and GEO A166. Offered fall semesters. Methods of gathering survey data for civil surveys. Evaluation of survey data gathering methods. Geomatics applications for urban surveys. Construction staking for route surveys, small construction project. Platting and mapping techniques.</td>
</tr>
<tr>
<td>GEO A257</td>
<td>Elements of Photo grammetry</td>
<td>3 CR</td>
<td>2 + 2</td>
<td>Contact Hours: 2 + 2. Prerequisites: MATH A108 with minimum grade of C and GEO A157 with minimum grade of C. 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.</td>
</tr>
<tr>
<td>GEO A267</td>
<td>Boundary Law I</td>
<td>4 CR</td>
<td>4 + 0</td>
<td>Contact Hours: 4 + 0. Prerequisites: GEO A155. 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, retracements, 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, relitigation, and other water boundary elements.</td>
</tr>
<tr>
<td>GEO A358</td>
<td>Programming for Digital Cartography</td>
<td>3 CR</td>
<td>2 + 2</td>
<td>Contact Hours: 2 + 2. Prerequisites: ES A201 with minimum grade of C and GEO A157 with minimum grade of C. Advanced principles of computer-aided design and mapping. Organization, filing, and database principles. Programming routines in Auto Visual Basic and AutoLISP languages.</td>
</tr>
<tr>
<td>GEO A359</td>
<td>Geodesy and Map Projections</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Contact Hours: 3 + 0. Prerequisites: MATH A200. Offered fall semesters. Introduction to geometric geodesy. Computations on the ellipsoid. Elements of datums. Map projections and state plane coordinate systems. Coordinate transformations.</td>
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<tr>
<td>GEO A433</td>
<td>Hydrographic Surveying</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Contact Hours: 3 + 0. Registration Restrictions: Upper class undergraduate or graduate standing in either Geomatics or Civil Engineering, or instructor’s permission. 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.</td>
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<tr>
<td>GEO A456</td>
<td>Geomatics and Civil Design</td>
<td>3 CR</td>
<td>2 + 3</td>
<td>Contact Hours: 2 + 3. Prerequisites: MATH A200 with minimum grade of C and GEO A166 with minimum grade of C. Offered fall semesters. Methods of gathering survey data for civil design. Geodesy overview. Global positioning systems (GPS) for positioning and direction. Elements of highway design and location, including horizontal, spiral, and vertical curves, super elevation, and earthwork. Geomatic design and location of utility systems. Geodetic and state plane coordinate systems. Elements of geographic information systems.</td>
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<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
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<tr>
<td>GEO A457</td>
<td>Boundary Law II</td>
<td>4 CR</td>
<td>Contact Hours: 4 + 0</td>
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<td>Prerequisites: GEO A267 and ENGL A212.</td>
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<td>Offered spring semesters.</td>
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<td>Procedures and sources for legal research, Alaska Easement Law, Alaska State Statutes and Administrative</td>
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<td>Code applicable to land surveying, current BLM procedures and regulations, surveying plottage procedures,</td>
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<td>Defective Survey Act, lotted sections, floodplains and wetlands, water boundary case law, ALTA/ASCM</td>
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<td>survey procedures, writing and interpreting legal descriptions.</td>
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<tr>
<td>GEO A459</td>
<td>Geodetic Geometrics</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: MATH A202 and GEO A359.</td>
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<td>Offered alternate spring semesters.</td>
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<td>Advanced topics in geometric geodesy and map projections. Introduction to physical geodesy. Programming</td>
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<tr>
<td>GEO A460</td>
<td>Geomatics Design Project</td>
<td>3 CR</td>
<td>Contact Hours: 2 + 2</td>
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<td>Registration Restrictions: For those seeking a BS in Geomatics, senior standing in geomatics program</td>
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<td>with all 300-level courses completed or instructor approval. For those seeking a certificate in GIS,</td>
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<td>all core courses must be completed or instructor approval. Offered fall semesters.</td>
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<td>Projects in geomatics. Research, design, data compilation, analyses, and mapping. Professional standards</td>
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<td>and ethical concerns for geomaticians and/or GIS professionals.</td>
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<td>GEO A466</td>
<td>Geopositioning</td>
<td>4 CR</td>
<td>Contact Hours: 3 + 3</td>
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<td>Prerequisites: MATH A200 and GEO A359.</td>
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<td>Registration Restrictions: Computer competency (see admissions requirements). Offered spring</td>
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<td>semesters. Introduction to positional systems, geodesy concepts, GPS site reconnaissance, network</td>
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<td>planning, data collection using static to real-time kinematic positioning methods, data processing,</td>
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<td>network adjustment, analysis of advantages and limitations of geopositioning technologies.</td>
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<td>GEO A467</td>
<td>Analytical and Digital Photogrammetry</td>
<td>3 CR</td>
<td>Contact Hours: 2 + 2</td>
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<td>Prerequisites: GEO A257.</td>
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<td>Offered alternate spring semesters.</td>
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<td>Theory of analytical photogrammetry including mathematical development of the rotation matrix, interior</td>
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<td>, relative, and absolute orientation. Programming of photogrammetric adjustments. Theory of strip and</td>
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<td>block adjustments. Independent projects in photogrammetric mapping.</td>
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<tr>
<td>GEO A490</td>
<td>Selected Advanced Topics in Geometrics</td>
<td>1-6 CR</td>
<td>Contact Hours: 0-6 + 0-12</td>
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<td>Registration Restrictions: Faculty permission.</td>
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<td>Specific course content is determined by student needs, developments in technology, or licensing</td>
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<tr>
<td>GEO A205</td>
<td>Elements of Physical Geography</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0</td>
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<td>Registration Restrictions: GEOG A101 or A103 recommended, but not required.</td>
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<td>Course Attributes: UAA GER Natural Sciences Requirement.</td>
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<td>Analysis of the processes that form the physical environment and the resulting physical patterns. Study</td>
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<td>of landforms, climate, soils, water resources, vegetation, and their world and regional patterns.</td>
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<td>Optional laboratory of one additional credit.</td>
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<tr>
<td>GEO A205L</td>
<td>Elements of Physical Geography Laboratory</td>
<td>1 CR</td>
<td>Contact Hours: 0 + 3</td>
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<td>Course Attributes: UAA GER Natural Sciences Lab Only.</td>
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<td>Special Fees.</td>
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<td>Optional laboratory of one additional credit.</td>
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<tr>
<td>GEO A323</td>
<td>Economic Geography and the Global Economy</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: GEOG A101 or INTL A101.</td>
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<td>Registration Restrictions: ECON A201 recommended.</td>
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<td>Exploration of key issues, concepts, and arguments in economic geography.</td>
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<td>Comparative investigation of the evolving economic geography of several international regions within</td>
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<td>the framework of contemporary processes of economic globalization.</td>
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<td>Covers policy, planning, global economic interdependence and transition, and contemporary issues.</td>
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<td>GEO A327</td>
<td>Political Geography</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0</td>
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<td></td>
<td>Prerequisites: GEOG A101 or INTL A101 or PS A102.</td>
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<td>Crosslisted with: PS A327.</td>
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<td>Study of the spatial forms and processes of political phenomena. Concepts, models, and current</td>
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<td>literature related to territories such as nation-states and congressional districts, the formation and</td>
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<td>dissolution of empires, geopolitics, and international conflict are examined.</td>
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<tr>
<td>GEO A340</td>
<td>The Historical Geography of North America</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: HIST A131.</td>
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<td>Crosslisted with: HIST A345 and INTL A345.</td>
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<td>Special Note: GEOG A205 recommended.</td>
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<td></td>
<td>Explores the European settlement of North America (U.S. and Canada), the impact of geography on this</td>
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<td>settlement, and the impress of culture and political process on the land. A significant part of the</td>
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<td>course compares and contrasts the American and Canadian geographic experience and the creation of</td>
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<td>distinct regional cultures.</td>
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<td>GEO A345</td>
<td>Across This Land:</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0</td>
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<td>The Historical Geography of North America</td>
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<td>The Historical Geography of North America</td>
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<td></td>
<td></td>
<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: HIST A131.</td>
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<td>Crosslisted with: HIST A345 and INTL A345.</td>
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<td>Special Note: GEOG A205 recommended.</td>
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<td>Explores the European settlement of North America (U.S. and Canada), the impact of geography on this</td>
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<td>settlement, and the impress of culture and political process on the land. A significant part of the</td>
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<td>course compares and contrasts the American and Canadian geographic experience and the creation of</td>
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<td>distinct regional cultures.</td>
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<tr>
<td>GEO A390</td>
<td>Selected Topics: Field Studies in Geography</td>
<td>1-3 CR</td>
<td>Contact Hours: 0.2 + 3.9</td>
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<td>Field Studies in Geography</td>
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<td>Registration Restrictions: Faculty permission and a designated GEOG course.</td>
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<td>Geographic concepts and processes explored in the field. Introduction to geographic fieldwork techniques</td>
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<td>and methodology. Students conduct fieldwork in selected areas of geographic inquiry. Topics range from</td>
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<td>regional studies (e.g. the geography of South Central Alaska) to topical studies (e.g. historical</td>
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<td>geography). May be repeated twice with change of subtitle.</td>
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<tr>
<td>GEO A415</td>
<td>Anglo-Saxons and Vikings:</td>
<td>3 CR</td>
<td>Contact Hours: 3 + 0</td>
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<td>History &amp; Geography in Early Medieval North Atlantic</td>
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<td>Prerequisites: HIST A101.</td>
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<td>Crosslisted with: HIST A415.</td>
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<td>Special Note: GEOG A205 recommended.</td>
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<td>A study of Anglo-Saxon and Viking society, territorial expansion, and settlement from the 7th - 11th</td>
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<td>centuries. Focus on historical impacts on the human landscape, political arrangement, and the effects</td>
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<td>of climate and environmental modification on population growth and migration.</td>
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GEOL A443 Northwest Passage: The Changing Canadian North
Contact Hours: 3 + 0
Prerequisites: GEOG A101 or INTL A101 or INTL A215.
- Geography of and current issues in the Canadian North. Historical and political development of the Canadian North as a region. Current issues to include the sovereignty of the Northwest Passage, environmental impacts of mineral and other economic development, challenges to subsistence activities, cultural change and social challenges, and climate change and its overarching impact on the region.

GEOL A447 The Silk Road: Ideological, Cultural, and Economic Travels through Central Eurasia
Contact Hours: 3 + 0
Prerequisites: GEOG A101 or INTL A101.
- Study of Central Asian cultures and histories in the context of the Silk Road. The extended region as a melange of cultural identities and histories, political economies, and ideological struggles. The interaction of the newly formed republics with China, Turkey, and Iran is also a significant concern of the course.

GEOL - GEOLOGY
Offered through the College of Arts and Sciences
Beatrice McDonald Hall (BMH), Room 214, 786-6840
http://geology.uaa.alaska.edu

GEOL A104 Natural History of Alaska
Contact Hours: 3 + 0
Prerequisites: MATH A055.
Course Attributes: UAA GER Natural Science w/ Lab.
- Special Note: Acceptable as elective credit only.
  - Surveys important biological, physical and geological features of Alaska, and their development over time. Includes study of major landforms, ecosystems, wildlife and people. Local area will be emphasized.

GEOL A111 Physical Geology
Contact Hours: 3 + 3
Prerequisites: MATH A055.
Course Attributes: UAA GER Natural Sciences Requirement.
- Offered fall and spring semesters.
  - Introduction to physical geology. Study of earth, its materials, and processes affecting changes on and within it. Laboratory training in use of topographic maps, and recognition of common rocks and minerals.

GEOL A115 Environmental Geology
Contact Hours: 3 + 0
Prerequisites: MATH A055.
Course Attributes: UAA GER Natural Sciences Requirement.
- Offered fall and spring semesters.
  - An introduction to the study of applied geology. Environmental issues, focusing on geologic hazards, water and air quality, water supply, waste, energy, global systems, and planning utilizing technical, social, and political approaches to problem management.

GEOL A115L Laboratory in Environmental Geology
Contact Hours: 0 + 3-6
Prerequisites: GEOL A100 or GEOL A111 or (GEOL A115 or concurrent enrollment).
Course Attributes: UAA GER Natural Sciences Lab Only.
Special Fees.
- Offered fall and spring semesters.
  - Investigation of problems in environmental geology related to hydrology, acid rain, pollution, and geologic hazards with emphasis on the Anchorage area. Independent study format includes reading, measurements, use of computer programs, and field trips.

GEOL A178 Fundamentals of Oceanography
Contact Hours: 3 + 0
Prerequisites: MATH A055.
Crosslisted with: BIOL A178.
Course Attributes: UAA GER Natural Sciences Requirement.
- Principles of oceanography, with emphasis on the oceans' biological, physical, chemical, and geological processes, and how ocean processes affect the atmosphere.

GEOL A179 Fundamentals of Oceanography: Laboratory
Contact Hours: 0 + 3
Prerequisites: MATH A055.
Crosslisted with: BIOL A179.
Course Attributes: UAA GER Natural Sciences Lab Only.
Special Fees.
- Laboratory exercises designed to illustrate principles and concepts developed in GEOL 178.

GEOL A190 Introductory Topics in Geology
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
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 A320 Volcanology
Contact Hours: 3 + 0
Prerequisites: GEOL A221.
- Special Fees.
  - The description and classification of volcanoes, volcanic eruptions, and volcanic deposits. Includes the history of volcanic studies, myths, and legends. Emphasis on the dynamics of volcanic eruptions, pyroclastic rocks, lava flows, and volcanic hazard assessment.

GEOL A321 Mineralogy
Contact Hours: 3 + 3
Prerequisites: GEOL A221 and MATH A105 and CHEM A105.
Special Fees.
  - Crystallography including external form and internal order. Crystal chemistry, atomic structure, crystal structure, and compositional variation, nature and origin of physical properties. Mineral association, occurrence, and paragenesis. Introduction to x-ray crystallography and optical mineralogy. Laboratory includes determinative crystallography and systematic determinative mineralogy.

GEOL A322 Igneous and Metamorphic Petrology
Contact Hours: 3 + 3
Prerequisites: GEOL A321.
Special Fees.
  - Identification and classification of igneous and metamorphic rocks, interpretation of textures, structures, and mineralogy of rocks; study of chemical and physical principles controlling the formation of rocks, importance of various rock types in economic and industrial arenas. Extensive study of hand specimens with emphasis on composition, texture, and structure.

GEOL A325 Geology of Ore Deposits
Contact Hours: 3 + 0
Prerequisites: GEOL A322.
Special Fees.
  - Genesis, tectonic setting and properties of selected metallic ore deposits. Significant hand sample identification and paragenetic associations of ore minerals and certain ore deposits including mafic layered intrusions, hydrothermal deposits, massive sulfides, and porphyry deposits. Emphasis on origin and transport of ore bearing fluids and deposition of ore minerals.

GEOL A335 Structural Geology
Contact Hours: 3 + 3
Prerequisites: GEOL A221 and [MATH A108 or MATH A109].
Special Fees.
  - Origin, recognition, and interpretation of earth's primary and secondary structures with application to earth history, exploration and development of natural resources. Laboratory includes projections, analysis of structural contours, cross sections, block diagrams and graphical solutions to structural problems.
COURSE DESCRIPTIONS

GEOL A340 Hydrogeology 3 CR
Contact Hours: 3 + 0
Prerequisites: GEOL A221 and CHEM A105.
Special Fees.
Focus on groundwater occurrence, storage, and transport. Stream hydrographs, duration curves, groundwater recharge, and streamflow measurements. Aquifers and aquifer properties such as porosity and permeability. Hydraulic head and applications of Darcy's Law. Groundwater flow equations and groundwater flow to wells. Geology of groundwater occurrence, water chemistry, water quality, and contamination.

GEOL A350 Geomorphology 4 CR
Contact Hours: 3 + 3
Prerequisites: GEOL A221.
Study of landforms and processes that affect their development, including tectonics, geologic structures, bedrock lithology, streams, glaciers, groundwater, and oceans. Laboratory focuses on formation and genesis of landforms based on evidence from topographic maps and aerial photography.

GEOL A360 Geochemistry 3 CR
Contact Hours: 3 + 0
Prerequisites: GEOL A221 and (CHEM A106 or concurrent enrollment).

GEOL A380 Anchorage Field Studies 3 CR
Contact Hours: 0 + 9
Prerequisites: GEOL A221.
Field experience focusing on the Anchorage area. Field trips to Anchorage, Eagle River, Turnagain, and Matanuska Valley to investigate the geologic history, glacial history, plate tectonics, and environmental concerns. Local rocks, formations, fossils, glacial landforms and structures will be examined. Five full-day field trips.

GEOL A381 Kenai Peninsula Field Studies 3 CR
Contact Hours: 0 + 9
Prerequisites: GEOL A221.
Field experience focusing on the Kenai Peninsula. Field trips to Anchorage, Eagle River, Turnagain, and Matanuska Valley to investigate the geologic history, glacial history, plate tectonics, and environmental concerns. Local rocks, formations, fossils, glacial landforms and structures will be examined. Five full-day field trips.

GEOL A382 Geologic Field Studies 3 CR
Contact Hours: 0 + 9
Prerequisites: GEOL A221.
Field experience focusing on the Anchorage area. Field trips to Anchorage, Eagle River, Turnagain, and Matanuska Valley to investigate the geologic history, glacial history, plate tectonics, and environmental concerns. Local rocks, formations, fossils, glacial landforms and structures will be examined. Five full-day field trips.

GEOL A410 Research Techniques in Geology 3 CR
Contact Hours: 3 + 0
Prerequisites: GEOL A221.
Registration Restrictions: Junior standing.
Introduction to and 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. Preparation for professional level scientific communication.

GEOL A421 Invertebrate Paleontology 4 CR
Contact Hours: 3 + 3
Prerequisites: GEOL A221.
Special Fees.
Courses on invertebrate phyla, which are important in the geologic record. Includes biostratigraphy, paleoecology, evolution, and functional morphology. Emphasis in lab on taxonomy and evolution of all major fossil invertebrate groups.

GEOL A450 Paleoclimatology and Global Change 3 CR
Contact Hours: 3 + 0
Prerequisites: GEOL A221 and (CHEM A106 or concurrent enrollment).
Global perspective of climate change from the Quaternary to modern times. To include: interpretation of climate data and proxies, connections between oceans, landmasses, atmosphere, and extratropical processes related to climate change, and past climate modifications and future climate change.
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<td>GEOL A480</td>
<td>Geologic Field Methods</td>
<td>3 CR</td>
<td>0 + 9</td>
<td>GEOL A322 and GEOL A335 and GEOL A452.</td>
<td>Special Fees</td>
<td>Special Note: Course may count as credit towards the major if field camp is taken elsewhere.</td>
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<td>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.</td>
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<tr>
<td>GEOL A481</td>
<td>Alaskan Field Investigations</td>
<td>3 CR</td>
<td>0 + 9</td>
<td>GEOL A350 and GEOL A480.</td>
<td>Special Fees</td>
<td>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.</td>
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<tr>
<td>GEOL A482</td>
<td>Geologic Field Investigations</td>
<td>3 CR</td>
<td>0 + 9</td>
<td>GEOL A480.</td>
<td>Special Fees</td>
<td>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.</td>
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<td>GEOL A490</td>
<td>Advanced Topics in Geology</td>
<td>1-4 CR</td>
<td>1-4 + 0</td>
<td>GEOL A221.</td>
<td>Special Fees</td>
<td>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.</td>
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<td>GEOL A492</td>
<td>Geology Seminar</td>
<td>1 CR</td>
<td>1 + 0</td>
<td>GEOL A221.</td>
<td>Special Fees</td>
<td>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.</td>
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<td>GEOL A495</td>
<td>Geology Internship</td>
<td>1-3 CR</td>
<td>1-3 + 0</td>
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<td>Registration Restrictions: Junior standing.</td>
<td>Field experience in an approved position with supervision and training in various agencies and businesses. Exposure to student work environment beyond the campus setting, to acquire essential practical skills and enhance self-confidence and career direction.</td>
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<td>GEOL A498</td>
<td>Student Research</td>
<td>1-3 CR</td>
<td>1-3 + 0</td>
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<td>Registration Restrictions: Faculty permission.</td>
<td>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.</td>
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<tr>
<td>GEOL A499</td>
<td>Senior Thesis</td>
<td>3 CR</td>
<td>0 + 9</td>
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<td>Registration Restrictions: Senior standing. Faculty permission.</td>
<td>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.</td>
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<tr>
<td>GEOL A665</td>
<td>Isotope Geochemistry</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>CHEM A106 and GEOL A360.</td>
<td>Special Fees</td>
<td>Prerequisites: GEOL A465. Special Fees. Principles and applications of radiogenic and stable isotopes with emphasis on applications in the hydrologic, earth, and ecosystem sciences. Focus on both traditional and environmental aspects of isotope geochemistry and biogeochemistry and some special applications to other fields of study such as anthropology, archaeology, and forensics. A class research project will include field sampling, sample analysis, and interpretation. Independent research project required.</td>
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**GER - GERMAN**

*Offered through the College of Arts and Sciences*
*Administration/Humanities Building (ADM) Suite 287, 786-4030*
*http://language.uaa.alaska.edu*

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<th>Course Code</th>
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<tr>
<td>GER A101</td>
<td>Elementary German I</td>
<td>4 CR</td>
<td>4 + 0</td>
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<td>Course Attributes: UAA GER Humanities Requirement.</td>
<td>Registration Restrictions: Course Attributes: UAA GER Humanities Requirement.</td>
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<td>Introduction for beginners with no prior knowledge of German. With the focus on oral communication, the course emphasizes listening comprehension, pronunciation, and everyday vocabulary. Students are also introduced to basic grammatical and sentence structures, to reading and writing the language, and to the culture of the German-speaking countries.</td>
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<tr>
<td>GER A102</td>
<td>Elementary German II</td>
<td>4 CR</td>
<td>4 + 0</td>
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<td>Special Fees</td>
<td>Registration Restrictions: Course Attributes: UAA GER Humanities Requirement. Continuation of GER 101, designed for students able to comprehend and initiate very basic survival conversations on everyday topics, read short texts and write simple paragraphs. Students gain confidence in asking and answering questions, learn to sustain modest conversations, increase their vocabulary, reading and writing skills, and knowledge of grammatical and sentence structures, and deepen their understanding of the German-speaking cultures.</td>
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<tr>
<td>GER A105</td>
<td>Conversational Skills Maintenance I</td>
<td>1 CR</td>
<td>0 + 2</td>
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<td>Registration Restrictions: Proficiency as after one semester of college-level or one year of high school study in German. Grade Mode: Pass/No Pass.</td>
<td>Registration Restrictions: Course Attributes: UAA GER Humanities Requirement.</td>
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<td>May be repeated once for credit. A maintenance and skills enhancement course at the elementary level, designed primarily to help students of German retain what they have learned. With the focus on oral communication, the course emphasizes speaking, listening comprehension, and vocabulary building.</td>
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<td>GER A201</td>
<td>Intermediate German I</td>
<td>4 CR</td>
<td>4 + 0</td>
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<td>Special Fees</td>
<td>Registration Restrictions: Course Attributes: UAA GER Humanities Requirement. Further development of students' listening, speaking, reading, and writing proficiency, with continued emphasis on purposeful communication. Students gain greater confidence in speaking, become more adept at creating with the language, and begin to sustain connected discourse. They are introduced to more sophisticated grammatical structures and to a wider range of current topics.</td>
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www.uaa.alaska.edu
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<tr>
<td>GER A202</td>
<td>Intermediate German II</td>
<td>4 CR</td>
<td>4 + 0</td>
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**GER A205** Conventional Skills Maintenance II 1 CR

Contact Hours: 0 + 2
Registration Restrictions: Four semesters of college German or four years of high school German.
Grade Mode: Pass/No Pass.
May be stacked with: GER A105 and GER A305.
Special Fees.
Special Note: May be repeated once for credit.

A maintenance and skills enhancement course for intermediate students of German, designed primarily to help them retain and solidify what they learned in Elementary German. With the focus on communication, the course emphasizes speaking, listening comprehension, and vocabulary building.

**GER A301** Advanced German I 4 CR

Contact Hours: 4 + 0
Registration Restrictions: Four semesters of college German or four years of high school German.
Special Fees.
Continued emphasis on developing students' listening, speaking, reading, and writing proficiency and cultural competency, aimed at effective communication and accompanied by the study of more complex and less common grammatical and stylistic structures. Students will study and discuss the formative events, forces, and personalities in the development of German culture.

**GER A302** Advanced German II 4 CR

Contact Hours: 4 + 0
Prerequisites: GER A301.
Special Fees.
Continuation of GER 301. Increased emphasis on developing students' speaking and writing proficiency, reading and analytical skills, and cultural competency. Aimed at effective communication and the ability to function in a German cultural context. Continued study and discussion of formative events, forces, and personalities in the development of German culture.

**GER A305** Conversational Skills Maintenance III 1 CR

Contact Hours: 0 + 2
Registration Restrictions: Proficiency as after four semesters of college-level or four years of high school study in German.
May be stacked with: GER A105 and GER A205.
Special Fees.
Special Note: May be repeated once for credit.

A maintenance and skills enhancement course at the advanced level, designed primarily to help students of German to retain and to consolidate what they have learned. With the focus on oral communication, the course emphasizes speaking, listening comprehension and vocabulary building.

**GER A310** Selected Topics in Advanced German 3 CR

Contact Hours: 3 + 0
Prerequisites: GER A202.
Special Fees.
Special Note: May be repeated for credit with a different subtitle.

An advanced course for students interested in conversation practice, writing skills, and cultural information about the German-speaking world. There will be a different topic each time the course is offered, e.g., Austria, Germany today, Switzerland, contemporary women, conversation and composition, current events, film, and the media. Conducted in German.

**GER A400** Selected Topics in German Literature 3 CR

Contact Hours: 3 + 0
Registration Restrictions: Three years of college German or equivalent.
Special Fees.
Special Note: Will be offered alternate semesters or years. May be repeated for credit if topic varies.

An advanced course for students interested in German literature with sufficient language proficiency to read and discuss assigned readings in German. Focus may be on periods, genres, individual authors, groups of authors, movements, works from different periods dealing with the same topics, or individual works. Conducted in German.

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**GIS - GEOGRAPHIC INFORMATION SYSTEMS**

Offered through the School of Engineering
Engineering Building (ENGR), Room 201, 786-1900
www.engr.uaa.alaska.edu

**GIS A123** Introduction to Geographic Information Systems (GIS) 1 CR

Contact Hours: 1 + 5
Registration Restrictions: Instructor approval.
Grade Mode: Pass/No Pass.
Special Fees.
Introduces key aspects of Geographic Information Systems (GIS). Basic data structures and functionalities will be explored. Introduction to software interface. Discussion of maps, coordinate systems, and metadata. Students will gain a brief working knowledge of a GIS.

**GIS A124** Introduction to GIS and Remote Sensing 1 CR

Contact Hours: 1 + 5
Registration Restrictions: Instructor approval.
Grade Mode: Pass/No Pass.
Special Fees.
Introduces the integration of Geographic Information Systems (GIS) and Remote Sensing. Image data will be imported into a GIS and analytical applications will be explored.

**GIS A125** GPS for GIS 1 CR

Contact Hours: 1 + 0
Registration Restrictions: Instructor approval.
Grade Mode: Pass/No Pass.
Special Fees.
Introduces the utility of Global Positioning Systems (GPS) and GIS data loggers for the collection of accurate locations and other data during field operations, and the downloading and use of the GPS data in a Geographic Information System (GIS).

**GIS A126** Introduction to ArcIMS Maps 1 CR

Contact Hours: 1 + 5
Registration Restrictions: Instructor approval.
Grade Mode: Pass/No Pass.
Special Fees.
Introduces key aspects for manipulating ArcIMS web-based maps. Functionalities to be covered include queries, symbolization, adding layers, and buffering.

**GIS A127** Introduction to Metadata for GIS 1 CR

Contact Hours: 1 + 0
Registration Restrictions: Instructor approval.
Grade Mode: Pass/No Pass.
Special Fees.
Introduces key aspects of GIS metadata, or the "data about data." Topics include reading and writing metadata and understanding metadata standards and tools.

**GIS A268** Elements of Geographic Information Systems (GIS) 4 CR

Contact Hours: 3 + 2
Registration Restrictions: Computer competency (see admission requirements) or instructor approval.
Special Fees.
Offered fall and spring semesters. Introduction to basic concepts of GIS including common uses and technical concepts such as functionalities, data structures (raster and vector), data sources, metadata, databases, coordinate systems, geocoding, and spatial analysis. Investigation of system implementation, management, accuracy, and legal issues. Application of GIS analysis functions and standard query languages. Application of GIS to real-world problems.

**GIS A295** Internship in Geographic Information Systems 1 CR

Contact Hours: 0 + 15
Prerequisites: GIS A268 with minimum grade of C.
Grade Mode: Pass/No Pass.
Special Fees.
Entry-level professional experience in geographic information systems through an internship with a local employer. Typical entry-level tasks to be conducted for the employer include: data entry, data coding and cleaning, importing and exporting data, creation of annotation, and map compilation.

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www.uaa.alaska.edu
COURSE DESCRIPTIONS

GIS A366 Spatial Information Analysis and Modeling 3 CR
Contact Hours: 2 + 2
Prerequisites: GIS A268 with minimum grade of C.

GIS A367 GIS and Remote Sensing 3 CR
Contact Hours: 2 + 2
Prerequisites: GEO A167 with minimum grade of C and GIS A268 with minimum grade of C.
Special Fees.
- Develops the students’ ability to use remotely sensed data within the framework of GIS. Covers basic physics theory required for the use of remotely sensing technology. Includes practical applications of the science using remotely sensed data, including the use of industry standard GIS software packages.

GIS A369 Land Information Systems 3 CR
Contact Hours: 2 + 2
Prerequisites: GIS A268 with minimum grade of C.
- History and philosophy of land, surveying, and land information systems in North America and other regions. Land data systems. Overview of methods for describing and interpreting land descriptions as well as data acquisition, methods, design, and applications for LIS. Issues of accuracy assessment, public lands, and information.

GIS A370 GIS and Remote Sensing for Natural Resources 3 CR
Contact Hours: 2 + 2
Prerequisites: GEO A167 with minimum grade of C and GIS A367 with minimum grade of C.
- 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, groundtruthing, GPS, and databases, will be combined into a GIS and evaluated with image analysis software to explore management and land use planning strategies. Environmental impact assessments, environmental modeling, and rapid ecological assessment (REA) in decision making for natural resource planning and management.

GIS A375 GIS and Public Health 3 CR
Contact Hours: 2 + 2
Prerequisites: GIS A268 with minimum grade of C.
Special Fees.
- Examines the use of geographic information systems (GIS) in the analysis of public health data. Students will develop GIS and cartographic skills through lectures, class work, and case studies, and specifically learn GIS operations that are essential in public health investigations and research.

GIS A433 GIS and the Marine Environment 3 CR
Contact Hours: 2 + 2
Prerequisites: GIS A268 with minimum grade of C and GIS A366 with minimum grade of C.
- Investigation and integration of the physical, biological, political, and cultural aspects of the oceans, seas, and coastal zones, which comprise over 70% of the Earth’s surface. The essential processes, theories, and information necessary to apply Geomatics technologies to the seas. The application of Geographic Information Systems (GIS) mapping and analyses to marine environments.

GIS A458 Design and Management of Spatial Data 3 CR
Contact Hours: 2 + 2
Prerequisites: GIS A366 with minimum grade of C.
Spatial database system philosophy and concepts including decision making criteria, design, planning, implementation, and management. Discussion of spatial data standards, legal issues, and national spatial data policies. Project implementation and management.

GIS A460 GIS Senior Project 3 CR
Contact Hours: 0 + 9
Registration Restrictions: Students seeking a Bachelor of Science in Geomatics need senior standing in Geomatics program with all 300- level courses completed or instructor approval. Students seeking a Certificate in GIS must complete all core classes or instructor approval. Special Fees.
- Senior project in GIS (geographic information systems). Research, design, data compilation, analyses, and mapping. Professional standards and ethical concerns for GIS professionals.

GIS A468 Integration of Geomatic Technologies 3 CR
Contact Hours: 2 + 2
Prerequisites: GIS A268 with minimum grade of C and GEO A167 with minimum grade of C.
Integration of geomatic technologies: Global Positioning Systems (GPS), remote sensing, digital photogrammetry, and image processing for data acquisition and compilation of digital databases for Geographic Information Systems, mapping, and other special studies.

GIS A470 GIS for Facility Management and Transportation Systems 3 CR
Contact Hours: 2 + 2
Prerequisites: GIS A366 with minimum grade of C.
- Facility management using GIS including dispatching, inventory, and maintenance. System design for industry. Data collection techniques and integration. GIS facility management applications including utilities (water, waste water, electricity, gas, telephone), airports, military installations, transportation systems, IT systems, property, and other building systems.

GIS A490 Selected Advanced Topics in GIS 1-6 CR
Contact Hours: 1-6 + 0
Registration Restrictions: Instructor approval. Special Fees.
- Advanced theoretical or practical concepts in GIS. Specific course content is determined by student needs, program needs, and developments in technology.

GIS A495 Internship in Geographic Information Systems II 3 CR
Contact Hours: 0 + 15
Prerequisites: GIS A268 with minimum grade of C and GIS A366 with minimum grade of C.
- Grade Mode: Pass/No Pass. Special Fees.
- Advanced professional experience in geographic information systems through an internship with a local employer. Typical tasks to be conducted for employer include: data entry, data coding and cleaning, importing and exporting data, creation of annotation, georeferencing, rubbersheeting, spatial analyses, documentation of metadata, and map compilation.

GUID - GUIDANCE
Offered through the Advising and Testing Center
University Center (UC), Room 112, 786-4500
www.uaa.alaska.edu/advising-testing

GUID A101 Introduction to Peer Advising 3 CR
Contact Hours: 3 + 0
- Introduction to the peer advising model with emphasis on the information dissemination and paraprofessional counseling aspects. This course is the training class for the peer advising program.

GUID A104 Student Association Leadership I 1-3 CR
Contact Hours: 2 + 2
Survey of student leadership topics including techniques of organizational planning, management, program planning, budgeting, group dynamics, communication and leadership theories and techniques. Application of techniques through program/service projects utilizing the student association as a laboratory.

GUID A150 Survival Skills for College Students 3 CR
Contact Hours: 3 + 0
Special Fees.
- Designed to increase student skills needed to reach educational objectives. Includes memory techniques, time management, library skills, lecture notes, goal setting and test taking. Techniques, skills, hints, aids, resources, ideas, methods and suggestions for student survival in college.

GUID A150A Survival Skills/College 1 CR
Contact Hours: 1 + 0
Grade Mode: Pass/No Pass. Offered only at Kenai Peninsula College.
Participation in a variety of activities including, reading, notetaking and follow-up, large and small group discussions and activities, short written assignments and/or quizzes.
HCA - Health Care Assisting

Offered through Kenai Peninsula College
34820 College Drive, Soldotna, Alaska 99669, (907-262-0300
www.kpc.alaska.edu

HCA A103 Personal Care Attendant 4 CR
Contact Hours: 2.5 + 3
Special Fees.
Special Note: Current immunizations, TB testing, and current CPR/First Aid certification are required for completion of the course.
Special Note: Upon successful completion, students are eligible to apply for a State of Alaska Personal Care Attendant (PCA) exam. Students successfully completing the exam are awarded a state-provided certification of completion for PCA training.
Introduces basic personal care assisting skills and knowledge. Prepares entry-level health care workers to provide care in homes and facilities, and to become efficient health care team members.

HCA A105 Certified Nurse Aide 6-8 CR
Contact Hours: 4 + 6-8
Registration Restrictions: English placement: PRPE A086 or higher; Math placement: MATH A055 or higher.
Special Fees.
Prepares the student to be an Alaska State Certified Nurse Aide. Includes CPR training, medical terminology, basic anatomy, first aid and skills labs. Students receive on-site clinical training at local health care facilities.

HIST - History

Offered through the College of Arts and Sciences Administration/Humanities Building (ADM), Room 147, 786-1539
www.uaa.alaska.edu/history

HIST A101 Western Civilization I 3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Humanities Requirement.
A survey of the origins of Western Civilization in the ancient Near East and subsequent development through 1650. The major political, social, economic, and intellectual developments 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, and intellectual characteristics of Western Society 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 survey of the discovery and exploration, colonial period, American Revolution, the Constitution, federal period, Jeffersonian-Jacksonian Democracy, the West, Sectionalism, Slavery and Abolitionism, American Culture, and Civil War.

HIST A132 History of United States II 3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Humanities Requirement.

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 beginnings in ancient Near East through 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 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 1860 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
May be stacked with: HIST A444.
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 A Gold Rush Era: Alaska and the Yukon 3 CR
Contact Hours: 3 + 0
Western United States, Canada, and Alaska will be studied in detail to determine their significance as a part of the overall evolution of the Yukon-Alaska gold rush during the period of 1846-1920. California, Oregon, Washington, and British Columbia stampeded activities will be considered as an introduction leading to culminating the gold rush era of the Yukon and Alaska.

HIST A261 Russian History 3 CR
Contact Hours: 3 + 0
Origins of early (Kievan) Russia, Mongol Era, and rise of Moscow. Modern Russia to 20th century.

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 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 Regime on the eve of Revolution.
COURSE DESCRIPTIONS

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 globalism - 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 and HIST A231.
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 transformation under Deng Xiaoping from 1949 through the 1990s. The principal focus will be on the constant reinvention of Chinese communism to face perceived challenges in China's modernization, sometimes with spectacular results and at other times with disastrous consequences.

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 GEOG, 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 philosophical roots.

HIST A330 Russian 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 geopolitical interests in the region.

HIST A341 History of Alaska 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Junior standing.
May be stacked with: HIST A641.
Course Attributes: UAA GER Humanities Requirement.
Introduction to background of Alaska and its relationship to America and the world, including anthropological aspects of Native groups, land bridge theory, Russian discovery, occupation and management, orthodoxy, purchase, American organization and development, gold rushes, congressional definition and federalism, Native claims history, statehood, oil and the disposition of Alaska lands.

HIST A345 Across This Land: The Historical Geography of North America 3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A131.
Crosslisted with: GEOG A345 and INTL A345.
Special Note: GEOG A205 recommended.
Explores the European settlement of North America (U.S. and Canada), the impact of geography on this settlement, and the imprint of culture and political process on the land. A significant part of the course compares and contrasts the American and Canadian geographic experience and the creation of distinct regional cultures.

HIST A354 Eyes On the Prize: America's Civil Rights Movement 3 CR
Contact Hours: 3 + 0
Telecourse based on the much acclaimed PBS/blackside history of the modern Civil Rights Movement. Eyes I ("America's civil rights years") consists of six one-hour programs from the landmark school desegregation case, Brown v. Board of Education, to the student sit-ins and voter registration drives at Selma and elsewhere. Eyes II ("America at the racial crossroads") consists of eight one-hour programs from the rioting in Watts and Detroit to the new racial politics of the 1980's. Covers the years 1954-1985.

HIST A355 Major Themes in US History 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Sophomore standing.
Time, continuity, and change in American history from the Colonial period to the 21st Century with an emphasis on case studies. A speaking and writing intensive course.

HIST A360 Modern Economic History 3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A102 and ECON A201.
Crosslisted with: ECON A360.
A survey of the economic history of the modern era (1600 to present). Emphasis will be placed on Western Europe and the United States. Additional coverage will be given to Japan, the Soviet Union and one Third World Nation.

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 A381 American Women's History to 1870 3 CR
Contact Hours: 3 + 0
Prerequisites: [HIST A131 or HIST A102] and HIST A314.
Explores the nature of American women's history and how women's lives in North America have changed over time. Major topics include the impact of the economy, family, sexuality, the community, and politics from the 17th century through the Civil War, and the rise of the women's movement.

HIST A382 American Women's History Since 1870 3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A132.
Explores the nature of American women's history from the Civil War to the present focusing on the political, economic, and social conditions of the past one hundred years which have shaped women's lives in the U.S. Readings will center on autobiographical sources as well as scholarly articles and books. The class will be run as a seminar with introductory lectures or comments for each weekly topic.

HIST A390A Themes in World History 3 CR
Contact Hours: 3 + 0
Prerequisites: GEOG A101 and [HIST A101 or HIST A102 or HIST A121 or HIST A122 or HIST A131 or HIST A132].
Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses and junior standing.
Course Attributes: UAA GER Integrative Capstone.
Special Note: May be repeated once for credit with a change of subtitle.
Provides students with opportunities to analyze patterns of meaning in the accumulated record of the human experience from prehistory to the present, contemplated on the most inclusive scale, that of the entire world. The course is comparative and interdisciplinary.

HIST A401 The History of Warfare 3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A101 and HIST A102.
A study of the history of warfare from the classical age to the present. The following topics are examined: the relationship between war and social, political and economic organization; the evolution of weapons systems; the growth of modern professional and mass armies; the "laws" of war; the development of modern strategic and tactical thought; and the impact of the atomic age.
HIST A402 The Second World War 3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A102.
The origins of the war in Europe and Asia. The grand strategies of the belligerents, the principal military operations, the relationship between science and war, and the mobilization of societies and economies for total war. Wartime diplomacy and the postwar settlements are also emphasized.

HIST A411 History of Modern Germany II 3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A102.
The history of Germany from World War I to the present. The Weimar Republic, the Third Reich, World War II, occupation, and the origin, development, and relationship of the two existing German states will be the basic units studied.

HIST A415 Anglo-Saxons and Vikings: History & Geography in Early Medieval North Atlantic 3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A101.
Crosslisted with: GEOG A415.
Special Note: GEOG A205 recommended.
A study of Anglo-Saxon and Viking society, territorial expansion, and settlement from the 7th-11th centuries. Focus on historical impacts on the human landscape, political arrangement, and the effects of climate and environmental modification on population growth and migration.

HIST A418 Tudor and Stuart England 3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A101.
The history of England from accession of Henry VII down to the death of Anne. Major topics are the development of modern instruments of government, the English Reformation, and the ensuing religious struggle, the Civil War and Revolution, and the establishment of parliamentary government.

HIST A423 Medieval Russian History 3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A101.
Explores the socio-economic, political, and cultural foundations of Medieval Russia beginning with ancient Slavic settlements and foreign invasions and concluding with the creation of the Romanov dynasty in the 17th century. Major topics include the impact of foreign invasions (e.g. Mongols), the influence of the Byzantine Empire, the rise of Muscovy, and the internal dynamics of Muscovite society.

HIST A424 Imperial Russian History 3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A101 and HIST A102.
Explores the socio-economic, political, and cultural foundations of imperial Russia from Peter the Great and concludes with the February Revolution of 1917. Major topics include the nature of autocracy, the role of serfdom, and the roots of Russia's revolutionary tradition.

HIST A425 Soviet Union 3 CR
Contact Hours: 3 + 0
Russian history from the origins of the Bolshevik Revolution and concentrating on Lenin and his contribution to Marxism; the struggle between Trotsky and Stalin; Stalinization (purges and collectivization of agriculture); World War II and the Cold War; detente; and the arms race.

HIST A427 Post-Soviet Culture and Society 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Completion of all Tier I GER (basic college-level skills) courses; and Junior standing. Prerequisite HIST A102 or any RUSS prefix course. Crosslisted with: RUSS A427.
Course Attributes: UAA GER Integrative Capstone.
Interdisciplinary examination and analysis of contemporary Russian culture and society. Explores major themes in post-Soviet society including shifting identities and changing social, cultural, political, and economic realities, and examines how these are expressed in a variety of contemporary sources. Conducted in English.

HIST A431 Colonies and Revolution 3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A131 and HIST A132.
Settlement of British America, social, political, economic and ideological development of American colonies, prelude to revolution, the American revolution, drafting of the Constitution, and the Federalist Era.

HIST A434 Early National Period, 1800-1850 3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A131 and HIST A132.
Jeffersonian policies and ideology; struggle with England and the War of 1812; transcontinental treaties and the Monroe Doctrine; The Age of Jackson and Westward Expansion; the Era of Reform; and the Mexican War.

HIST A440 The American West Since 1850 3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A131 and HIST A132.
Study of major themes in Western American history, including economic, social and ideological change, and the historiography of the American West.

HIST A444 Advanced Studies in Film History 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Junior standing.
May be stacked with: HIST A244.
Special Note: May be repeated once for credit with a change of subtitle. Only 3 credits of HIST A444 may be applied to either a major or minor in history.
Advanced studies in selected topics in motion picture history. Topics range from genre studies (musicals, comedies, science fiction) to special areas of film history (animation, special effects, major stars and studios, significant directors). Subtitle varies.

HIST A451 Populists and Progressives: America, 1877-1917 3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A132.
The development of the reform state, from the rise of the People's Party to the progressive era presidencies of Roosevelt, Taft, and Wilson.

HIST A452 America in War and Peace, 1917-1945 3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A132.
An examination of Americans responding to the crises of war and depression.

HIST A453 America Since 1945 3 CR
Contact Hours: 3 + 0
May be stacked with: HIST A653.
Topics will include the growth of presidential power; McCarthyism, the FBI, and civil liberties; the rise of the national security state; civil rights and antiwar movements of the 1960s and Watergate.

HIST A477 Senior Seminar 3 CR
Contact Hours: 3 + 0
A course in research methodology intended for history majors and others, normally taken in the senior year of study. Students will prepare a major research paper, utilizing primary research material under the direction of department faculty.

HIST A478 Studies in Early American History 3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A131.
Special Note: May be repeated for credit with a different subtitle.
An examination of selected fundamental topics in early American history. Areas will be studied as student need and faculty expertise indicate. Subtitle varies.

HIST A479 Studies in Modern American History 3 CR
Contact Hours: 3 + 0
Prerequisites: HIST A131 and HIST A132.
Special Note: May be repeated for credit with a different subtitle.
This course is intended to provide an intensive examination of selected fundamental topics in 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 Note: May be repeated for credit with a change of subtitle.
This course is a study of selected important topics in modern European history. These include World War I, European Fascism and National Socialism, European Marxism, and World War II. The course will be offered as student need and faculty expertise indicate. Subtitle varies.

HIST A641 Studies in Alaska History 3 CR
Contact Hours: 3 + 0
May be stacked with: HIST A341.
Special Note: Not available for credit to students who have taken HIST A341.
Advanced study of various topics in Alaska history, including Russian exploration, occupation and development, social conditions in the Russian period, the U.S. Purchase, American development and economic relationships, political development, Native issues, environmental history, and changing perceptions.
COURSE DESCRIPTIONS

HIST A653  The United States, 1945 to the Present 3 CR
Contact Hours: 3 + 0
May be stacked with: HIST A453.
Special Note: Not available for credit to students who have taken HIST A453.
Advanced study of selected topics in the political and cultural history of America since the Second World War.

HIST A690  Studies in History 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing.
Special Note: May be repeated for credit with a change in subtitle.
An examination of an aspect of history from the perspective of a major field in the discipline.

HLTH - HEALTH
Offered through the Community & Technical College
Allied Health Sciences Building (AHS), Room 161, 786-6928
www.uaa.alaska.edu/ctc/alliedhealth

HLTH A101  Introduction to Health Occupations 3 CR
Contact Hours: 2 + 2
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.

HLTH A309  Interdisciplinary Team-Based Research 3 CR
Contact Hours: 3 + 0
Special Fees.
Contact Hours: 1 + 6
Registration Restrictions: Registration limited to students admitted to the Forty-Ninth State Fellows Program, and also open to students enrolled in the University Honors College, who have permission to register from the University Honors College.
Examines the principles and methods of conducting research in a collaborative, team-based environment. Under the supervision of the instructor, students from different disciplines will be placed into teams that must work together to solve a complex systems problem requiring collaboration across disciplines. The instructor will guide the teams to formulate a research plan, illustrate how to perform data analysis and experimental methodology, and provide guidance on effective team management. May include guest lecturers for different application areas.

HNRS - HONORS
Offered through the University Honors College
Eduard and Cathryn Rasmussen Hall (RH), Room 119, 786-1086
www.uaa.alaska.edu/honors

HNRS A191  Freshman Honors Tutorial 1 CR
Contact Hours: 1 + 0
Registration Restrictions: Registration limited to students admitted to the Forty-Ninth State Fellows Program, and also open to students enrolled in the University Honors College who have permission to register from the University Honors College.
Special Note: Subtitle varies; may be repeated once for credit with a different subtitle. Concurrent enrollment is required in the associated course whose title is the same as the subtitle of HNRS A191.
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 future and of the student's role in it.

HNRS A192  Honors Seminar: Enduring Books 3 CR
Contact Hours: 3 + 0
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.
An honors seminar focusing on the directed reading of a single book of enduring significance.

HNRS A291  Sophomore Honors Tutorial 1 CR
Contact Hours: 1 + 0
Prerequisites: HNRS A191 and HNRS A192.
Registration Restrictions: Registration limited to students admitted to the Forty-Ninth State Fellows Program, and also open to students enrolled in the University Honors College who have permission to register from the University Honors College.
Special Note: Subtitle varies; may be repeated once for credit with a different subtitle. Concurrent enrollment is required in the associated course whose title is the same as the subtitle of HNRS A291.
Offers sophomore-level intensive reading, writing, and discussion relating to the content of another course with which it is associated; the associated course varies from term to term. Students receive additional instruction in examining arguments in the readings, demonstrating their grasp of questions in expository writing, and using these skills in class discussion.

HNRS A292  Honors Seminar in Social Science 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Registration limited to students admitted to the University Honors College, and to students who have permission to register from the University Honors College.
Special Note: This class 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 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 A309  Interdisciplinary Team-Based Research 3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A200 with minimum grade of C or MATH A272 with minimum grade of C.
Registration Restrictions: Registration limited to students admitted to the University Honors College, or to students who obtain permission to register from the University Honors College.
Examines selected topics from a social science perspective. Exposes students to a broad range of social issues, and helps them 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 A391  Junior Honors Tutorial 1 CR
Contact Hours: 1 + 0
Prerequisites: HNRS A291 and HNRS A292.
Registration Restrictions: Registration limited to students admitted to the Forty-Ninth State Fellows Program, and also open to students enrolled in the University Honors College who have permission to register from the University Honors College.
Special Note: Subtitle varies. Concurrent registration is required in the associated course whose title is the same as the subtitle of HNRS A391.
Offers junior-level intensive reading, writing, and discussion relating to the content of another course with which it is associated; the associated course varies from term to term. Students receive additional instruction in analyzing theoretical approaches in the readings, developing and arguing for a thesis in expository writing, and applying critical thinking to class discussion.

HNRS A392  Honors Thesis Seminar 1 CR
Contact Hours: 1 + 0
Prerequisites: HNRS A192 and HNRS A292 and HNRS A310.
Registration Restrictions: Registration limited to students admitted to the University Honors College, and to students who have permission to register from the University Honors College.
In-depth application of discipline research skills to a particular problem. Develops an understanding of research problems and research methods used by different disciplines.

HNRS 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.
Examines advanced study of selected topics in the political and cultural history of America since the Second World War.
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.
HS A470 Medical Sociology 3 CR
Contact Hours: 3 + 0
Prerequisites: SOC A101.
Crosslisted with: SOC A370.
A historical and contemporary overview of selected social, political, and economic factors that influence the provision of health care in America. Focuses on the relationship between health care and race, sex, social stratification, and geographical location. Brief international comparisons with alternative for-profit and not-for-profit national health care systems.

HS A480 Contemporary Issues in Addiction Studies 1-3 CR
Contact Hours: 1-3 + 0
Prerequisites: HS A350.
Special Fees.
Covers topics that are consistent with contemporary issues related to the field of addiction studies. Subjects focus on such areas as: AIDS and substance abuse, ethics, and drug testing. Other topics will reflect recent concerns in the field.

HS A482 Drug Actions of Psychoactive Drugs 3 CR
Contact Hours: 3 + 0
Prerequisites: HS A350.
An advanced level course designed to assist substance abuse and related health care professionals to understand the origin, nature, chemistry, effects, and uses of psychoactive drugs on human behavior. Content will focus on the classification, administration, distribution, and the biochemical and physical effects of psychoactive chemicals, with an emphasis on the pharmacology of medications used to treat substance abuse-related disorders.

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.

HS A605 Environmental and Occupational Health 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Admission to MPH Program or faculty permission.
Covers topics that are consistent with contemporary issues related to the field of occupational health and safety. Incorporates behavioral and social science concepts in the analysis of a variety of public health issues related to the workplace, particularly in Alaska, and the northern regions. Also presents how socioeconomic status, culture, race/ethnicity, age, and gender relate to health and disease outcomes and the quality of life. Students gain experience in problem identification, assessment, intervention, and evaluation through analysis of behavioral, cultural, and attitudinal factors.

HS A610 Environmental and Occupational Health 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Admission to MPH Program or faculty permission.
Provides an overview of environmental factors including biological, physical, chemical, and occupational factors that affect the health of a community. Combines an overview of the interrelatedness of the two.

HS A615 Health Services Administration 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Admission to MPH Program or faculty permission.
Provides students with the basic knowledge necessary to understand the planning, organization, administration, management, evaluation, and policy of health programs in the United States and, particularly, the state of Alaska. Addresses issues such as the current provision of hospital and ambulatory care, how health care is financed, and the politics of health care delivery.
HS A625  Biostatistics for Health Professionals 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing or instructor permission. Undergraduate statistics course with a grade of C or better.
Crosstlisted 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.

HS A625L  Biostatistics for Health Professionals Lab 1 CR
Contact Hours: 0 + 3
Prerequisites: (HS A625 or concurrent enrollment).
Registration Restrictions: Graduate standing.
Grade Mode: Pass/No Pass.
Crosstlisted with: NS A625L.
Elective computer laboratory to teach statistical computer packages to use in performing statistical data analysis.

HS A626  Principles of Epidemiology 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing or faculty permission; Provide documentation indicating a grade of 2.00 (“C” or higher) in an introductory statistics course which covers descriptive and inferential statistics.
Crosstlisted with: NS A626.
Special Fees.
Introduces students to the principles and methods of epidemiological investigation of common national and state public health problems, ranging from infectious to noninfectious diseases to social, behavioral, and environmental concerns. Discusses different types of epidemiological study design, and explores past and present trends in epidemiology, giving special attention to epidemiological issues in Alaska and the northern regions. Clinical application within health care administration, nursing, social work, and public health are emphasized.

HS A628  Program Evaluation 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Admission to the MSW program, full-time student standing, and successful completion of year one of the MSW program, or advanced standing in Social Work, Health Sciences or related discipline. Prior research courses or research experience desirable.
Crosstlisted with: SWK A628.
Special Fees.
Provide knowledge of purpose, design, and implementation of social services program evaluation process. Develop ability to conceptualize, and to carry out an actual program evaluation relative to the student's practicum placement. Covers both formative and summative evaluation processes. Includes necessity for evaluation and issues of cultural competence of evaluators.

HS A629  Public Health Research Tools and Methods 4 CR
Contact Hours: 3 + 2
Prerequisites: HS A625 and HS A626.
Registration Restrictions: Admission to MPH Program or faculty permission.
Special Fees.
Introduces students to the basic principles and methods of public health research from its conception to its analysis and evaluation. Discusses concepts of epidemiology including bias, control of extraneous variables, confounding, and validity. Students will complete a UAA-approved Human Subjects Research Education course and receive a certificate of completion. The complementing lab session of the course gives students a practical hands-on experience with a computer statistical program such as Epilnfo.

HS A630  Public Health Emergencies and Disasters 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Admission to MPH Program or faculty permission.
Special Fees.
Explores public health issues concerning bioterrorism, war, and natural and human-made disasters and emergencies in Alaska, the nation, and the world. Includes effective public health interventions during such emergencies—from conducting a public health needs assessment to establishing basic health services. Political, legal, and ethical challenges of public health emergencies are addressed. An opportunity to explore individual topics of interest is provided through individual assignments.

HS A699  Public Health Thesis 1-5 CR
Contact Hours: 0 + 3-15
Registration Restrictions: Admission to MPH Program and academic advisor approval.
Prerequisites: (HS A625 or concurrent enrollment).
Special Fees.
The thesis 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 project 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 knowledge and ability to receive the Master's degree.

HUM - HUMANITIES
Offered through the College of Arts and Sciences
Social Sciences Building (SSB), Room 343, (907) 786-4858
http://liberalstudies.uaa.alaska.edu

HUM A205  Fridays Ten 'Til Two 1 CR
Contact Hours: 1 + 0
May be stacked with: EAH A049.
Special Note: See schedule for current title offering.
Interdisciplinary program of lectures and discussions led by faculty and community leaders.

HUM A211  Introduction to Humanities I 3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A111.
Course Attributes: UAA GER Humanities Requirement.
Offered as Demand Warrants.
Integrated exploration of fundamental principles of literature, music, philosophy, and visual arts.

HUM A212  Introduction to Humanities II 3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A111.
Course Attributes: UAA GER Humanities Requirement.
Offered as Demand Warrants.
A study of a given historical period or periods with reference to art, literature, philosophy, and music.

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 differ, 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.

HUM A230  Introduction to Folklore 3 CR
Contact Hours: 3 + 0
Introduces history, central themes, genres and methodology of contemporary folklore studies emphasizing folklore as a discipline. Focuses on the interplay of community, creativity, and symbolic communication in human society by looking at tradition, landscape, ethnicity, material culture, vernacular architecture, oral history, belief, song and performance.

HUM A250  Myths and Contemporary Culture 3 CR
Contact Hours: 3 + 0
Prerequisites: ENGL A111 and COMM A111.
Course Attributes: UAA GER Humanities Requirement.
Offered as Demand Warrants.
Survey of the origin, function, and history of myths which affect contemporary culture. From the earliest Sumerian epic to Joseph Campbell’s “The hero with a thousand faces,” myths will be traced through their transformations in literature, sculpture, music, painting, and folk tales.
HUMS - HUMAN SERVICES

Offered through the College of Health & Social Welfare
Beatrice McDonald Hall (BMH), Room 106, 786-6437
http://hums.uaa.alaska.edu

HUMS A101 Introduction to Human Services 3 CR
Contact Hours: 3 + 0
Special Fees.
Offered fall and spring semesters.
Overview of human services. Includes traditional and contemporary helping approaches, values, and professional roles of human service workers. Covers human service consumers, their problems and functioning, helping systems and strategies, environmental change processes, and legal and ethical issues.

HUMS A106 Introduction to Social Welfare 3 CR
Contact Hours: 3 + 0
Prerequisites: SOC A101.
Crosslisted with: SWK A106.
Course Attributes: UAA GER Social Sciences Requirement.
Offered fall and spring semesters.
Analyzes social inequality and the American social welfare system. Traces historical development of government response to social inequality. Explores historical and persisting dilemmas—ethical, political, social and economic—explicit and implicit in social welfare provisioning. Assists in understanding of social welfare problems and their solutions.

HUMS A121 Advocating for Victims of Domestic Violence and Sexual Assault 3 CR
Contact Hours: 3 + 0
Crosslisted with: SWK A121.
Offered only at Matanuska-Susitna College.
Focuses on developing the skills and knowledge needed to be an effective advocate for victims of domestic violence and sexual assault. Provides historical perspective, identifies physical, sexual and emotional abuse that defines battering. Explains cycle of violence, power and control issues and why women stay in abusive relationships. Identifies five stages of living without violence (denial, self-blame, help seeking, ambivalence and living violence free lives). Discusses ways of helping victims become survivors.

HUMS A122 Substance Abuse as a Contemporary Problem 3 CR
Contact Hours: 3 + 0
Introduction to current issues in addictions with emphasis on understanding alcohol and other drug use in historical, social, cultural, legal, and public health/policy contexts.

HUMS A123 Public Education and Prevention in Substance Abuse 3 CR
Contact Hours: 3 + 0
Special Fees.
Offered spring semesters.
Use of community organization knowledge and skills for development of educational and preventive programs in substance abuse.

HUMS A124 Introduction to Physiology and Pharmacology of Substance Abuse 3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A111.
Introduction to basic knowledge about psychopharmacological properties and effects of psychoactive substances. Focus will be given to understanding the relationship between infectious diseases and substance use/abuse.

HUMS A153 Human Relations 3 CR
Contact Hours: 3 + 0
Crosslisted with: PSY A153.
Special Fees.
A survey of human relations to include communication, problem solving, interaction, relationship, choice and change skills.

HUMS A155 Human Relations in the Workplace 3 CR
Contact Hours: 3 + 0
Special Fees.
A survey of communication, problem solving and interaction skills as applied to the world of work.

HUMS A223 Introduction to Paraprofessional Counseling I 3 CR
Contact Hours: 3 + 0
Special Fees.
Offered fall and spring semesters.
Focuses on systematic approach to effective helping and helping skills which fall into the following skill categories: skills for understanding, skills for comfort and crisis intervention, and skills for positive action.
HUMS A324 Introduction to Paraprofessional Counseling II 3 CR
Contact Hours: 3 + 0
Prerequisites: HUMS A223.
Special Fees.
Offered fall and spring semesters.
Focuses on 11 major paraprofessional counseling skill clusters. Course emphasis will be performance in a direct service context.

HUMS A333 Alternative Dispute Resolution 3 CR
Contact Hours: 3 + 0
Prerequisites: [HUMS A223 or PSY A223] and [HUMS A324 or PSY A324].
Special Fees.
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 Fees.
Offered fall semesters.
Examines perspectives on masculinity and male sex role from historical, cultural and social-psychological perspectives with focus on males as clients in the human services setting. Examines the dynamics of male socialization and its influence on men in areas such as family and work, sexuality, and physical and mental health. Attention given to implications for prevention and human service delivery.

HUMS A390 Selected Topics in Human Service Practice .5-3 CR
Contact Hours: 5.5-4 + 0
Prerequisites: HUMS A101.
Provides the most current education in the area of Human Service practice. Specific topics will vary.

HUMS A412 Ethical Issues 3 CR
HUMS A412 in Human Services Practice 3 CR
Contact Hours: 3 + 0
Prerequisites: HUMS A101 and HUMS A223.
Special Fees.
Offered fall semesters.
Overview 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.
Offered spring semesters.
Focuses upon human service work in rural settings. Development of relevant knowledge and skills in the following areas: cultural issues, the addiction process and their impact on the individual, the family, and the community. Prevention and treatment of substance abuse strategies are presented focusing upon the human service worker as a change agent.

HUMS A416 Substance Abuse and the Older Adult 3 CR
Contact Hours: 3 + 0
Prerequisites: HUMS A124 and HUMS A223.
Addresses the issues related to aging adults who misuse alcohol, drugs, prescription medications, and other substances. Emphasis will be placed on identification, assessment, and intervention strategies.

HUMS A417 Substance Abuse Counseling for Human Service Professionals 3 CR
Contact Hours: 3 + 0
Prerequisites: HUMS A122 and HUMS A123 and HUMS A223.
Special Fees.
Offered fall semesters.
Develops advanced counseling theory and skills specifically required by human service professionals in substance abuse treatment. Includes client assessment, diagnosis, and treatment planning. Substance abuse treatment strategies will be compared and contrasted.

HUMS A424 Advanced Counseling for Human Service Professionals 3 CR
Contact Hours: 3 + 0
Prerequisites: HUMS A223 and HUMS A324.
Special Fees.
Offered spring semesters.
Comparative counseling systems and theories appropriate in the human service context are presented. Cognitive, affective, behavioral systems will be presented as approaches in a variety of human service settings including education, family and community, rehabilitation, and mental health.

HUMS A434 Group Facilitation for Human Service Professionals 3 CR
Contact Hours: 3 + 0
Prerequisites: HUMS A223 and HUMS A324.
Special Fees.
Advanced facilitation skills appropriate for group work to include goal setting, reciprocal task identification, and personal growth. Presents a theoretical case in both group dynamics and group leadership. Contemporary ethical and managerial issues are included.

HUMS A461 Crisis Intervention 3 CR
Contact Hours: 3 + 0
Prerequisites: HUMS A101 and HUMS A223 and HUMS A324.
Special Fees.
Offered fall semesters.
A systematic and social approach to causes and treatment of human crises. Covers characteristics of crises, intervention strategies, and specific techniques for resolving various crisis situations. Students are expected to research, analyze, and compare community crisis support services.

HUMS A495A Human Services Practicum III 3 CR
Contact Hours: 1 + 9
Prerequisites: HUMS A295A with minimum grade of C and HUMS A295B with minimum grade of C.
Registration Restrictions: Admission to Human Services Bachelor Degree Program. Special Fees.
Placement in an agency will provide students with advancing levels of responsibility in direct client services and/or specialized activities/projects while increasing their professional development. Weekly concurrent classroom seminars required.

HUMS A495B Human Services Practicum IV 3 CR
Contact Hours: 1 + 9
Prerequisites: HUMS A495A with minimum grade of C.
Registration Restrictions: Admission to Bachelor of Human Services Program. Special Fees.
Building on the HUMS A495A agency placement, students will have advanced levels of responsibility for providing direct client services and/or special projects or activities in the agency, while further developing professional skills and emphasizing an increasing independence. Concurrent weekly classroom seminar is required.

ID - INTERIOR DESIGN
Offered through the College of Arts and Sciences
Fine Arts Building (ARTS), Room 302, 786-1783
http://art.uaa.alaska.edu
ID A141 Interior Design 3 CR
Contact Hours: 3 + 0
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.
INTL - INTERNATIONAL STUDIES
Offered through the College of Arts and Sciences
Social Sciences Building (SSB), Room 359, 786-4848
www.uaa.alaska.edu/intl

ITAL - ITALIAN
Offered through the College of Arts and Sciences
Administration/Humanities Building (ADM), Suite 287, 786-4030
http://language.uaa.alaska.edu

ITAL A101 Elementary Italian I 4 CR
Contact Hours: 4 + 0
Course Attributes: UAA GER Humanities Requirement.
Special Fees.
Offered alternate fall semesters if demand warrants.
Introduction to Italian for beginners. Focus on oral communication, emphasizing listening comprehension, pronunciation, and everyday vocabulary. Introduction to basic grammatical and sentence structures, reading and writing, and Italian culture.

JPC - JOURNALISM & PUBLIC COMMUNICATIONS
Offered through the College of Arts and Sciences
Professional Studies Building (PSB), Room 203, 786-4180
http://jpc.uaa.alaska.edu

JPC A101 Media and Society 3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Social Sciences Requirement.
Describes the evolution of newspapers, magazines, photography, film, radio, television, Internet, and development of telecommunications and information technologies in the last 100 years. Emphasis on social, cultural, political, and economic affects 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
Prerequisites: JPC A101.
Examines visual forms of communication. Emphasis on the use of images in newspapers, magazines, film, television, photography, informational graphics, interactive multimedia, digital games, and Web-based technologies and the role of visual media in cultural processes and aesthetic appreciation.

JPC 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.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Contact Hours</th>
<th>Prerequisites</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>JPC A313</td>
<td>Movies and the First Amendment</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>JPC A204</td>
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<td></td>
<td>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.</td>
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<tr>
<td>JPC A314</td>
<td>Documentary Filmmakers and Filmmaking</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Registration Restrictions: Junior status. Analyzes cinematography and filmmaking techniques of significant American and international documentary filmmakers.</td>
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<tr>
<td>JPC A330</td>
<td>Advanced Public Relations</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>JPC A212 and JPC A320 and JPC A329. Use of controlled and uncontrolled (public) media to achieve motivation of target audiences; case studies and typical problems, planning and preparation of communication materials; and application of public relations concepts and techniques.</td>
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<tr>
<td>JPC A342</td>
<td>Photojournalism</td>
<td>3 CR</td>
<td>2 + 2</td>
<td>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.</td>
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<tr>
<td>JPC A343</td>
<td>Radio News Reporting</td>
<td>3 CR</td>
<td>2 + 2</td>
<td>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.</td>
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<tr>
<td>JPC A344</td>
<td>Television News Reporting</td>
<td>3 CR</td>
<td>2 + 2</td>
<td>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.</td>
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<tr>
<td>JPC A345</td>
<td>Web Design</td>
<td>3 CR</td>
<td>2 + 2</td>
<td>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.</td>
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<tr>
<td>JPC A346</td>
<td>Magazine Writing</td>
<td>3 CR</td>
<td>2 + 2</td>
<td>JPC A204. Analyzes writing strategies and techniques for contemporary magazines. Emphasis on professional principles and practices of story development, magazine story research and writing, copy editing, use of images and cutlines, and placement of stories in contemporary magazine markets. Students produce stories for on-campus and off-campus publications.</td>
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<tr>
<td>JPC A362</td>
<td>Principles of Strategic Communications</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>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.</td>
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<tr>
<td>JPC A363</td>
<td>Research Methods for Strategic Communications</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>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.</td>
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<tr>
<td>JPC A366</td>
<td>Planning and Writing for Strategic Communications</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>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.</td>
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<tr>
<td>JPC A368</td>
<td>Commercial Photography</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>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.</td>
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<tr>
<td>JPC A369</td>
<td>Design for Publications</td>
<td>3 CR</td>
<td>2 + 2</td>
<td>JPC A213 and JPC A363. Analyzes contemporary graphics technology for use in strategic communications. Emphasis on writing and visual communication for advertising, public relations, sales promotion and marketing, including design and layout issues related to annual reports and other multiple-page publications.</td>
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<tr>
<td>JPC A382</td>
<td>Digital Audio Production</td>
<td>3 CR</td>
<td>2 + 2</td>
<td>JPC A203 and JPC A204. Analyzes digital audio production. Emphasis on professional principles and practices of signal processing, multi-track mixing, layering, synchronization and digital editing techniques. Students produce digital audio programs for various markets.</td>
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<tr>
<td>JPC A383</td>
<td>TV Studio Production</td>
<td>3 CR</td>
<td>2 + 2</td>
<td>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.</td>
<td></td>
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<tr>
<td>JPC A384</td>
<td>Digital Video Production</td>
<td>3 CR</td>
<td>2 + 2</td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>JPC A385</td>
<td>Scriptwriting for Film and Television</td>
<td>3 CR</td>
<td>2 + 2</td>
<td>JPC A204. Analyzes scriptwriting strategies and techniques for film and television. Emphasis on professional principles and practices of story development, scripting form, storyboarding, and marketing of scripts for film and television projects.</td>
<td></td>
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<tr>
<td>JPC A403</td>
<td>Communications and Media Research</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>JPC A204 and STAT A252. Evaluates communications and media research. Emphasis on accuracy and applies professional 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 paper using quantitative and qualitative research methods.</td>
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<tr>
<td>JPC A404</td>
<td>Global Media and Communications Systems</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>JPC A204. Analyzes 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.</td>
<td></td>
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<tr>
<td>JPC A405</td>
<td>Communications and Media Theories</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>JPC A204. Evaluates on historical and contemporary theories of public communications, public opinion, audience, evolving technologies, and social influences of communications and media.</td>
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</tr>
<tr>
<td>JPC A413</td>
<td>Communications Law</td>
<td>3 CR</td>
<td>3 + 0</td>
<td>Crosslisted with: JUST A413. Legal rights, privileges, and regulations of press, radio, television, and films; libel, contempt, copyright, rights of privacy; and decisions of regulatory bodies.</td>
<td></td>
</tr>
</tbody>
</table>
JPC A444  Web Journalism  3 CR  
Contact Hours: 2 + 2  
Prerequisites: JPC A204 and JPC A345.  
Evaluates development of Web journalism. Applies ethical principles and professional practices of online reporting using text, images, graphics, voice, music, and video to communicate with Web news users.

JPC A443  Advanced Reporting  3 CR  
Contact Hours: 2 + 2  
Prerequisites: JPC A204.  
Registration Restrictions: JPC junior or senior status.  
Applies ethical principles and advanced professional principles and practices of in-depth, investigative, and enterprise reporting to contemporary topics for print, radio, television, and World Wide Web.

JPC A444  Specialty Reporting  3 CR  
Contact Hours: 3 + 0  
Prerequisites: JPC A204.  
Special Note: May be taken twice for credit with permission of Department Chair.  
Evaluates specialty reporting such as sports, environmental, medical and health, business, or transportation reporting. Applies ethical principles and advanced professional principles and practices of reporting to special topics. Students report for print, radio, television, or Web.

JPC A445  Design for Print I  3 CR  
Contact Hours: 2 + 2  
Prerequisites: JPC A204 and JPC A213.  
Evaluates the use of design for magazine production. Emphasis on magazine writing, design, layout, typography, production, electronic distribution, and prepress. Class will produce True North, a general interest color magazine.

JPC A446  Design for Print II  3 CR  
Contact Hours: 2 + 2  
Prerequisites: JPC A203 or JPC A204 and JPC A213.  
Evaluates the use of design for magazine production. Emphasis on magazine writing, design, layout, typography, production, electronic distribution and prepress. Class will produce Alaska Media Review, a professional interest magazine.

JPC A462  Corporate Communications  3 CR  
Contact Hours: 3 + 0  
Prerequisites: JPC A363.  
Evaluates corporate communication. Applies professional principles and practices of strategic communications, internal communications, message design, advertising, public relations, integrated marketing communications, and new communication technologies in corporations.

JPC A463  Crisis Communications  3 CR  
Contact Hours: 3 + 0  
Prerequisites: JPC A363.  
Evaluates crisis communications. Applies ethical principles and professional practices of crisis communications planning, development, and execution during a crisis. Develops a crisis communications plan for organizations for communicating with internal and external audiences during a crisis.

JPC A464  Development Communications  3 CR  
Contact Hours: 3 + 0  
Prerequisites: JPC A363.  
Evaluates development communications. Applies ethical principles and professional practices of planning and execution of development communications programs, including fund-raising for businesses and non-profit organizations.

JPC A465  Strategic Communications  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 principles and 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  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 principles 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 six 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
http://language.uaa.alaska.edu

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>JPN A100A</td>
<td>Introduction to Japanese Language and Culture I</td>
<td>3 CR</td>
<td>A general survey course focusing on the rudiments of Japanese phonetic writing, &quot;Hiragana&quot;, some basic grammar, useful words and phrases, and various aspects of Japanese culture. Designed primarily for people who intend to travel to Japan or host Japanese visitors and who want to be able to exchange some simple information. Emphasis is on conversation.</td>
</tr>
<tr>
<td>JPN A100B</td>
<td>Introduction to Japanese Language and Culture II</td>
<td>3 CR</td>
<td>Continuation of Japanese A100A. A general survey course focusing on pronunciation practice, intonation, Hiragana reading, elementary grammar, useful words, phrases, idioms, and sentence patterns along with various aspects of Japanese culture. Intended for travelers or hosts to Japanese visitors. Emphasis is on conversation.</td>
</tr>
<tr>
<td>JPN A102E</td>
<td>Elementary Japanese II</td>
<td>3 CR</td>
<td>Special Fees: Course Attributes: UAA GER Humanities Requirement. Offered only at extended colleges. Special Fees: Continued drill in speaking, listening, reading and writing in different situations. Emphasis on developing practical skills in oral and written &quot;Hiragana&quot; communication.</td>
</tr>
<tr>
<td>JPN A105</td>
<td>Conversational Skills I</td>
<td>1 CR</td>
<td>Registration Restrictions: Proficiency as after one semester of college level or one year of high school level Japanese. Grade Mode: Pass/No Pass. May be stacked with: JPN A205. Special Fees: May be repeated once for credit.</td>
</tr>
<tr>
<td>JPN A201</td>
<td>Intermediate Japanese I</td>
<td>4 CR</td>
<td>Special Fees: Course Attributes: UAA GER Humanities Requirement. Special Fees: Continuing study of basic grammar and practice in speaking, listening, reading, and writing. More Kanji, vocabulary, and expressions are to be studied. Students will move toward a higher level of all skills of language comprehension, production, and cultural understanding. Continued efforts to develop oral and written fluency in formal and informal situations.</td>
</tr>
<tr>
<td>JPN A202</td>
<td>Intermediate Japanese II</td>
<td>4 CR</td>
<td>Special Fees: Course Attributes: UAA GER Humanities Requirement. Special Fees: Completion and reinforcement of the fundamentals of the Japanese language introduced in the introductory level. Develops the functional ability to communicate in Japanese beyond survival level. More Kanji, vocabulary, and expressions are introduced. Continued efforts to develop oral and written proficiency in informal and formal situations.</td>
</tr>
<tr>
<td>JPN A205</td>
<td>Conversational Skills II</td>
<td>1 CR</td>
<td>Registration Restrictions: Proficiency as after two semesters of college level or two years of high school level Japanese. Grade Mode: Pass/No Pass. May be stacked with: JPN A105. Special Fees: May be repeated once for credit.</td>
</tr>
<tr>
<td>JPN A290</td>
<td>Selected Topics in Japanese Culture</td>
<td>1 CR</td>
<td>Special Fees:</td>
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</tbody>
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JUST - JUSTICE
Offered through the College of Health & Social Welfare
Social Sciences Building (SSB), Room 306, 786-1810
http://justice.uaa.alaska.edu

JUST A250 Development of Law 3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110.
Offered fall and spring semesters.
Study of underlying philosophy, development and structure of law with emphasis on the law system of the U.S. and Alaska. Includes 'civil' precedents of such constitutional provisions as 'due process' and 'equal protection' in the U.S. Bill of Rights; criticisms of law; review of Native law ways; and procedures for changing law.

JUST A251 Criminology 3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110.
Offered fall and spring semesters.
The study of deviant behavior and theories of crime causation and their relationship to society, law and law enforcement.

JUST A255 Criminal Investigation 3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110.
Fundamentals of investigation. Crime scene search and recording, collection and preservation of physical evidence, and scientific aids. Modus operandi, sources of information, interviews and interrogations, follow-up, and case preparation.

JUST A310 Introduction to Forensic Science 3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110 or PARL A101.
Crosslisted with: PARL A340.
Provides an overview of forensic science and its relationship within the justice system. Focuses on the various areas of criminalistics, which typically involve the analysis done in government crime labs on physical evidence gathered in the course of a criminal investigation.

JUST A320 Crime Prevention 3 CR
Contact Hours: 3 + 0
Examination of crime prevention strategies and concepts not usually found in law enforcement efforts. The legal, moral and ethical considerations and problems of human and environmental manipulation are explored in an interdisciplinary context. Emphasizes new and innovative approaches to preventing criminal behavior.

JUST A330 Justice and Society 3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110.
Registration Restrictions: Junior standing.
The evolutionary influence of ideology, technology and social interests on the justice system. The dynamic impact of long-term emerging concepts such as 'equality' and 'privacy' will be viewed against the background of requirements of political and economic organization.

JUST A340 Family Law 3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110 or PARL A101.
Crosslisted with: PARL A340.

JUST A344 Courts and Civil Liberties 3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110 or PS A101.
Crosslisted with: PS A343.
An introduction to American constitutional law through a study of selected Supreme Court cases. Among the topics considered are judicial review; separation of powers; property, commerce, and taxation; liberties guaranteed by the Bill of Rights; equal protection; and privacy. Comparisons are made with the Alaska Constitution.

JUST A350 Contemporary Correctional Issues 3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110.
Special Note: Attendance on field trips is required.
A survey course designed to acquaint the student with policy formulation problems related to both traditional and modern concepts of correctional programming. The roles of the executive, legislative, and judicial branches of government in determining correctional policy will be examined. Policy issues in both pre-trial and post-conviction facilities will be covered and the trend toward privatization of correctional facilities and programs will be discussed.
COURSE DESCRIPTIONS

JUST A352 Substantive Criminal Law 3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110 or PARL A101.
Crosstowned with: PARL A352.
Offered fall semesters.
Study of elements, purposes, and functions of substantive criminal law. Includes casebook study of general law of crimes and defenses with concentration on Alaska cases and statutes in Alaska Criminal Code. Historical and philosophical concepts are covered.

JUST A354 Criminal Procedure 3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110 or PARL A101.
Crosstowned with: PARL A354.
Offered spring semesters.
Emphasis upon legal limitations of police and right of people to be secure from government under protection of federal and Alaska constitutions. Concentration on laws of arrest, search and seizure, wiretapping, electronic surveillance, and exclusionary rule. Interrogations and confessions, lineups and other pretrial identification procedures, right to counsel, trial by jury, entrapment, and double jeopardy. Study of cases decided by U.S. and Alaska Supreme Courts, along with applicable Alaska Statutes and Alaska Rules of Criminal Procedure.

JUST A360 Justice Processes 3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110.
Offered fall and spring semesters.
Study of processes and issues in police, court and correctional agency operations. Definition of goals; organizational design and development, organizing and managing financial, personnel and management processes; budget, union, communication, record, community-based programs; inspection, and program assessment. Contemporary administrative process problems.

JUST A365 Comparative Justice Systems 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Junior standing
Justice systems are examined on a global basis, in contrast with American justice systems, as a basis for a comparative approach to present-day national and international problems in crime and the administration of justice. Varying approaches—colonial, Anglo-American and eastern—to policing, corrections, legal systems and social order are reviewed and evaluated.

JUST A366 Alcohol and Crime 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Junior standing
Examines the relationship between alcohol use and a variety of criminal behaviors including assault, homicide, and drunken driving. Special consideration is given to legislative and environmental approaches for preventing the negative consequences of alcohol use.

JUST A370 Judicial Policy and Court Administration 3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110 and JUST A221.
A review of the Alaska court system, its problems, management, policies and procedures. Analysis of issues related to court operations and policies and alternatives to the current situation.

JUST A385 Urban Police Problems 3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110.
Exploration of a variety of contemporary problems and issues related to the provision of urban police services. Issues considered may include alternatives to arrest, patrol methods, police officer-citizen relations, job stress, and use of deadly force.

JUST A398 Individual Research 1-4 CR
Contact Hours: 1-4 + 3-12
Registration Restrictions: Junior standing, 6 credits writing courses, faculty permission.
Participation in Justice Center research projects or use of Center data bases. Students learn to formulate hypotheses, collect and enter data, and perform computer analyses. Students will review the literature on similar projects and submit a final research paper.

JUST A400 Advanced Research Methods 3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A200 and JUST A201.
Advanced social science research methods, focusing on specific sampling and data collection strategies, i.e., focus group, telephone survey, cluster vs. stratified sampling, etc. Evaluates the potential use of official statistics such as police and census data. Students will be expected to select appropriate samples and create appropriate data collection instruments and protocols.

JUST A401 Inferential Data Analysis in Justice 3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A200 and JUST A201.
Special Note: Recommend completion of GER Quantitative Skills requirement.
Advanced social science research focusing on inferential data analysis. Provides an in-depth understanding of the logic and application of inferential techniques, particularly of multivariate models. Students will formulate and implement an analysis plan with real criminal justice data.

JUST A410 Cinematic Images of Justice 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Junior standing.
Visual survey of how the cinema has portrayed the criminal justice system. Special attention devoted to discrepancies between scientific research findings and popular stereotypes portrayed by media. Attention given to each component of the justice system. Impact of fictionalized events and justice system action/reaction will be juxtaposed with the reality of the justice system. Concepts such as equality, privacy, police brutality, gangs, and prison life will be viewed against the background of political economies and legal reality.

JUST A413 Communications Law 3 CR
Contact Hours: 3 + 0
Special Fees.
Legal rights, privileges, and regulations of press, radio, television, and films, libel, contempt, copyright, rights of privacy, and decisions of regulatory bodies.

JUST A440 Police Administration 3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110 and JUST A221.
Focuses on critical issues and situations faced by police executives. Among the areas studied are decision making, organizational strategies and services mixes, citizen complaint systems, change strategies and models, information systems, personnel management, financial administration and productivity measurement.

JUST A444 Terrorism and the Rule of Law 3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110 and JUST A250.
Selected case studies in modern terrorism are examined. Focuses on the relationship between civil liberties and laws and social policies intended to address terrorism.

JUST A445 Probation, Parole and Community Corrections 3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A210.
Study of community-based alternatives to incarceration for adult and juvenile offenders. The purposes, operations and organization of probation and parole agencies and the decision making responsibilities of probation and parole officers will be examined. Private and public community residential programs will be analyzed.

JUST A451 Research and Policymaking 4 CR
Contact Hours: 3 + 3
Prerequisites: JUST A110 and STAT A252.
Registration Restrictions: Upper-class standing.
Special Note: Laboratory is required. Offered fall and spring semesters.
An overview of social research methods and procedures as related to justice policy development, implementation and assessment. Students are exposed to the policymaking process, qualitative and quantitative information producing tools, research utilization strategies and research proposal writing.

JUST A454 Evaluation Research and Change 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Social science methods course.
Crosstowned with: SOC A454.
Application of evaluation research to policy-making process. Presents evaluative research strategies including monitoring, process evaluation, cost-benefit analysis and impact evaluation. Special attention given to designing evaluation projects, analyzing and interpreting results, preparing and presenting evaluation research reports in justice, human and community service fields.

JUST A455 Rural Justice 3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110.
Multidisciplinary study of ‘bush justice’ in rural Alaska and in other Arctic settings including Greenland and Canada. A study of the interplay of law ways of Alaska Natives and early white populations with the developing military, territorial and state systems. Special focus on small village justice systems, traditional and modern; roles of police, councils, judges and others in the system, criminal and civil law; and alternatives to urban models proposed or tested in rural settings.
JUST A475  Juvenile Procedure  3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A203 or SOC A203.
A practical clinical course providing comprehensive coverage of the Alaska children's code and juvenile law procedures.

JUST A480  Correctional Systems Management  3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110 and JUST A251.
Focuses on the management of correctional rehabilitation. Probation, imprisonment, parole and community-based corrections concepts are explored in-depth. Legal aspects of correctional administration, prisoner rights, and judicial involvement in penal systems. Correctional decision making processes, participatory management and citizen involvement are assessed. International comparisons of correctional systems are utilized to explore organizational and management options.

JUST A488  Research Practicum  1-6 CR
Contact Hours: 0 + 3-18
Prerequisites: JUST A200 and JUST A201.
Registration Restrictions: Faculty permission required.
The application of research skills to the study of a problem in the justice field. Involves field research and related independent study.

JUST A490  Contemporary Justice Issues  1-6 CR
Contact Hours: 1-6 + 0
Prerequisites: JUST A110.
Registration Restrictions: Junior standing.
Special Note: May be repeated once for credit with a change in subtitle.
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 + 5-3
Registration Restrictions: Approval by internship coordinator.
Grade Mode: Pass/No Pass.
Offered fall and spring semesters.
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 A498  Individual Research  1-4 CR
Contact Hours: 1-4 + 3-12
Registration Restrictions: Research methods course, faculty permission.
Participation in Justice Center research projects current literature, collect data, formulate and test hypotheses, analyze data, and complete a final research paper.

JUST A625  Seminar in Criminal Violation  3 CR
Contact Hours: 3 + 0
Offered alternate fall semesters.
An advanced criminology seminar which will explore the application of various theories of crime causation to specific kinds of criminal violation. Students will use criminological theory in an effort to explain different types of criminal behavior and to assess both methods of prevention and potential treatment of the violator. Topics will include: crimes of violence, crimes against the public order, organized crime, white collar crime, etc.

JUST A630  Justice Administrative Theory and Practice  3 CR
Contact Hours: 3 + 0
Offered alternate spring semesters.
An advanced seminar to study policy development and the application of theory and research in the administration of justice organizations. Theories, practices, innovations and administrative strategies will be explored.

JUST A640  Corrections Theory and Research  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
Offered as Demand Warrants.
Theoretical foundation of correctional practice explored through reading of classic texts. Development and testing of hypotheses on rehabilitation, retribution, and incapacitation.

JUST A650  Policing Theory and Research  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
Offered alternate spring semesters.
Social science research on policing explored through readings on police use of force, domestic violence, and community policing. Development of proposals for empirical tests of hypotheses derived from the literature.

JUST A670  Administrative Law  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
Offered spring semesters.
Legal guidelines for adoption, enforcement, and adjudication of violations of agency regulations at federal, state, and local levels as exercised by public sector management. Legislative, executive, and judicial controls on agency action. Research project required.

KOR - KOREAN
Offered through the College of Arts and Sciences
Administration/Humanities Building (ADM), Suite 287, 786-4030
http://language.uaa.alaska.edu

KOR A101  Elementary Korean I  4 CR
Contact Hours: 4 + 0
Course Attributes: UAA GER Humanities Requirement.
Special Fees.
Introduces Korean in the conversational mode, with exposure to grammatical structure, reading, writing and some culture.

LANG - LANGUAGES
Offered through the College of Arts and Sciences
Administration/Humanities Building (ADM), Suite 287, 786-4030
http://language.uaa.alaska.edu

LANG A400  Literature in Translation  3 CR
Contact Hours: 3 + 0
Special Note: May be repeated for credit with a change of subtitle. See schedule for specific offerings.
Selected readings in translation of works in a language other than English. May be a survey of a national literature, a genre course or be limited to one author or a group of authors. Students who speak the language of the original works may read them in the original but lectures and class discussion will be conducted in English.

LANG A667A  Middle/High School Second-Language Teaching I  3 CR
Contact Hours: 3 + 0
Prerequisites: (EDFN A478 or concurrent enrollment) and (EDFN A602 or concurrent enrollment).
Registration Restrictions: Departmental approval required.
Crosslisted with: EDYS A667B.
Special Note: Concurrent enrollment in internship required.
Standards-based curriculum planning and assessment for the diverse student population in second-language classrooms in the middle/high school. Includes an overview of language acquisition theories and instructional strategies typically used in the World Languages and English-as-a-Second Language (ESL) curriculum. Integrates technology, literacy, and education for special populations.

LANG A667B  Middle/High School Second-Language Teaching II  2 CR
Contact Hours: 2 + 0
Prerequisites: EDYS A667A or LANG A667A.
Registration Restrictions: Departmental approval required.
Crosslisted with: EDYS A667B.
Special Note: Concurrent enrollment in internship required.
Standards-based development of professional teaching practices for middle/high school world language classrooms. Specific emphasis on development of thematic units. Continued technology integration.

LANG A667C  Middle/High School Methods for Teaching English as a Second Language  2 CR
Contact Hours: 2 + 0
Prerequisites: EDYS A667A or LANG A667A.
Registration Restrictions: Departmental approval required.
Crosslisted with: EDYS A667C.
Special Note: Concurrent enrollment in internship required.
Development of pedagogical content knowledge and understanding of human development and learning with both general principles of instruction and content-specific strategies. Includes content areas typically taught in secondary English-as-a-Second Language/Bilingual curriculum. Integrates technology, literacy, and education for special populations.
COURSE DESCRIPTIONS

LANG A691  Current Topics in Second Language Education  1-3 CR
Contact Hours:  1-3 + 0
Registration Restrictions: Basic fluency in a second language desirable and graduate standing.
Crosslisted with: EDFN A691.
Special Fees.
Focuses on second-language education, based on current research and first-hand experience from successful, established programs. Intended for administrators; early-childhood, elementary, secondary modern language or ESL teachers; and others planning to implement a second-language education program or currently participating in an established program.

LAT - LATIN
Offered through the College of Arts and Sciences
Administration/Humanities Building (ADM), Suite 287, 786-4030
http://language.uaa.alaska.edu
LAT A101  Elementary Latin I  3 CR
Contact Hours:  3 + 0
Course Attributes: UAA GER Humanities Requirement.
Prerequisites: LAT A101.
Special Fees.
Introduction to language covering grammar, syntax, vocabulary and pronunciation.
LAT A102  Elementary Latin II  3 CR
Contact Hours:  3 + 0
Prerequisites: LAT A101.
Course Attributes: UAA GER Humanities Requirement.
Special Fees.
Continued development of grammar, syntax, and vocabulary; increasing emphasis on reading selected texts.

LING - LINGUISTICS
Offered through the College of Arts and Sciences
Professional Studies Building (PSB), Room 212, 786-4355
http://english.uaa.alaska.edu
LING A101  The Nature of Language  3 CR
Contact Hours:  3 + 0
Course Attributes: UAA GER Humanities Requirement.
Offered fall and spring semesters.
A beginning course in the study of language. Introduction to systematic analysis of human language and description of its grammatical structure, distribution, and diversity.
LING A201  Intermediate Grammar  3 CR
Contact Hours:  3 + 0
An intermediate course in the descriptive analysis of syntax and related aspects of word-formation. Practice in traditional and contemporary methods of syntactic analysis, sentence structure and diagramming, in English.

LOG - LOGISTICS
Offered through the College of Business & Public Policy
Edward and Cathryn Rasmuson Hall (RH), Room 309, 786-4100
www.cbpp.uaa.alaska.edu/logistics.asp
Students taking any ACCT, BA, CIS, ECON, LGOP, LOG, or PADM course will be charged a single lab fee of $25 for the semester. This fee applies to Elmendorf AFB or Fort Richardson classes only when specifically annotated. Does not apply to Eagle River.

LOG A110  Logistics Information Systems and Customer Service  3 CR
Contact Hours:  3 + 0
Introduces the principles and concepts of logistics functions covering total product flow from the inbound raw materials to the outbound finished goods. Emphasizes the total logistics system design and development process. Addresses functions and activities required for managing and providing training services for industry.
LOG A120  Warehouse and Inventory Control Operations  3 CR
Contact Hours:  3 + 0
Introduces fundamentals of warehouse and inventory control operational practices, as well as supply functions.
LOG 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.
LOG A160  Purchasing and Supply Management  3 CR
Contact Hours:  3 + 0
Introduces principles and methods relating to purchasing, inventory management, supplier management, and materials management from the inbound raw materials to the outbound finished goods.
LOG A235  Transport Operations Management  3 CR
Contact Hours:  3 + 0
Introduction to the role and importance of efficient and effective transportation management. Studies transportation management from the perspective of both the shipper and the carrier. Focuses on costing and pricing, carrier strategy, information technology, and shipper transportation management strategy and processes.
LOG A378  Management of Global Logistics Supply Chains  3 CR
Contact Hours:  3 + 0
Prerequisites: LOG A378.
Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.
Introduction to logistics supply chain concepts, structures, design, and management. Logistics supply chain processes, costs, and decisions.
LOG A379  Transportation Management  3 CR
Contact Hours:  3 + 0
Prerequisites: LOG A378.
Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.
Structure and operating characteristics of the transportation sector. Transportation carrier modes. Procurement and use of transportation services.
LOG A415  Purchasing Management  3 CR
Contact Hours:  3 + 0
Prerequisites: LOG A378 and LOG A379.
Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.
Purchasing activities and cost management techniques. Acquisition of materials, products, and services.
LOG A416  International Logistics and Transportation Management  3 CR
Contact Hours:  3 + 0
Prerequisites: LOG A378 and LOG A379.
Registration Restrictions: College of Business and Public Policy majors must be admitted to the upper-division standing.
LOG A417  Materials Management  3 CR
Contact Hours:  3 + 0
Prerequisites: LOG A378 and LOG A379.
Registration Restrictions: College of Business and Public Policy majors must be admitted to the upper-division standing.
Warehouse location, design, and operations. Managing material flows. Packing issues.
LOG A601 Supply Chain Management Systems 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Acceptance into Graduate Certificate Program or department approval.

Examines the changes in supply chain management systems and networks in today's complex, global market. Focuses on the interaction of system demands for purchasing and materials management; the interaction of ethical, contractual, and legal elements; the impact of strategic decisions; and the impact of supply network functional activities.

LOG A602 Logistics 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Acceptance into Graduate Certificate Program or department approval.
Special Fees.

Examines the principles and practices of global supply chain and logistics management. Focuses on logistics integration and how global organizations can gain a sustainable competitive advantage by implementing programs of total logistics management into their organizations.

LOG A603 Measurement in Supply Chains 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Acceptance into Graduate Certificate Program or department approval.
Special Fees.

Examines the metrics and tools needed to create value by logistics within the global supply chain. Focuses on complexity factors and their impact on the creation of this value. Conducts performance evaluation analyses using systems analysis, assumption-based planning, project management techniques, and activity-based cost accounting.

LOG A604 Radio Frequency Identification 3 CR
Contact Hours: 3 + 0
Prerequisites: LOG A601 and LOG A602 and LOG A603.
Registration Restrictions: Acceptance into Graduate Certificate Program or department approval.
Special Fees.

Explores how Radio Frequency Identification (RFID) is revolutionizing supply chain management systems and logistics systems. Focuses on how to design, develop and integrate logistics information systems to appraise the value of experimental RFID technology compared to more traditional technologies.

LOG A605 Transportation Systems Management 3 CR
Contact Hours: 3 + 0
Prerequisites: LOG A601 and LOG A602 and LOG A603.
Registration Restrictions: Acceptance into Graduate Certificate Program or department approval.
Special Fees.

Examines the management of passenger transportation systems in the travel industry. Focuses on different forms of transportation as they relate to travel industry management and policy.

LOG A606 Lean Operations 3 CR
Contact Hours: 3 + 0
Prerequisites: LOG A601 and LOG A602 and LOG A603.
Registration Restrictions: Acceptance into Graduate Certificate Program or department approval.
Special Fees.

Examines the concepts of lean operations and shows through examples, case studies, simulations, and hands-on projects how organizations can reduce the wastes that adversely impact profitability and performance. Focuses on value-stream mapping, synchronized flow, pull systems, and any current reengineering concepts that may be appropriate, such as kanban systems, the 5Ss, quick change-over, theory of constraints, and total productive maintenance.
LOG A665 Supply Chain Measurement 6 CR  
Contact Hours: 6 + 0  
Prerequisites: LOG A662.  
Registration Restrictions: Admission to Master of Science, Global Supply Chain Management Program.  
Special Fees.  
Study of the tools needed to measure and sell the value created by logistics throughout the supply chain. An evaluation of factors of complexity and their impact on the creation of value. Physical valuation will be determined through the techniques of supply chain modeling and computer-based simulation. Financial valuation will be determined through activity-based cost accounting and capital budgeting techniques.

LOG A678 Strategic Logistics and Global Supply Chain Management 3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: Completion of MBA foundation course requirements.  
Graduate standing or instructor’s permission.  
Introductory study of the roles logistics and supply chain management play in a company's strategic planning in both domestic and global markets, for the MBA generalist.

LSIC A488A Capstone Project I: Design and Research 3 CR  
Contact Hours: 3 + 0  
Prerequisites: LSIS A311 and LSIS A312 and LSIC A331 and LSIC A332.  
Registration Restrictions: Meet prerequisites and completion of 9 credits of liberal studies disciplinary concentration.  
The design and 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. Requires weekly meetings with mentors and extensive independent effort.

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.

LS - LIBRARY SCIENCE  
Offered through the College of Arts and Sciences  
Consortium Library Reference Desk, 786-1848  
http://consortiumlibrary.org  

LS A101 Library Resources and Information Retrieval 1 CR  
Contact Hours: 1 + 0  
An introduction to academic library research with an emphasis on electronic resources.

LS 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.

LSIC - LIBERAL STUDIES INTEGRATED CORE  
Offered through the College of Arts and Sciences  
Social Sciences Building (SSB), Room 343, 786-4858  
http://liberalstudies.uaa.alaska.edu  

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 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: LSIS A111.  
An interdisciplinary examination of the origins, nature, and structures of power, authority, and governance; the nature of sovereignty; and the processes of reform and revolution. Various disciplinary perspectives are employed in three to four major case studies. Examples may include the Russian Revolution, the American Civil War, the French Revolution, Globalization and Democracy, the Taiping Revolt, the Meiji Restoration, the American Civil Rights Movement, and the Alaska Native Sovereignty Movement.

LSIC A332 Science, Technology, and Culture 3 CR  
Contact Hours: 3 + 0  
Prerequisites: LSIC A202 and LSIC A111 and LSIC A231 and (LSIS 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 and writing intensive course.

LSIS A392 Seminar in Liberal Studies 1 CR  
Contact Hours: 1 + 0  
Prerequisites: COMM A111 and ENGL A111.  
An advanced Learning Community approach to the study of issues in the natural sciences, social sciences, humanities, and performing and fine arts, using readings, lectures, in-depth small group discussion and activities outside of class. Class will have different focus each year. A writing and speaking intensive course.

LSIS A488A Capstone Project I: Design and Research 3 CR  
Contact Hours: 3 + 0  
Prerequisites: LSIS A311 and LSIS A312 and LSIC A331 and LSIC A332.  
Registration Restrictions: Meet prerequisites and completion of 9 credits of liberal studies disciplinary concentration.  
The design and 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. Requires weekly meetings with mentors and extensive independent effort.

LSIS 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  
Social Sciences Building (SSB), Room 343, 786-4858  
http://liberalstudies.uaa.alaska.edu  

LSIS A201 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 A212 Global Supply Chain Management 3 CR  
Contact Hours: 3 + 0  
Prerequisites: MATH A107 or concurrent enrollment.  
Course Attributes: UAA GER Natural Science w/ Lab.  
Special Fees.  
Global Supply Chain Management  
An advanced Learning Community approach to the study of issues in the natural sciences, social sciences, humanities, and performing and fine arts, using readings, lectures, in-depth small group discussion and activities outside of class. Class will have different focus each year. A writing and speaking intensive course.

LSIS A311 Cultural Foundations of Human Behavior 3 CR  
Contact Hours: 3 + 0  
Culture as a concept and phenomenon, including its origins, variety, utility, subtlety, and complexity. Identify cultural aspects of human lives from various social science perspectives such as anthropology, sociology, and psychology. Apply methods to comprehend cultural differences and develop approaches to improving communication and understanding in cross-cultural circumstances. Examples of cultures from around the world, through time.
MA - MEDICAL ASSISTING

Offered through the Community & Technical College
Allied Health Sciences Building (AHS), Room 161, 786-6928
www.uaa.alaska.edu/ctc/alliedhealths

MA A101 Medical Terminology I 3 CR
Contact Hours: 3 + 0
Medical terminology, including analysis of its roots and origins. Anatomical, diagnostic, operative, and laboratory terminology of human body systems and selected medical specialties. Emphasis on spelling and pronunciation.

MA A104 Essentials of Human Disease 3 CR
Contact Hours: 3 + 0
Prerequisites: MA A101 with minimum grade of C.
Provides 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 A110 Principles of Radiography 3 CR
Contact Hours: 3 + 0
Special Note: Designed for those currently working in a medical office setting or students who plan to work in a medical setting.

MA A120 Medical Office Procedures 4 CR
Contact Hours: 3 + 2
Special Fees.
Special Note: MA A120A and MA A120B satisfy the requirement for MA A120.
Introduces business aspects of medical offices and administrative duties of medical assistants. Includes telephone and reception procedures, appointment scheduling, medical law and ethics, essentials of medical records, professionalism, and financial record keeping for the medical office.

MA A120A Medical Office Procedures A: Legal and Ethical Issues in Medical Assisting 2 CR
Contact Hours: 2 + 0
Special Note: MA A120A and MA A120B satisfy the requirement for MA A120.
Introduces medical law and ethics for medical office personnel and allied health professionals. Includes medical/legal terminology, confidentiality of medical information, HIPAA regulations, informed consent requirements, and recommendations for prevention of professional liability claims.

MA A120B Medical Office Procedures B: An Introduction to Administrative Duties 2 CR
Contact Hours: 1 + 2
Special Fees.
Special Note: MA A120A and MA A120B satisfy the requirement for MA A120.
Introduces administrative and business aspects of the medical office and administrative duties of medical assistants. Includes general office duties, telephone and reception procedures, appointment scheduling, essentials of medical records, and financial record keeping for the medical office.

MA A140 Medical Transcription I 2-3 CR
Contact Hours: 1 + 3-6
Prerequisites: MA A101 with minimum grade of C or concurrent enrollment.
Registration Restrictions: 45 wpm keyboarding in Windows word processing.
Special Fees.
Special Note: Two (2) credits of this course are required for the Medical Assisting AA degree. Students wishing to specialize in medical transcription may wish to register for three (3) credits, which requires the transcribing of additional medical reports.
Provides instruction in the machine transcribing of physicians' medical dictation. Introduces the use of transcription equipment, formatting of various medical reports, and transcription techniques and guidelines. Includes the transcribing of medical reports.

MA A141 Medical Transcription II 3 CR
Contact Hours: 1 + 4
Prerequisites: MA A140.
Special Fees.
More advanced and complex machine transcribing of medical dictation.

MA A150 Clinical Procedures I 4 CR
Contact Hours: 3 + 2
Corequisite: MA A150L.
Introduction to clinical duties of medical assistants and basic clinical procedures in medical offices. Care of patients in examining room, use and care of medical instruments and supplies, and assisting physicians with clinical procedures.

MA A155 Clinical Procedures II 4 CR
Contact Hours: 3 + 2
Corequisite: MA A155L.
Continuation of MA 150, with introduction to clinical duties of medical assistants and basic clinical procedures in medical offices. Includes electrophotodiagnosis, pharmacology, hematology, and radiology.

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.
Provides instruction in the coding of medical encounters, including medical codes, billing and reimbursement, and medical terminology. Emphasis on accuracy and completeness.

MA A230 Billing and Insurance for the Medical Office 3 CR
Contact Hours: 2 + 0
Prerequisites: CIS A105 and MA A220.
Special Fees.
Introduces business aspects of medical offices and administrative duties of medical assistants. Includes insurance claim processing, medical reimbursement, and legal and ethical issues.

MA A290 Selected Topics in Medical Assisting 1-6 CR
Contact Hours: 1-6 + 0-15
Special Note: Prerequisites will vary with topic.
Offers selected topics in medical assisting pertaining to current issues and trends. Course content is determined by current trends, current regulations, and student needs.

MA A295 Medical Office Externship 5 CR
Contact Hours: 5 + 15
Grade Mode: Pass/No Pass.
Special Fees.
Special Note: A grade of C or better in all courses required for the nontranscripted departmental Certificate of Completion in Medical Assisting.
Provides an opportunity to apply principles, skills, and knowledge in private medical offices and clinics as final preparation for employment in the field. Duties are assigned by the UAA instructor and supervised by the physician(s) and medical assistants. Learning is enhanced by off-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.
Introduces 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.
 coursework descriptions

MATH - MATHEMATICS

Offered through the College of Arts and Sciences
Social Sciences Building (SSB), Room 154, 786-1744
http://math.uaa.alaska.edu

Each student enrolled in MATH A050 through MATH A205, MATH A250, or MATH A272 on campus will be charged a Math Lab Fee as noted below.

MATH A050A

Basic Mathematics
1 CR

Contact Hours: 1 + 0
Special Fees.

Special Note: MATH A050A, A050B, A050C combined are equivalent to MATH A054.

Includes addition, subtraction, multiplication, and division (the four basic operations) on whole numbers, fractions and decimals, and a discussion of order of operations. Computation involving ratios, proportion, and percent is also included. The topic of math anxiety is dealt with throughout the course.

MATH A050B

Review of Mathematical Concepts
1 CR

Contact Hours: 1 + 0
Registration Restrictions: MATH A050A or Placement Test.
Special Fees.

Special Note: MATH A050A, A050B, A050C combined are equivalent to MATH A054.

Includes a review of elementary geometry (area, perimeter, and volume calculations), the Pythagorean Theorem, similar and congruent triangles, order of operations, and an introduction to mathematical expressions using variables.

MATH A050C

Introduction to Equations
1 CR

Contact Hours: 1 + 0
Registration Restrictions: MATH A050B or Placement Test.
Special Fees.

Special Note: MATH A050A, A050B, A050C combined are equivalent to MATH A054.

Explores mathematical expressions using real numbers, exponents, and radicals. Also included is an overview of properties of equalities, solving equations, inequalities, elementary word problems, and the four operations on polynomials.

MATH A054

Prealgebra
3 CR

Contact Hours: 3 + 0
Special Fees.

Special Note: MATH A050A, A050B, A050C combined are equivalent to MATH A054.

- Basic concepts of prealgebra mathematics. Includes arithmetic operations and applications, whole numbers, integers, fractions, decimals, ratio and proportion, percent, geometry and measures, exponents, algebraic expressions, polynomials, solution of simple equations, and introduction to graphing and statistics.

MATH A055

Elementary Algebra
3 CR

Contact Hours: 3 + 0
Prerequisites: MATH A054 with minimum grade of C.

Registration Restrictions: If prerequisite is not satisfied, appropriate SAT score or approved UAA Placement Test required.

Special Fees.

- Beginning algebra course. Includes operations with signed numbers and polynomials, factoring, exponents, radicals, algebraic fractions, solution of linear equations, systems of equations, linear inequalities, and quadratic equations. Basic graphing.

MATH A060

Essential Mathematics
4 CR

Contact Hours: 4 + 0
Special Fees.

Special Note: Equivalent to MATH A054 and MATH A055. Credit will not be given for both MATH 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 formule 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 A102

Business Math
3 CR

Contact Hours: 3 + 0

- Designed for students with a modest mathematical background who wish to develop skills in applied business mathematics and financial matters. Topics include simple and compound interest, notes, present value, trade and cash discounts, markup/markdown, payrolls, depreciation, casualty insurance, sales and property tax, installment buying and business statistics.

MATH A105

Intermediate Algebra
3 CR

Contact Hours: 3 + 0
Prerequisites: MATH A055 with minimum grade of C or MATH A060 with minimum grade of C.

Registration Restrictions: If prerequisite is not satisfied, appropriate SAT or ACT scores or approved UAA Placement Test required.

Special Fees.

Special Note: Presumes a solid foundation in elementary algebra.

- Covers sets, properties of real numbers, exponents and radicals, solution of first and second-degree equations and inequalities. Also covers word problems, fundamental operations with polynomials, factoring, special products, rational expressions, functions, conic sections, Cartesian graphing of first and second-degree equations and inequalities, systems of equations, and introduction to logarithmic and exponential functions.

MATH A107

College Algebra
4 CR

Contact Hours: 4 + 0
Prerequisites: MATH A105 with minimum grade of C.

Registration Restrictions: If prerequisite is not satisfied, appropriate SAT or ACT scores or approved UAA Placement Test required.

Course Attributes: UAA GER Quantitative Skill Requirement.

Special Fees.

Special Note: A student may apply no more than 7 credits from any combination of MATH A107, A108, and A109 toward the graduation requirements for any baccalaureate degree.

- Covers equations and inequalities; function theory and applications; solution of equations greater than second degree; determinants and matrices; systems of equations and inequalities, including applications; logarithmic and exponential functions, including applications; graphs and equations of conic sections, including applications; binomial theorem; sequences and series; mathematical induction and combinatorial notation.

MATH A108

Trigonometry
3 CR

Contact Hours: 3 + 0
Prerequisites: MATH A107 with minimum grade of C.

Registration Restrictions: If prerequisite is not satisfied, appropriate SAT or ACT scores or approved UAA Placement Test required.

Course Attributes: UAA GER Quantitative Skill Requirement.

Special Fees.

Special Note: A student may apply no more than 7 credits from any combination of MATH A107, A108 and A109 toward the graduation requirements for any baccalaureate degree.

- Covers angular measure and trigonometric functions, fundamental trigonometric identities, composite angle identities, and graphs of trigonometric functions. Also includes complex numbers, DeMoivre’s theorem, solution of right and oblique triangles, solution of trigonometric equations, inverse trigonometric functions and vectors.

- Provides calculation practice helpful for physics, engineering and survey technology courses.

MATH A109

Precalculus
6 CR

Contact Hours: 6 + 0
Prerequisites: MATH A105 with minimum grade of B.

Registration Restrictions: If prerequisite is not satisfied, appropriate SAT or ACT scores or approved UAA Placement Test required.

Course Attributes: UAA GER Quantitative Skill Requirement.

Special Fees.

Special Note: Intensive course designed for students who intend to take the calculus sequence (MATH A200, A201, A202). A student may apply no more than seven credits from any combination of MATH A107, A108 and A109 towards the graduation requirements for any baccalaureate degree.

- Intensive course covering polynomial, rational, exponential, logarithmic and trigonometric functions, composite and inverse functions, conic sections, matrices and determinants, solutions of equations and inequalities, vectors, complex numbers, DeMoivre’s theorem, polar coordinates, parametric and polar graphs, sequences and series, binomial theorem, and mathematical induction.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MATH A172</td>
<td>Applied Finite Mathematics</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: MATH A105 with minimum grade of C.</td>
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<td>Registration Restrictions: If prerequisite is not satisfied, appropriate SAT or ACT scores or approved UAA Placement Test required.</td>
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<td>Course Attributes: UAA GER Quantitative Skill Requirement.</td>
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<td>Special Fees.</td>
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<td></td>
<td>Linear and quadratic equations and inequalities, algebra of matrices, introductory linear programming, logarithms, and exponential functions. Applications emphasizing the relationships of these mathematical concepts to quantitative decision-making in the managerial and social sciences.</td>
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<td>MATH A200</td>
<td>Calculus I</td>
<td>4 CR</td>
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<td>Contact Hours: 4 + 0</td>
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<tr>
<td></td>
<td>Prerequisites: [MATH A107 with minimum grade of C and MATH A108 with minimum grade of C] or [MATH A109 with minimum grade of C].</td>
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<td>Registration Restrictions: If prerequisite is not satisfied, appropriate SAT, ACT, or AP scores or approved UAA Placement Test required.</td>
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<td>Course Attributes: UAA GER Quantitative Skill Requirement.</td>
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<td>Special Fees.</td>
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<td></td>
<td>Review of functions and analytic geometry, limits, derivatives of trigonometric and rational algebraic functions, curve sketching, basic integration of power functions, the definite integral, and applications of differentiation and integration.</td>
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<tr>
<td>MATH A201</td>
<td>Calculus II</td>
<td>4 CR</td>
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<td>Contact Hours: 4 + 0</td>
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<td>Prerequisites: MATH A200 with minimum grade of C.</td>
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<tr>
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<td>Course Attributes: UAA GER Quantitative Skill Requirement.</td>
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<td>Special Fees.</td>
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<td></td>
<td>Differentiation and integration of exponential, logarithmic and trigonometric functions. Parametric equations, arc length, polar coordinates, techniques of integration, and infinite series.</td>
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<tr>
<td>MATH A202</td>
<td>Calculus III</td>
<td>4 CR</td>
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<td>Contact Hours: 4 + 0</td>
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<td>Prerequisites: MATH A201 with minimum grade of C.</td>
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<td>Special Fees.</td>
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<td></td>
<td>Vectors, partial differentiation and multiple integration. Green's Theorem, Stokes' Theorem and the Divergence Theorem.</td>
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<tr>
<td>MATH A205</td>
<td>Communicating Mathematical Ideas</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Prerequisites: EDSE A212 with minimum grade of C or PSY A245 with minimum grade of C.</td>
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<td>Registration Restrictions: Department Approval. Minimum grade of C in GER Quantitative Skills course.</td>
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<td>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.</td>
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<td></td>
<td>Elementary set theory, numeration 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.</td>
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<tr>
<td>MATH A215</td>
<td>Introduction to Mathematical Proofs</td>
<td>3 CR</td>
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<td></td>
<td>Contact Hours: 3 + 0</td>
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<td></td>
<td>Prerequisites: MATH A201.</td>
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<td></td>
<td>Study of logic, sets, relations, functions, cardinality, and an introduction to mathematical proof techniques.</td>
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<tr>
<td>MATH A231</td>
<td>Introduction to Discrete Mathematics</td>
<td>3 CR</td>
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<td></td>
<td>Contact Hours: 3 + 0</td>
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<td></td>
<td>Prerequisites: MATH A107.</td>
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<td></td>
<td>Registration Restrictions: If prerequisite is not satisfied, appropriate SAT, ACT, or AP scores or approved UAA placement test required.</td>
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<td>Special Fees.</td>
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<td>Logic in its connections with mathematical proof, set theory, Boolean algebra, and combinatorial circuits; techniques of counting; elements of graph theory. Additional topics related to the mathematics of computing may include graph and tree traversal, finite automata, and the basics of complexity and formal languages.</td>
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<tr>
<td>MATH A250</td>
<td>Introduction to Computer Algebra Systems</td>
<td>1 CR</td>
</tr>
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<td></td>
<td>Contact Hours: 1 + 0</td>
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<td></td>
<td>Prerequisites: MATH A280 or MATH A272.</td>
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<td>Grade Mode: Pass/No Pass.</td>
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<td>Special Fees.</td>
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<td></td>
<td>Introduction to the use of a computer algebra system as a tool to solve mathematical problems. Topics will cover syntax, symbolic calculations, plots, control structures, lists, and matrices. Writing of programs by students is required.</td>
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</tr>
</tbody>
</table>

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www.uaa.alaska.edu

Chapter 13 Page 407
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.  
Introduction to numerical methods and software packages to solve applied problems. Topics include matrices with emphasis on using them to solve systems of linear equations, methods of solving non-linear equations, techniques to interpolate and approximate functions, methods of numerical differentiation and integration, and numerical methods to solve ordinary and partial differential equations. MATLAB and Mathematica will be used to solve applied problems with these techniques.

MATH A490A  Selected Topics in Pure Mathematics  1-3 CR  
Contact Hours: 1-3 + 0  
Prerequisites: MATH A215 and MATH A314.  
Registration Restrictions: Instructor permission required.  
Special Fees.  
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 degrees.  
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 (ENGRR), Room 201, 786-1900  
www.engr.uaa.alaska.edu

ME A402  Mechanical Design I  4 CR  
Contact Hours: 3 + 3  
Prerequisites: ES A208 or ES A210.  
Analysis and design of displacements, velocities, accelerations, and forces in linkages, cams, and gear systems by analytical, experimental, and computer methods. Application of kinematics and dynamics of mechanisms.

ME A308  Instrumentation and Measurement  3 CR  
Contact Hours: 2 + 3  
Prerequisites: ES A309.  
Crosslisted with: EE A308.  
Instrumentation theory and concepts of digital and analog devices, transducers, data sensing transmission, recording and display, instrumentation system, remote sensing, and hostile environmental conditions.

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  Elements of Material Science  3 CR  
Contact Hours: 3 + 0  
Prerequisites: CHEM A108 and PHYS A211.  
Investigation and study of crystal structure, defect structure, aspects of metal processing, heat treatment, joining, testing, failure analysis, and phase diagrams for engineering applications and design.

ME A403  Mechanical Design II  3 CR  
Contact Hours: 3 + 0  
Prerequisites: [ENG A161 or ES A201] and ES A331 and MATH A302.  
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  Dynamics of Systems  3 CR  
Contact Hours: 2 + 3  
Prerequisites: [ENG A161 or ES A201] and [ES A208 or ES A210] and MATH A302.  
Crosslisted with: EE A408.  
Response of mechanical systems to internal and external forces. Free and forced vibration, random vibration. Discrete and continuous systems. Vibration parameter measurements and stability criteria.

ME A414  Thermal Systems Design  3 CR  
Contact Hours: 3 + 0  
Prerequisites: ES A346.  
Introduction to the design of power and space conditioning systems, energy conversion, heating, ventilating, air conditioning, total energy systems, and introduction to thermal system simulation and optimization.

ME A441  Heat and Mass Transfer  3 CR  
Contact Hours: 3 + 0  
Prerequisites: ES A302 and ES A341 and ES A346.  
Application of heat and mass transfer concepts to engineering problems including steady state and transient conduction, laminar and turbulent free and forced convection, evaporation, condensation, ice and frost formation, black body and real surface radiation, and heat exchangers.

ME A471  Automatic Control  3 CR  
Contact Hours: 3 + 0  
Prerequisites: EE A51 and MATH A302.  
Crosslisted with: EE A471.  
Use of linear system representation by transfer functions, signal flow graphics, and state equations. Feedback, time and frequency response of linear systems. Stability analysis by Routh-Hurwitz criterion and frequency domain methods, and system design and compensation.

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.
### MECH - MECHANICAL TECHNOLOGY

**Offered through Kenai Peninsula College**

34820 College Dr., Soldotna, Alaska, 99669, (907) 262-0300.

**www.kpc.alaska.edu**

**MECH A101**  
**Introduction to Machine Shop**  
4 CR  
Contact Hours: 2 + 4  
Offered only at Kenai Peninsula College.  
The fundamentals of safe machine shop practice including the operation of the lathe,  
vertical mill, bandsaw, drill press, grinders, cut-off saw, and radial drill. Precision  
measurement, single point threading and off-hand drill sharpening are taught with  
emphasis on repair work.

**MECH A102**  
**Intermediate Machine Shop**  
4 CR  
Contact Hours: 2 + 4  
Prerequisites: MECH A101.  
A continuation of safe shop fundamentals to include metalurgy, gears, fits,  
broaching, tapers, indexing and dividing, rotary table, multiple lead threads, carbide  
tools, and finishes. The use of machinery as required for machine repair. More complex  
projects will be completed by the student.

**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  
avtive 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.

**MECH A220**  
**Computer Numerical Control Mill**  
4 CR  
Contact Hours: 2 + 4  
Prerequisites: MECH A201 or MECH A202.  
Registration Restrictions: If prerequisite is not met, five years repair shop experience or  
instructor permission.  
Programming, operating, and producing mill parts on the computer numerical  
control mill (3-axis). Includes the history of computer numerical control mill,  
programming conventions, standards, format, cutting tools, tool changeing, tool offsets,  
feedback systems, adaptive control, computer to machine, and mill practice.

**MECH A273**  
**Machine Shop Lab**  
1 CR  
Contact Hours: 0 + 1  
Registration Restrictions: Three semesters of machine shop. Offered only at Kenai Peninsula College.  
Advanced machine shop practice to include more involved projects, machine tool set-ups, and techniques. Emphasizes student planning, executing, and completing projects at a high level.

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### MEDT - MEDICAL LABORATORY TECHNOLOGY

**Offered through the Community & Technical College Allied Health Sciences Building (AHS), Room 169, 786-4930**

**www.uaa.alaska.edu/ctc/alliedhealth/medlab**

This department is undergoing curriculum revision. Contact department for specific details.

**MEDT A101**  
**Phlebotomy Procedures**  
3 CR  
Contact Hours: 2 + 3  
Special Fees.  
Covers infection control, safety, blood collection by venipuncture and capillary  
techniques, specimen processing, quality assurance, communications, professionalism,  
ethics, and laboratory computer usage. Prepares students for phlebotomy practicum.

**MEDT A102**  
**Urinalysis for Clinical Assistants**  
2 CR  
Contact Hours: 2 + 0  
Prerequisites: MEDT A101 with minimum grade of C.  
Special Fees.  
Covers physical, chemical, and microscopic analysis of urine at the clinical assistant  
level.

**MEDT A103**  
**Hematology for Clinical Assistants**  
3 CR  
Contact Hours: 3 + 0  
Prerequisites: MEDT A101 with minimum grade of C.  
Special Fees.  
Covers specimen collection, reagent preparation, quality control, and testing of  
hematology and coagulation specimens at the clinical assistant level.

**MEDT A104**  
**Clinical Chemistry for Clinical Assistants**  
3 CR  
Contact Hours: 3 + 0  
Prerequisites: MEDT A101 with minimum grade of C.  
Special Fees.  
Covers specimen collection, reagent preparation, quality control, and testing of  
clinical chemistry specimens at the clinical assistant level.

**MEDT A105**  
**Microbiology for Clinical Assistants**  
3 CR  
Contact Hours: 3 + 0  
Prerequisites: MEDT A101 with minimum grade of C.  
Special Fees.  
Covers specimen collection, reagent preparation, quality control, and testing of  
microbiology specimens at the clinical assistant level.

**MEDT A107**  
**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 A123**  
**Introduction to Laboratory Medicine**  
3 CR  
Contact Hours: 2 + 2  
Registration Restrictions: Departmental approval. May be stacked with: MEDT A132.  
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 assurance.

**MEDT A133**  
**Basic Techniques in Laboratory Medicine**  
1 CR  
Contact Hours: 1 + 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. 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 assurance.
COURSE DESCRIPTIONS

MEDT A195A  Phlebotomy Practicum  3 CR
Contact Hours: 0 + 9
Prerequisites: MEDT A101 with minimum grade of C.
Grade Mode: Pass/No Pass.
Special Fees.
Provides clinical practicum in area hospitals/facilities for phlebotomy. Applies
didactic theories and principles of phlebotomy techniques. Prepares student for
certification exam.

MEDT A195B  Clinical Assistant Practicum  7 CR
Contact Hours: 0 + 21
Prerequisites: MEDT A102 with minimum grade of C and MEDT A103 with minimum
grade of C and MEDT A104 with minimum grade of C and MEDT A105 with minimum
grade of C.
Grade Mode: Pass/No Pass.
Special Fees.
Provides clinical practicum in area hospitals/facilities for clinical assistants. Applies
didactic theories and principles of urinalysis, hematology, clinical chemistry, and
microbiology at the clinical assistant level.

MEDT A202  Clinical Chemistry  6 CR
Contact Hours: 3 + 6
Prerequisites: BIOL A111 with minimum grade of C and BIOL A112 with minimum
grade of C and [CHEM A103 with minimum grade of C and CHEM A103L with
minimum grade of C or CHEM A105 with minimum grade of C and CHEM A105L with
minimum grade of C] and [CHEM A104 with minimum grade of C or CHEM A321 with
minimum grade of C] and MEDT A132 with minimum grade of C.
Registration Restrictions: Departmental approval.
Special Fees.
Develops skills in performing chemical analysis of blood and other body fluids.
Discusses and practices specific testing procedures for various organ systems. Correlates
laboratory results with clinical findings. Emphasizes quality assurance.

MEDT A203  Clinical Microbiology  6 CR
Contact Hours: 3 + 6
Prerequisites: BIOL A111 with minimum grade of C and BIOL A112 with minimum
grade of C and [CHEM A103 with minimum grade of C and CHEM A103L with
minimum grade of C or CHEM A105 with minimum grade of C and CHEM A105L with
minimum grade of C] and [CHEM A104 with minimum grade of C or CHEM A321 with
minimum grade of C] and MEDT A132 with minimum grade of C.
Registration Restrictions: Departmental approval.
Special Fees.
Emphasizes the media, isolation and culture techniques, biochemical tests and
staining techniques used in the identification, susceptibility testing and rapid antigen
testing of 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 A111 with minimum grade of C and BIOL A112 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 [CHEM A104 with minimum grade of C or CHEM A321 with
minimum grade of C] and MEDT A132 with minimum grade of C.
Registration Restrictions: Departmental approval.
Special Fees.
Emphasizes the theory and practice of manual and automated procedures in
hematology and coagulation and the relationship of these procedures to the diagnosis of
disease.

MEDT A206  Immunology and Blood Banking  6 CR
Contact Hours: 3 + 6
Prerequisites: BIOL A111 with minimum grade of C and BIOL A112 with minimum
grade of C and [CHEM A103 with minimum grade of C and CHEM A103L with
minimum grade of C or CHEM A105 with minimum grade of C and CHEM A105L with
minimum grade of C] and [CHEM A104 with minimum grade of C or CHEM A321 with
minimum grade of C] and MEDT A132 with minimum grade of C.
Registration Restrictions: Departmental approval.
Special Fees.
Introduces the theory of antigen-antibody reactions as it relates to blood grouping
and typing, antibody detection and compatibility testing. Discusses blood donor
screening and component preparations, immunologically related diseases,
transplantation, and principles of antigen-antibody based tests.

MEDT A208  Urine and Body Fluid Analysis  3 CR
Contact Hours: 2 + 2
Prerequisites: BIOL A111 with minimum grade of C and BIOL A112 with minimum
grade of C and [CHEM A103 with minimum grade of C and CHEM A103L with
minimum grade of C or CHEM A105 with minimum grade of C and CHEM A105L with
minimum grade of C] and [CHEM A104 with minimum grade of C or CHEM A321 with
minimum grade of C] and MEDT A132 with minimum grade of C.
Registration Restrictions: Departmental approval.
Special Fees.
Examines the physical, chemical and microscopic properties of urine and other body
fluids. Correlates selected chemical and microscopic constituents of urine and other body
fluids with various disease states.

MEDT A250  Capstone Seminar  1 CR
Contact Hours: 2 + 0
Registration Restrictions: Departmental permission.
Grade Mode: Pass/No Pass.
Uses discussion format enhanced by speakers, role-playing, problem solving, and
case studies on current topics in the clinical laboratory. Emphasizes ethical principles in
relation to technical applications.

MEDT A295  Clinical Practicum  12 CR
Contact Hours: 0 + 36
Prerequisites: MEDT A202 with minimum grade of C and MEDT A203 with minimum
grade of C and MEDT A204 with minimum grade of C and MEDT A206 with minimum
grade of C and MEDT A208 with minimum grade of C.
Registration Restrictions: Departmental approval
Special Fees.
Applies knowledge and skills acquired in medical laboratory technology (MEDT)
courses to laboratory testing at a clinical facility. Supervised by UAA faculty and clinical
laboratory personnel.

MEDT A301  Clinical Molecular Biology  4 CR
Contact Hours: 3 + 3
Prerequisites: BIOL A112 with minimum grade of C and MATH A107 with minimum
grade of C and [CHEM A104 with minimum grade of C or CHEM A321 with minimum
grade of C].
Registration Restrictions: Departmental approval.
Special Fees.
Examines the practice of molecular biology and its applications in the clinical
laboratory. Topics include human genetics; isolation, amplification, discrimination and
detection techniques for nucleic acids; and the design and operation of a molecular
diagnostic laboratory.

MEDT A302  Clinical Laboratory Education and Management  4 CR
Contact Hours: 4 + 0
Prerequisites: (PHIL A302 or concurrent enrollment).
Registration Restrictions: MLT program director and faculty approval. Completion of
GER Tier 1 (basic college-level skills) courses and junior standing.
Course Attributes: UAA GER Integrative Capstone.
Special Fees.
Applies educational and management principles to laboratory medicine and allied
health science professions. Prepares future laboratory managers to function in a
culturally diverse and technologically dynamic environment. Topics include education,
process, and teaching methods. Managerial components incorporate planning, directing,
and evaluating. Designed for students with an educational or working background in a
health care field.

MEDT A303  Advanced Clinical Microbiology  6 CR
Contact Hours: 3 + 3
Prerequisites: MEDT A203 with minimum grade of C.
Registration Restrictions: Departmental approval
Special Fees.
Examines microorganisms of medical importance to humans. Includes unusual
pathogenic and anaerobic bacteriology, mycology, parasitology, and virology with
emphasis on identification, susceptibility testing, and epidemiology.

MEDT A401  Introduction to Research  2 CR
Contact Hours: 2 + 0
Prerequisites: STAT A252 and (CBS A305 or concurrent enrollment).
Registration Restrictions: Departmental approval
Special Fees.
Applies research and presentation methods to current topics in medical technology.
MTP A1495 Medical Technology Practicum 12 CR
Contact Hours: 0 + 36
Prerequisites: MTP A202 with minimum grade of C and MTP A204 with minimum grade of C and MTP A208 with minimum grade of C and MTP A214 with minimum grade of C and MTP A218 with minimum grade of C and MTP A212 with minimum grade of C and MTP A210 with minimum grade of C and MTP A205 with minimum grade of C and MTP A200 with minimum grade of C and MTP A203 with minimum grade of C.
Registration Restrictions: Departmental approval
Special Fees.
Integrates knowledge and applies skills acquired in medical laboratory technology (MTP) courses to laboratory testing at a clinical facility. Supervised by UAA faculty and clinical laboratory personnel.

MT - MARINE TECHNOLOGY
Offered through Kenai Peninsula College
34620 College Dr., Soldotna, Alaska, 99669, (907) 262-0300.
www.kpc.alaska.edu
MT A122 Small Engine Maintenance and Repair 3 CR
Contact Hours: 3 + 0
Offered only at Kenai Peninsula College.
Maintenance and operation of small gasoline engines. Application of these engines to pumps, chain saws, and outboard motors.

MT A231 Vessel Commercial License Preparation 3 CR
Contact Hours: 3 + 0
Grade Mode: Pass/No Pass.
Offered only at Kenai Peninsula College.
Preparation for passing the USCG license exam for motor boat operator of uninspected passenger vessels, and master, inland and near coastal.

MTP - MASSAGE THERAPY PROGRAM
Offered through the Community and Technical College
Allied Health Sciences Building (AHS), Room 219, 786-4930
www.uaa.alaska.edu/ctc/programs/alliedhealth/mtp
MTP A151 Human Health and Disease I 3 CR
Contact Hours: 3 + 0
Special Fees.
Introduces 11 basic systems of the human body, their anatomical cellular structures, and physiological functions. First of a two-part course presenting the core material of anatomy, physiology, and pathology.

MTP A152 Human Health and Disease II 3 CR
Contact Hours: 3 + 0
Prerequisites: MTP A151 with minimum grade of C.
Special Fees.
Concludes the study of the eleven basic systems of the human body, their anatomical cellular structures, and physiological functions. Emphasis is placed on showing how the body's structure and function achieve a level of homeostasis through varied regulatory systems. Second of a two-part course presenting the core material of anatomy, physiology, and pathology.

MTP A154 Professional Communication and Documentation for Massage Therapists 2 CR
Contact Hours: 1 + 2
Prerequisites: MTP A151 with minimum grade of C or concurrent enrollment.
Special Fees.
Examines standards for, and provides practice in documentation, professional communication and record management in a professional setting.

MTP A155 Massage Therapy Business Management 2 CR
Contact Hours: 2 + 0
Special Fees.
Provides professional practice models and information to plan, set up, market, and run a new practice as required by Massage Therapy licensure and certification.

MTP A156 Standards in Therapeutic Massage 3 CR
Contact Hours: 3 + 0
Prerequisites: MTP A151 and MTP A154 and (MTP A167 with minimum grade of C or concurrent enrollment).
Corequisite: MTP A156 and MTP A158.
Special Fees.
CDS: Introduces the principles, professional standards, and ethics for massage practitioners.

MTP A157 Applications in Therapeutic Massage 4 CR
Contact Hours: 2 + 4
Prerequisites: MTP A151 and MTP A154 and (MTP A167 with minimum grade of C or concurrent enrollment).
Corequisite: MTP A156 and MTP A158.
Special Fees.
Introduces the benefits, physiological effects, and practical applications of therapeutic massage. Presents body mechanic concepts and therapist injury prevention.

MTP A158 Swedish Massage Development 2 CR
Contact Hours: 0 + 4
Prerequisites: MTP A151 and MTP A154 and (MTP A167 with minimum grade of C or concurrent enrollment).
Corequisite: MTP A156 and MTP A157.
Grade Mode: Pass/No Pass.
Special Fees.
Practices Swedish massage techniques, draping, and proper body mechanics.

MTP A167 Introduction to Human Movement 2 CR
Contact Hours: 2 + 0
Prerequisites: (MTP A151 with minimum grade of C or concurrent enrollment).
Special Fees.
Introduces basic human movement terms and concepts. Includes the study of individual muscles, bones, and bony landmarks.

MTP A173 Basic Jin Shin Do Acupressure 3 CR
Contact Hours: 2 + 2
Special Fees.
Introduces classic Chinese acu-theory including a synthesis of traditional Japanese acupuncture techniques, Reichian segmental theory, Taoist philosophy, and QiGong breathing and exercise techniques.

MTP A174 Introduction to Reflexology 4 CR
Contact Hours: 3 + 2
Special Fees.
Presents the principles and theories of reflexology. Students will learn to read the map of the body on the feet and stimulate the area of various reflexes on the foot or hand.

MTP A245 Structure, Function, and Movement 3 CR
Contact Hours: 3 + 0
Prerequisites: MTP A252 with minimum grade of C or concurrent enrollment) and MTP A154 with minimum grade of P.
Special Fees.
Presents the musculoskeletal system and the biomechanical relationships of muscles with their corresponding joints. Teaches anatomical and kinesiological terminology, major muscles, their actions and location. Includes palpation, active and passive range of motion, and movement analysis.

MTP A256 Goal-Oriented Massage 2 CR
Contact Hours: 2 + 0
Prerequisites: MTP A152 and (MTP A254 with minimum grade of C or concurrent enrollment).
Corequisite: MTP A267 and MTP A295.
Special Fees.
Introduces therapeutic massage techniques, including Swedish massage, shiatsu, and reflexology.

MTP A266 Assessment and Applications in Massage 4 CR
Contact Hours: 2 + 4
Prerequisites: MTP A152 and (MTP A254 with minimum grade of C or concurrent enrollment).
Corequisite: MTP A266 and MTP A295.
Special Fees.
Presents assessment and massage techniques using range of motion, proprioceptive neuromuscular facilitation stretching, lymphatic drainage, hydrotherapy, and seated work.

MTP A273 Intermediate Jin Shin Do 4 CR
Contact Hours: 3 + 2
Prerequisites: MTP A173.
Special Fees.
Introduces 60 new acupoints. Presents the twelve organ meridians, according to location and psycho-physical associations. Differentiates Western and Eastern understanding of physiology.
MUS - MUSIC

Offered through the College of Arts and Sciences
Fine Arts Building (ARTS), Room 302, 786-1595
http://music.uaa.alaska.edu

MUS A101A Community College Chorus 2 CR
Contact Hours: 2 + 0
Grade Mode: Pass/No Pass.
Performance-oriented class for community choral singing.

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 A105 Jazz Techniques Lab 2 CR
Contact Hours: 2 + 0
Registration Restrictions: Admission by audition only.
Performance-oriented group for students with intermediate to advanced instrumental skills. Focuses on reading, rehearsal, and study of contemporary music adapted for big band sound or jazz ensemble.

MUS A111 Fundamentals of Music 3 CR
Contact Hours: 3 + 0
Rudimentary work in the elements of music and an introduction to notation, rhythm, scales, keys, intervals, and musical terminology. Designed for students with little or no background in music reading, or as a refresher course for those who have studied music.

MUS A112 Practical Theory 3 CR
Contact Hours: 3 + 0
Prerequisites: MUS A111.
Registration Restrictions: Ability to read music in treble and bass clef in all keys.
Elementary study of harmony and melody; formation of scales, modes, intervals, chords, inversions, and simple harmonic progressions. Writing and harmonizing of melodic lines.

MUS A115 Jazz Theory I 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Ability to read music, theory background, basic ability on an instrument.
Detailed study of jazz using modulation, sequence, transposition, arranging, and voicing through analysis and dictation. Course is adapted to individual students on keyboard or other instruments.

MUS A116 Jazz Theory II 3 CR
Contact Hours: 3 + 0
Prerequisites: MUS A115.
Application of skills obtained in MUS 115. Modulation, sequence, transposition, arranging, and voicing are studied, with compositions performed by lab groups. Copyright preparation is discussed.

MUS A121 Music Appreciation 3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Fine Arts Requirement.
Special Note: Music majors may not use this course towards their GER-Fine Arts requirement.
Enhancement of listener understanding and enjoyment of various musical styles.
Investigation of music through the ages: Medieval through contemporary.

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
Prerequisites: MUS A131.
Corequisite: MUS A133.
Organization of musical materials with emphasis on diatonic functional harmony.
Introduction to part writing and keyboard skills.

MUS A132 Music Theory II 3 CR
Contact Hours: 3 + 0
Prerequisites: MUS A131.
Corequisite: MUS A134.
Continuation of MUS A131, emphasizing part writing and melody harmonization.
Introduction of non-harmonic tones and modulation and development of practical keyboard skills.

MUS A133 Sightsinging and Ear Training I 2 CR
Contact Hours: 2 + 0
Corequisite: MUS A131.
The development of skills in hearing and reading music. The course features the study of intervals and chords and common metrical patterns.

MUS A134 Sightsinging and Ear Training II 2 CR
Contact Hours: 2 + 0
Prerequisites: MUS A133.
Corequisite: MUS A132.
Continuation of MUS A133, emphasizing rhythmic, melodic and harmonic dictation.

MUS A140 Fingerstyle Guitar I 2 CR
Contact Hours: 2 + 0
Special Fees.
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.
Special Fees.
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 Fees.
Special Note: Instrument required.
One-semester theory course for guitar students. Includes analysis and construction of scales, intervals, chords, and key centers. Develops transcription skills, assignment of chords to melodies, harmonization, and eartraining. Hands-on exercises focus on practical application to the instrument.

MUS A150 Piano Class I 1 CR
Contact Hours: 1 + 0
Special Fees.
MUS A152 Voice Class I 1 CR
Contact Hours: 1 + 0
Registration Restrictions: Ability to match pitches.
Special Fees.
Special Note: Ability to read music not a prerequisite.
Study and practice of basic fundamentals of singing and song interpretation, stressing attitude and correct practice habits. Introduces and expands general knowledge of singing: mechanism, technique, repertoire, and performance practices.

MUS A154 Functional Piano I 1 CR
Contact Hours: 1 + 0
Prerequisites: (MUS A131 or concurrent enrollment).
Helps music majors obtain performance, sight-reading, and harmonization/transposition skills needed to pass Piano Proficiency Examination. Emphasizes basic reading skills and keyboard coordination.

MUS A155 Functional Piano II 1 CR
Contact Hours: 1 + 0
Prerequisites: MUS A154.
Continuation of MUS A154, using simple literature, sight-reading exercises, major scales and cadences, and simple tunes with primary triads.

MUS A222 History of Music II 3 CR
Contact Hours: 3 + 0
Prerequisites: MUS A121 or MUS A131.
Course Attributes: UAA GER Fine Arts Requirement UAA GER Humanities Requirement.
Special Note: BA music majors may not use this course towards their GER-Fine Arts or CAS Humanities sequence requirements.
Western Art music since 1750. Stylistic developments and structure through Classical, Romantic, and 20th Century eras within their historical context.

MUS A231 Music Theory III 3 CR
Contact Hours: 3 + 0
Prerequisites: MUS A132.
Corequisite: MUS A233.
Functional harmony featuring part writing and melody harmonization and introducing chromatic harmony. Covers modulation, secondary dominant functions, and other altered chords along with analysis of binary and ternary forms.

MUS A242 Solo Fingerstyle Guitar 2 CR
Contact Hours: 2 + 0
Prerequisites: MUS A142 and MUS A240.
Registration Restrictions: Faculty permission.
Special Fees.
Continuation of MUS A240. Review of second position and introduction of notecounting in the 4th and 5th positions. Intermediate solo repertoire including examples from the Latin American composers. Fingerstyle technique using extended chords in bars positions and pattern modulation.

MUS A250 Voice Class II 1 CR
Contact Hours: 1 + 0
Registration Restrictions: Admission by audition only.
Special Fees.
Special Note: May be repeated once for credit.
Performance-oriented course for the intermediate guitarist. Focuses upon rehearsal and memorization techniques using literature appropriate for each student's level of instrumental mastery. Continues notecounting in studies in all positions and exercises in small ensemble performance.

MUS A261 Private Lessons 1-2 CR
Contact Hours: 1-2 + 3-6
Special Fees.
Continuation of MUS A162.

MUS A262 Private Lessons 1-2 CR
Contact Hours: 1-2 + 3-6
Special Fees.
Continuation of MUS A261.
## MUS A263  Private Lessons (Non-Major)  1-2 CR
Contact Hours: 1-2 + 3-6
Special Fees.
Continuation of MUS A164.

## MUS A264  Private Lessons (Non-Major)  1-2 CR
Contact Hours: 1-2 + 3-6
Special Fees.
Continuation of MUS A263.

## MUS A280  Basic Conducting  2 CR
Contact Hours: 2 + 0
Prerequisites: MUS A131.
Introduces principles of conducting. Explores time-beating, use of left hand, score reading, and transposition as it relates to conducting.

## MUS A301A  University Singers  1 CR
Contact Hours: 2 + 0
Registration Restrictions: By audition.
Grade Mode: Pass/No Pass.
May be stacked with: MUS A301B.
Special Fees.
Special Note: May be repeated for credit. Ensemble credit for the non music major.
Rehearsal and performance of literature for large choral ensemble, including works from the Renaissance to the present day.

## MUS A301B  University Singers  2 CR
Contact Hours: 2 + 0
Registration Restrictions: By audition.
May be stacked with: MUS A301A.
Grade Mode: Pass/No Pass.
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 Note: May be repeated for credit.
In-depth rehearsal and performance of original band music and transcriptions from Renaissance up to and including 20th century literature. Ensemble for the non music major.

## MUS A303B  University Wind Ensemble  2 CR
Contact Hours: 2 + 0
Registration Restrictions: By audition.
May be stacked with: MUS A303A.
Special Note: May be repeated for credit.
In-depth rehearsal and performance of original band music and transcriptions from Renaissance up to and including 20th century literature. Ensemble course for wind and percussion majors.

## MUS A307A  University Sinfonia  1 CR
Contact Hours: 2 + 0
Registration Restrictions: By audition.
Grade Mode: Pass/No Pass.
May be stacked with: MUS A307B.
Special Note: May be repeated for credit.
Intensive study of chamber orchestra literature leading to public performance. String music for intermediate and advanced performers. Includes wind and percussion players for specific works. Ensemble for non music majors.

## MUS A307B  University Sinfonia  2 CR
Contact Hours: 2 + 0
Registration Restrictions: By audition.
May be stacked with: MUS A307A.
Special Note: May be repeated for credit.
Intensive study of chamber orchestra literature leading to public performance. String music for intermediate and advanced performers. Includes wind and percussion players for specific works. Ensemble for string majors.

## MUS A313  Opera Workshop  2 CR
Contact Hours: 2 + 0
Registration Restrictions: By audition.
Special Fees.
Special Note: May be repeated for credit. Only 4 credits of MUS A313 may be applied to the Bachelor of Music degrees.
Rehearsal and performance of selected operas, operettas and musical theatre. Meets the small ensemble requirement for music majors.

## MUS A331  Form and Analysis  3 CR
Contact Hours: 3 + 0
Prerequisites: MUS A232.
Structural principles and stylistic analysis of music of the 18th and 19th centuries.

## MUS A361  Private Lessons  1-2 CR
Contact Hours: 1-2 + 3-6
Special Fees.
Continuation of MUS A262.

## MUS A362  Private Lessons  1-2 CR
Contact Hours: 1-2 + 3-6
Special Fees.
Continuation of MUS A361.

## MUS A363  Private Lessons (Non-Major)  1-2 CR
Contact Hours: 1-2 + 3-6
Special Fees.
Continuation of MUS A363.

## MUS A364  Private Lessons (Non-Major)  1-2 CR
Contact Hours: 1-2 + 3-6
Special Fees.
Continuation of MUS A363.

## MUS A365  Chamber Ensemble  1 CR
Contact Hours: 1 + 0
Prerequisites: MUS A162.
Registration Restrictions: Faculty approval.
Special Note: May be repeated for credit 3 times.
Instrumental/Vocal ensemble of three or more. Students select a faculty coach and prepare and deliver a chamber work in a Department event or other approved public venue.

## MUS A371  Brass Methods and Techniques  2 CR
Contact Hours: 2 + 0
Prerequisites: MUS A132.
Special Fees.
Special Note: Student must be able to read music fluently while holding/performing on the brass instruments.
Instruction in the brass instruments. The course is part of the teacher training program.

## MUS A372  Woodwind Methods and Techniques  2 CR
Contact Hours: 2 + 0
Prerequisites: MUS A132.
Special Fees.
Special Note: Student must be able to read music fluently while holding/performing on the woodwind instruments.
Instruction in the woodwind instruments. The course is part of the teacher training program.

## MUS A373  String Methods and Techniques  2 CR
Contact Hours: 2 + 0
Prerequisites: MUS A132.
Special Fees.
Special Note: Student must be able to read music fluently while holding/performing on the string instruments.
Instruction in the stringed instruments of the orchestra and guitar. The course is part of the teacher training program.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>MUS A374</td>
<td>Voice Methods and Techniques</td>
<td>2 CR</td>
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<tr>
<td>Contact Hours: 2 + 0</td>
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<tr>
<td>Prerequisites: MUS A132.</td>
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<tr>
<td>Special Note: Student must be able to sing and read music fluently.</td>
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<tr>
<td>Instruction in musical use of the voice. The course is part of the teacher training program.</td>
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| MUS A375    | Percussion Methods and Techniques               | 2 CR    |
| Contact Hours: 2 + 0 |
| Registration Restrictions: Student must be able to read music fluently while holding/performing on the percussion instruments. |
| Special Fees. |

| MUS A376    | Elementary Music Methods and Techniques        | 2 CR    |
| Contact Hours: 2 + 0 |
| Prerequisites: MUS A132. |
| Special Fees. |

| MUS A381    | Choral Conducting                               | 2 CR    |
| Contact Hours: 2 + 0 |
| Prerequisites: MUS A232 and MUS A280. |
| Special Fees. |

| MUS A382    | Instrumental Conducting                         | 2 CR    |
| Contact Hours: 2 + 0 |
| Prerequisites: MUS A232 and MUS A280. |
| Special Fees. |

| 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. |

| MUS A405B   | University Jazz Ensemble                        | 2 CR    |
| Contact Hours: 2 + 0 |
| Registration Restrictions: By audition. |
| May be stacked with: MUS A405A. |
| Special Fees. |

| MUS A407    | Jazz Combo                                      | 2 CR    |
| Contact Hours: 2 + 0 |
| Prerequisites: MUS A162. |
| Registration Restrictions: By audition. |
| Special Note: May be repeated for credit. |

| 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. |

| 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. |

| 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. |

| 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. |

| MUS A421    | Music in the Baroque Period                     | 3 CR    |
| Contact Hours: 3 + 0 |
| Prerequisites: MUS A222 and MUS A232. |
| Special Note: BA music majors must first pass MUS 154 and the functional piano exam by jury before enrolling in this course. |
| Musical style from 1600 to 1750. In-depth study of keyboard music, opera, oratorio and cantata, and instrumental music. Requires intensive listening and reading of music. |

| MUS A422    | Music in the Classical Period                   | 3 CR    |
| Contact Hours: 3 + 0 |
| Prerequisites: MUS A222 and MUS A232. |
| Special Note: BA music majors must first pass MUS 154 and the functional piano exam by jury before enrolling in this course. |
| Musical style from 1720 to 1830. In-depth study of the music of pre-classic composers and Haydn, Mozart, and Beethoven. Requires intensive listening and reading of music. |

| MUS A423    | Music in the Romantic Period                    | 3 CR    |
| Contact Hours: 3 + 0 |
| Prerequisites: MUS A222 and MUS A232. |
| Special Note: BA music majors must first pass MUS 154 and the functional piano exam by jury before enrolling in this course. |
| Musical style from 1820 to 1900. In-depth study of orchestral and choral music, opera, lieder, and music for piano. Requires intensive listening and reading of music. |

| MUS A424    | Music in the 20th Century                       | 3 CR    |
| Contact Hours: 3 + 0 |
| Prerequisites: MUS A222 and MUS A232. |
| Special Note: BA music majors must first pass MUS A154 and the functional piano exam by jury before enrolling in this course. |
| Musical developments since 1900. In-depth study of serialism, neo-classicism, neo-Romanticism, expressionism, primitivism, minimalism, and styles since 1950. Requires intensive listening and reading of music. |

| MUS A431    | Counterpoint                                    | 3 CR    |
| Contact Hours: 3 + 0 |
| Prerequisites: MUS A232. |
| Study of the contrapuntal techniques of the 16th and 18th centuries. Features writing in appropriate vocal and instrumental forms. |

| MUS A432    | Orchestration                                   | 3 CR    |
| Contact Hours: 3 + 0 |
| Prerequisites: MUS A232. |
| Principles and practices of composing and transcribing music for various instrumental ensembles, including band and orchestra. |

| MUS A461    | Private Lessons                                 | 1-2 CR  |
| Contact Hours: 1-2 + 3-6 |
| Special Fees. |
| Continuation of MUS A362. |

| MUS A462    | Private Lessons                                 | 1-2 CR  |
| Contact Hours: 1-2 + 3-6 |
| Special Fees. |
| Continuation of MUS A461. |
### COURSE DESCRIPTIONS

**MUS A466  String and Wind Master Class**  1 CR  
Contact Hours: 1 + 0  
Registration Restrictions: Faculty Permission. Special Fees.  
Seminars in performance practice for string and wind players. Comparative analysis and discussion of string and wind literature and close examination of their styles and periods (early Baroque through 20th century). At least one performance or research project required each semester.

**MUS A467  Piano Master Class**  2 CR  
Contact Hours: 2 + 0  
Special Note: Mandatory each semester for piano performance majors; 8 credits minimum required for piano majors in music education; may be repeated for credit. Performance and discussion of the styles and periods of vocal literature ranging from the Renaissance to contemporary repertoire. Weekly in class performance trains the student to be more at ease and effective in singing.

**MUS A468  Voice Master Class**  2 CR  
Contact Hours: 2 + 0  
Registration Restrictions: Faculty permission required. Special Fees. Special Note: Mandatory each semester for vocal performance majors; 8 credits minimum required for vocal majors in music education; may be repeated for credit. Designed to improve the effectiveness of guitar performance, build confidence and stage presence by exploring technique and interpretation through actual stage experience. Problems arising from public performance will be discussed and solutions offered. The proper stylistic approach to works of specific composers will be addressed.

**MUS A469  Guitar Master Class**  2 CR  
Contact Hours: 2 + 0  
Registration Restrictions: One of MUS A147, MUS A240, or private lessons. Special Note: Mandatory each semester for guitar performance majors; 8 credits minimum required for guitar majors in music education; may be repeated for credit. The proper stylistic approach to works of specific composers will be addressed. Designed to improve the effectiveness of guitar performance, build confidence and stage presence by exploring technique and interpretation through actual stage experience. Problems arising from public performance will be discussed and solutions offered. The proper stylistic approach to works of specific composers will be addressed.

**MUS A603  Wind Ensemble Performance Projects**  2 CR  
Contact Hours: 1 + 4  
Registration Restrictions: Completion of baccalaureate degree in music and audition. Development and implementation of standards based curricular performance projects for band. Students participate in University Wind Ensemble for lab experience.

**MUS A668A Methods for Teaching Music I, K-12**  3 CR  
Contact Hours: 3 + 0  
Prerequisites: EDFN A601 and EDFN A602 and EDFN A603. Registration Restrictions: Admission to the Master of Arts in Teaching Program; departmental approval required. Corequisite: EDFN A695C. Special Note: Concurrent enrollment in internship is required. Provides students with the fundamentals of standards-based curriculum planning and assessment for the diverse student population in secondary classrooms. Includes an overview of the content areas typically taught in K-12 music curriculum. Integrates technology, health enhancement, literacy, and education for special populations.

**MUS A668B Methods for Teaching Music II, K-12**  3 CR  
Contact Hours: 3 + 0  
Prerequisites: MUS A668A and EDFN A695C. Registration Restrictions: Admission to the Master of Arts in Teaching Program; departmental approval required. Corequisite: EDFN A695D. Special Note: Concurrent enrollment in internship is required. Provides students with the opportunity to develop pedagogical content knowledge by connecting theoretical knowledge and understanding of human development and learning with both general principles of instruction and content-specific strategies for teaching music.

### NS - NURSING SCIENCES

**NS A204 Technology and Nursing Informatics**  3 CR  
Contact Hours: 3 + 0  
Prerequisites: ENGL A111 and ENGL A213 and [PHIL A101 or PHIL A201] or ENGL A120. Registration Restrictions: Admission to Clinical Nursing Major or RN licensure in the State of Alaska. Corequisite: NS A216 and NS A300. Special Fees. Concepts and applications of nursing informatics in health care organizations. Evaluate the impact of technology on nursing practice and on client education, including privacy and security issues. Explore electronic resources available to clients and nurses.

**NS A205 Nursing Informatics**  3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: Admission to clinical major and/or RN licensure in the State of Alaska. Special Fees. Concepts and applications of nursing informatics in health care organizations. Explore electronic resources available to clients and nurses.

**NS A216 Pathophysiology**  4 CR  
Contact Hours: 4 + 0  
Prerequisites: BIOL A112 with minimum grade of C and CHEM A104 with minimum grade of C and CHEM A104L with minimum grade of C. Registration Restrictions: Admission to Clinical Nursing major or RN licensure in State of Alaska. Corequisite: NS A204 and NS A300. Special Fees. 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. Offered fall and spring semesters. Systematic study of the nursing process in the care of individuals in a variety of settings. Emphasis on identifying the physiologic 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 A303L 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.

**NS A305 Health Assessment of Individuals**  2 CR  
Contact Hours: 2 + 0  
Registration Restrictions: RN licensure in State of Alaska. Corequisite: NS A305L. Offered fall semesters. Application of the nursing process focusing on health assessment, skills and tools for subjective and objective data collection, and interview techniques. The processes of history taking and physical examination are emphasized.
NS A305L Health Assessment of Individuals Lab 1 CR
Contact Hours: 0 + 3
Registration Restrictions: RN licensure in the State of Alaska.
Corequisite: NS A305L.
Grade Mode: Pass/No Pass.
Special Fees.
Offered fall semesters.
Skills laboratory experience to build skills and reinforce student learning in NS 305.

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 and NS A315 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 A313L Health Disruptions I Laboratory 1 CR
Contact Hours: 2 + 2
Prerequisites: NS A204 and NS A216 and NS A300 and NS A303 and NS A303L and NS A309. Corequisite: NS A313L.
Offered fall and spring semesters.
Emphasis on episodic health disruptions occurring across the life span. Nursing therapeutics utilized focus on nursing management of the individual, the family, and the environment to optimize wellness.

NS A313L Health Disruptions I Laboratory 3 CR
Contact Hours: 0 + 9
Prerequisites: NS A216 and NS A300 and NS A303 and NS A303L and NS A309. Corequisite: NS A313L.
Grade Mode: Pass/No Pass.
Special Fees.
Clinical experience to build skills and reinforce student learning in NS A313.

NS A314 Health I for Registered Nurses 2 CR
Contact Hours: 2 + 0
Prerequisites: NS A204 and NS A308.
Registration Restrictions: RN licensure in the state of Alaska.
Corequisite: NS A314L.
Emphasizes health promotion, illness prevention, and health protection strategies for individuals, families, and small groups. Focus on promoting healthy lifestyles across the life span. Class will introduce concepts of community health nursing, epidemiology, and injury.

NS A314L Health I for Registered Nurses Lab 2 CR
Contact Hours: 0 + 6
Prerequisites: NS A204 and NS A308.
Corequisite: NS A314.
Grade Mode: Pass/No Pass.
Special Fees.
Clinical experience in NS A314L will build skills and reinforce learning in NS A314. This course focuses on health promotion, illness prevention, and health protection strategies for individuals, families, and small groups.

NS A315 Health I: Nursing Therapeutics 3 CR
Contact Hours: 2 + 2
Prerequisites: NS A216 and NS A300 and NS A303 and NS A303L and NS A309.
Corequisite: NS A315L.
Offered fall and spring semesters.
Emphasizes health states and risk factors in individuals and families across the life span that are amenable to health promotion and illness prevention efforts, achieving and maintaining healthy lifestyles, as well as self-management of health.

NS A315L Health I: Nursing Therapeutics Laboratory 3 CR
Contact Hours: 0 + 9
Prerequisites: NS A216 and NS A300 and NS A303 and NS A303L and NS A309.
Corequisite: NS A315.
Grade Mode: Pass/No Pass.
Special Fees.
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 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 A401L.
Grade Mode: Pass/No Pass.
Special Fees.
Emphasis on episodic health disruptions in specialty-focused care. Nursing therapeutics focus on care of individuals, families and environments.

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 A406L Nursing Therapeutics in Complex Health Disruptions 2.5 CR
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 A408L Complex Health Disruptions: Nursing Therapeutics 2 CR
Contact Hours: 2 + 0
Prerequisites: NS A314 with minimum grade of C and NS A314L with minimum grade of P. Registration Restrictions: RN-BS program students only. Corequisite: NS A408L.
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 from prerequisite courses and nursing experience.
NS A408L  Complex Health Disruptions Laboratory: Nursing Therapeutics  2 CR
Contact Hours: 0 + 6
Prerequisites: NS A314 with minimum grade of C and NS A314L with minimum grade of P.
Registration Restrictions: RN-BS students only.
Corequisite: NS A408.
Grade Mode: Pass/No Pass.
Special Fees.
Clinical experience to build skills and reinforce student learning in NS A408.

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 C and NS A406L with minimum grade of P.
Registration Restrictions: Completion of GER Tier 1 (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 C and NS A406L 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 and NS A319 with minimum grade of C.
Special Fees.
Theories of management and organizations for basic student roles in relation to health care delivery systems. Emphasis is on the role of the professional nurse in health care organizations. Provides an overview of skills and techniques used for effective leadership and management of health care services. Exploration of legal implications and perspectives in nursing practice.

NS A416  Concentration in Clinical Nursing  5 CR
Contact Hours: 1 + 0
Prerequisites: NS A400 with minimum grade of C and NS A401 with minimum grade of C and NS A401L with minimum grade of P and NS A406 with minimum grade of C and NS A406L with minimum grade of P and NS A411 with minimum grade of C 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 406 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
Registration Restrictions: RN licensure in Alaska.
Special Fees.
Offered spring semesters.
Basic theories of management and organizations 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. Registered nurse students integrate knowledge and skills gained from their own clinical practice into a theoretical context.

NS A420  Nursing Care of Special Populations  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Enrollment in the School of Nursing or hold RN licensure in Alaska.
Special Fees.
Investigation of the challenges facing nurses caring for individuals with a developmental (intellectual or physical) disability. Exploration of communication styles, psychosocial needs, physical needs, and integration of individuals with developmental disabilities into the community health care system.

NS A421  Sexual Assault Response Team Training  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Registered Nurse or current enrollment in a nursing program.
Development of advanced knowledge and skills required for nurses to function effectively as members of a multi-disciplinary Sexual Assault Response Team (SART). Covers roles of team members, team building strategies, development of SART procedures and protocols, interaction with judicial system, skill development in performing medical-legal examination and collecting forensic evidence, sex offender characteristics, identification of community resources, and exploration of cultural issues.

NS A422  Nursing Interventions for the Critically Ill Adult  2-3 CR
Contact Hours: 2 + 0-3
Registration Restrictions: Grade of C or better in all required 300-level nursing courses.
Special Fees.
Emphasizes the specific nursing care needs of critically ill adults and the role of the critical care nurse. Case studies are used to assist students to apply the nursing process to the care of critically ill adults to promote movement of the client from critical illness to recovery and independence. Clinical experiences consist of participant observation in a variety of critical care settings.

NS A423  Transcultural Nursing  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Grade of C or better in all required NS 300-level clinical courses or RN licensure in State of Alaska.
Special Fees.
Examination of sociocultural factors that influence health, illness, and health-related human behavior. Introduction to concepts that place health-related behaviors within a cultural context and to the elements of a culturally sensitive approach to clients seeking professional nursing care services.

NS A424  Issues in Women's Health  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Grade of C or better in all required NS 300-level clinical courses or RN licensure in State of Alaska.
Special Fees.
Exploration of current issues, research, controversies affecting women's health with a focus on health promotion and maintenance. Life cycle issues will be addressed. Special needs and interventions for unique populations will be addressed. The focus on health promotion and maintenance and an advocacy viewpoint suggest this course for health professionals.

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
Registration Restrictions: Grade of C or better in all required NS 300-level clinical courses or RN licensure in State of Alaska.
Special Fees.
Overview of family violence, including medical, physical, and emotional abuse and neglect of target at-risk groups. Focus is on developing an interdisciplinary perspective for understanding causation and treatment issues. Dynamics of the problem are explored from the perspectives of various theorists. Emphasis is on the development of increased personal self-awareness to the complexity of feelings and issues in family violence and on the relationship of nursing to social work, justice, and corrections in the context of domestic violence programs.

NS A428  Nursing the Chemically Dependent Client  3 CR
Contact Hours:  3 + 0
Registration Restrictions: Grade of C or better in all required NS 300-level clinical courses or RN licensure in State of Alaska.
Special Fees.
In-depth study of the psychopharmacologic and sociocultural effects of chemical dependency. Students learn to utilize the nursing process to design strategies for the nursing management of chemically dependent client systems. Clinical experiences include participant observation in a variety of settings where chemically dependent clients are commonly encountered.

NS A429  Perioperative Nursing  3 CR
Contact Hours: 1.5 + 4.5
Registration Restrictions: Grade of C or better in all required NS 300-level clinical courses or 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
Registration Restrictions: Grade of C or better in all required NS 300-level clinical courses or RN licensure in State of Alaska.
Special Fees.
Rural health care analyzed from a problem solving framework. Specific issues to be addressed include: historical perspectives of rural health care; behavioral, cultural, and environmental factors affecting health; access to and utilization of health care systems; responsibility for rural health care policy; and strategies for improving rural health. Alaskan communities are utilized as a focus for the clinical portion of the course.

NS A431  Human Sexuality in Health and Illness  3 CR
Contact Hours:  3 + 0
Registration Restrictions: Grade of C or better in all required NS 300-level clinical courses or RN licensure in State of Alaska.
Special Fees.
Explores physiological, psychological and social nature of human sexuality and implications for nursing profession. Emphasizes individual and group sexual behavior. Explores impact of illness on sexuality and role of professional nurse.

NS A433  Health Education: Theory and Practice  3 CR
Contact Hours:  3 + 0
Registration Restrictions: Grade of C or better in Nursing Foundations I, II, and III or RN licensure in State of Alaska.
Croslisted with: HS A433.
Special Fees.
Introduction to the principles, methods, and resources used in health education. Examines psychosocial and cultural determinants of health behavior and their role in the development of effective health education strategies. Explores organizational, societal, and professional issues influencing health education for individuals, groups, and communities.

NS A434  Health Care of the Elderly  3 CR
Contact Hours:  3 + 0
Prerequisites: NS A300 with minimum grade of C and NS A303 with minimum grade of C and NS A30L with minimum grade of I and NS A309 with minimum grade of C. Registration Restrictions: Prerequisites or RN licensure in Alaska.
Special Fees.
Overview of issues which affect older adults and their lifestyles. Addresses normal physiological and psychosocial aging changes, and health concepts of prevention, promotion, and protection. Includes issues affecting care giving of older family members in a multitude of settings. Explores health policies which have financial, legal, and ethical implications. Highlights special needs of Alaskan elderly.

NS A435  Disaster Nursing  3 CR
Contact Hours:  3 + 0
Prerequisites: (NS A303 with minimum grade of C or concurrent enrollment) and (NS A309 with minimum grade of C or concurrent enrollment).
Registration Restrictions: Prerequisites or RN licensure in Alaska.
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 A438  Managed Care: Issues and Practice  3 CR
Contact Hours:  3 + 0
Registration Restrictions: Grade of C or better in all required NS 300 level clinical courses or RN licensure in State of Alaska.
The role of the nurse in interdisciplinary practice of managed care to include case management and home health environments. Issues to include ethics, economics, accountability, and health care reforms. The historical and social evolution of managed care, including regulatory, legislative, financial, and sociocultural considerations.
Practice in computer applications for health care information systems.

NS A440  Nursing Honors I: Project Exploration  1 CR
Contact Hours:  5 + 1.5
Prerequisites: (NS A400 or concurrent enrollment).
Registration Restrictions: Permission for enrollment in Nursing Honors by Baccalaureate Chair and Nursing Baccalaureate Curriculum Committee. 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:  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 A451  Introduction to Neonatal Intensive Care Nursing  3 CR
Contact Hours:  3 + 0
Prerequisites: (NS A401 or concurrent enrollment).
Registration Restrictions: Grade of C or better in all required NS 300-level clinical courses or RN licensure in State of Alaska.
Crosslisted with: HS A433.
Special Fees.
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 A601  Advanced Pathophysiology  3 CR
Contact Hours:  3 + 0
Registration Restrictions: Graduate standing or faculty permission required.
Special Fees.
Critical review and analysis of disease processes and resulting abnormal functioning across the life span. A case study approach is used to foster refinement of critical thinking in interpreting pathophysiologic changes that result in clinical manifestations indicative of illness.

NS A602  Advanced Health Assessment in Primary Care  3 CR
Contact Hours:  2 + 3
Registration Restrictions: RN license in the state of Alaska; undergraduate level in health and physical assessment.
Special Fees.
Designed to provide a systematic approach to advanced assessment of physical, sociocultural, developmental, and spiritual aspects of individuals across the life span. The course builds on basic health assessment knowledge and skills, laboratory, and radiology interpretation, validation, documentation, and analysis of assessment findings.
NS A610 Pharmacology for Primary Care 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Current Licensure to practice as a Registered Nurse in the State of Alaska. Special Fees.
Offered spring semesters.

An advanced level pharmacology course that assists health care professionals in the selecting, prescribing, and monitoring of pharmaceutical agents utilized in the primary care setting in the community. Legend drugs, over-the-counter agents, and some complementary therapeutics will be discussed. Emphasis is on the pharmacodynamics of medications most commonly prescribed for the treatment of respiratory diseases, infections, genitourinary disease, preventive health, dermatological diseases, musculoskeletal conditions, cardiovascular diseases, depression and anxiety, and reproductive health.

NS A611 Psychopharmacology 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing or permission of instructor. Current licensure to practice as a registered nurse in Alaska. Special Fees.

Focuses on psychopharmacological principles and therapeutic practices used to safely and effectively select, prescribe, and monitor psychotropic agents utilized in treating mental health problems and psychiatric disorders across the lifespan.

NS A620 Nursing Research Methods 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing, grade of C or better in undergraduate research course, and basic statistics course. Special Fees.
Offered alternate spring semesters.

Principles of the research process including nursing research problem identification, literature review, development of conceptual framework, research design, sampling and data collection methods, data analysis, and proposal writing. Enhancement of skills for evaluation of nursing research. Focus on planning of Master’s degree research in nursing.

NS A621 Knowledge Development for Advanced Nursing Practice 4 CR
Contact Hours: 4 + 0
Registration Restrictions: Graduate standing or faculty permission required. Special Fees.
Offered fall semesters.

Development of a community of learners through the integration of theory from nursing and other disciplines to describe and explain human responses in health and illness. Theories will be critically analyzed for adequacy of conceptualization, measurement, and application. Selected theories to be covered vary and include theories about adaptation, illness prevention, health promotion, and change in relation to individuals, families, and groups.

NS A623 Transcultural Nursing in a Multicultural World 3 CR
Contact Hours: 3 + 0

Critique of transcultural nursing concepts and theory for utilization in the provision of culturally sensitive nursing care and health education with individuals, families, and groups from diverse cultural populations within society. Cultural beliefs and values that influence definitions of behaviors related to health and illness will be explored. The effect of culture on the acquisition and integration of new knowledge to facilitate movement toward a health promoting lifestyle will be emphasized. Additional theoretical focuses from the social sciences, particularly anthropology, will be analyzed for their application in a culturally sensitive approach to nursing care.

NS A624 Qualitative Research in Nursing 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing. Special Fees.

Focus on qualitative approach in gaining nursing knowledge. Broad range of topics including case study, content analysis, participant and nonparticipant observation, open-ended interviews, document study, and an introduction to “Grounded theory” methods. Students will be required to select one method for in-depth exploration.

NS A625 Biostatistics for Health Professionals 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing or instructor permission. Undergraduate statistics course with a grade of C or better.
Crosslisted with: HS A625.

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.

NS A625L Biostatistics for Health Professionals Lab 1 CR
Contact Hours: 0 + 3
Prerequisites: (NS A625 or concurrent enrollment). Registration Restrictions: Graduate Standing.
Grade Mode: Pass/No Pass.
Crosslisted with: HS A625L.

Elective computer laboratory to teach statistical computer packages to use in performing statistical data analysis.

NS A661 Principles of Epidemiology 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing or faculty permission. Crosslisted with: HS A661.

Special Fees.

Introduces students to the principles and methods of epidemiological investigation of common national and state public health problems, ranging from infectious and noninfectious diseases to social, behavioral, and environmental concerns. Discusses different types of epidemiological study design, and explores trends in epidemiology, giving special attention to epidemiological issues in Alaska and the northern regions. Clinical application within health care administration, nursing, social work, and public health are emphasized.

NS A631 Family Nurse Practitioner 2 CR
Focus on Women’s Health and Obstetrics I
Contact Hours: 1 + 4
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 women and childbearing families with a focus on wellness and prevention.

NS A632 Family Nurse Practitioner 2 CR
Focus on Pediatrics I
Contact Hours: 1 + 4
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.

NS A635 Family Nurse Practitioner 2 CR
Focus on Women’s Health and Obstetrics II
Contact Hours: 1 + 4
Prerequisites: NS A631 and NS A633 with minimum grade of C.
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 certified nurse midwife.

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 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.
An analysis of the procedures by which government and private agencies make arrangements, legal and ethical questions, marketing of nursing services and establishing support networks.

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.

Continuing preparation for expansion to primary care of all ages. Includes advanced history and physical assessment skills for pediatric clients of all ages. 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 children, adolescents, females of all ages, and child-bearing families with a focus on primary care of common diseases.

Continuing preparation for expansion to primary care of all ages. Includes advanced history and physical assessment skills for pediatric 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 infants, children, adolescents, females of all ages, and child-bearing families with a focus on primary care of common diseases.

Continuing preparation for expansion to primary care of all ages. Includes advanced history and physical assessment skills for pediatric 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 infants, children, adolescents, females of all ages, and child-bearing families with a focus on primary care of common diseases.

Continuing preparation for expansion to primary care of all ages. Includes advanced history and physical assessment skills for pediatric 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 infants, children, adolescents, females of all ages, and child-bearing families with a focus on primary care of common diseases.

Continuing preparation for expansion to primary care of all ages. Includes advanced history and physical assessment skills for pediatric 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 infants, children, adolescents, females of all ages, and child-bearing families with a focus on primary care of common diseases.

Continuing preparation for expansion to primary care of all ages. Includes advanced history and physical assessment skills for pediatric 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 infants, children, adolescents, females of all ages, and child-bearing families with a focus on primary care of common diseases.

Continuing preparation for expansion to primary care of all ages. Includes advanced history and physical assessment skills for pediatric 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 infants, children, adolescents, females of all ages, and child-bearing families with a focus on primary care of common diseases.

Continuing preparation for expansion to primary care of all ages. Includes advanced history and physical assessment skills for pediatric 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 infants, children, adolescents, females of all ages, and child-bearing families with a focus on primary care of common diseases.

Continuing preparation for expansion to primary care of all ages. Includes advanced history and physical assessment skills for pediatric 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 infants, children, adolescents, females of all ages, and child-bearing families with a focus on primary care of common diseases.

Continuing preparation for expansion to primary care of all ages. Includes advanced history and physical assessment skills for pediatric 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 infants, children, adolescents, females of all ages, and child-bearing families with a focus on primary care of common diseases.

Continuing preparation for expansion to primary care of all ages. Includes advanced history and physical assessment skills for pediatric 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 infants, children, adolescents, females of all ages, and child-bearing families with a focus on primary care of common diseases.

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Continuing preparation for expansion to primary care of all ages. Includes advanced history and physical assessment skills for pediatric 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 infants, children, adolescents, females of all ages, and child-bearing families with a focus on primary care of common diseases.

Continuing preparation for expansion to primary care of all ages. Includes advanced history and physical assessment skills for pediatric 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 infants, children, adolescents, females of all ages, and child-bearing families with a focus on primary care of common diseases.

Introduces the psychiatric-mental health nurse practitioner role and entry-level competencies. Emphasizes interpersonal and diagnostic processes utilized in assessing and managing the care of individuals across the lifespan who are at risk of, or are experiencing, mental health problems and psychiatric disorders. Evidence regarding the clinical basis and effectiveness of current treatment modalities is examined. Application focuses on developing counseling skills that foster therapeutic alliances and promote mental health and functional well-being.
### 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:**  
**Special Note:** For Post-Master’s Certificate students, licensure for advanced practice nurse in Alaska is required.  

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:** For Post-Master’s Certificate students, licensure for advanced practice nurse in Alaska is required.  

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 A682  Administrative Services  3 CR

**Contact Hours:** 3 + 0  
**Prerequisites:** (NS A681 or concurrent enrollment).  
**Offered as Demand Warrants:**  
**Elements of administrative processes within the health care system. Personal and interpersonal competencies and maximization of resource allocation to optimize effective leadership and management are emphasized.**

### NS A682L  Administrative Services Field Work  1 CR

**Contact Hours:** 0 + 4  
**Prerequisites:** (NS A682 or concurrent enrollment).  
**Registration Restrictions:** RN licensure in Alaska.  
**Grade Mode:** Pass/No Pass.  
**Offered as Demand Warrants:**  
**Elective clinical experience in application of administrative theory in health care settings. Students work directly with preceptor in the care setting.**

### NS A690  Selected Topics in Advanced Clinical Nursing  3 CR

**Contact Hours:** 3 + 0  
**Prerequisites:** NS A620.  
**Registration Restrictions:** Baccalaureate Degree in Nursing.  
**Special Fees:**  
**In-depth exploration of current literature within a defined clinical nursing specialty area of practice. Students identify issues of current concern within the specialty, review and synthesize the relevant literature, select a specific problem, and develop and submit for publication a scholarly paper designed to address the selected problem.**

### NS A695  Practicum in Health Care Administration  4 CR

**Contact Hours:** 2 + 8  
**Prerequisites:** NS A681 and PADM A610 and PADM A624 or [NS A681 and BA A632].  
**Offered as Demand Warrants:**  
**Seminar and practicum emphasizing integration and application of advanced administrative theory and skills.**

### NS A696  Individual Project  2-5 CR

**Contact Hours:** 2-5 + 0  
**Prerequisites:** NS A620 and NS A621 and NS A625 and NS A642.  
**Registration Restrictions:** Enrollment in graduate nursing program.  
**Special Fees:**  
**Development and implementation of a theory-based practice project in a clinical, educational or administrative setting. Students identify a topic of current concern within the specialty, review and synthesize the relevant literature, examine and address a specific issue.**

### NS A699  Thesis  2-5 CR

**Contact Hours:** 2-5 + 0  
**Prerequisites:** NS A620 and NS A621 and NS A625 and NS A642.  
**Registration Restrictions:** Enrollment in graduate nursing program.  
**Grade Mode:** Pass/No Pass.  
**Special Fees:**  
**Under the guidance of the thesis advisor and in conjunction with thesis committee, student develops, refines and implements a research proposal.**

### NUPN - NURSING - PRACTICAL NURSING

Offered through the College of Health & Social Welfare  
Professional Studies Building (PSB), Room 103, 786-4665  
[http://nursing.uaa.alaska.edu](http://nursing.uaa.alaska.edu)

#### NUPN A101  Fundamental Concepts and Skills for Practical Nursing  7 CR

**Contact Hours:** 7 + 0  
**Prerequisites:** (NUPN A105 or concurrent enrollment).  
**Registration Restrictions:** Admission to the Practical Nursing Certificate Program.  
**Corequisite:** NUPN A101L.  
**Introduction of fundamental concepts of basic human needs, health-illness continuum, nursing process, therapeutic communication, and basic drug and diet therapy. Holistic care that meets the unique physical, mental, emotional, and spiritual health needs of the client and family is emphasized. Development of critical thinking skills and conscientious accountability for working in the practical nurse role within the health care system is emphasized.**

#### NUPN A101L  Fundamental Concepts and Skills for Practical Nursing Lab  5 CR

**Contact Hours:** 0 + 15  
**Prerequisites:** (NUPN A105 or concurrent enrollment).  
**Registration Restrictions:** Admission to the Practical Nursing Certificate Program.  
**Corequisite:** NUPN A101.  
**Grade Mode:** Pass/No Pass.  
**Special Fees:**  
**Application of knowledge gained in NUPN A101 to the acquisition of nursing skills in the nursing skills laboratory and to the care of clients in the clinical practice setting.**
NUPN A105 Human Anatomy and Function 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Admission to the Practical Nursing Certificate Program.
Corequisites: NUPN A101 and NUPN A101L.
Special Fees.
Anatomy and Function of organs and systems within the human body. Students learn the basic structure and function of the human body. Students also learn derivation, application, and integration of appropriate terminology to anatomy, physiology, and pathophysiology. Provides a foundation for practical nurse clinical practice.

NUPN A110 Adult Medical-Surgical Nursing for Practical Nurses 5 CR
Contact Hours: 5 + 0
Prerequisites: NUPN A101 with minimum grade of C and NUPN A105 with minimum grade of C and NUPN A101L with minimum grade of P.
Registration Restrictions: Admission to the Practical Nursing Certificate Program.
Corequisites: NUPN A110 and NUPN A115.
Introduction to nursing care of the ill adult, using the nursing process as a unifying framework. Pathophysiology of common disorders; treatment options, including drug therapy and nursing care approaches are presented.

NUPN A110L Adult Medical-Surgical Nursing for Practical Nurses Lab 3 CR
Contact Hours: 0 + 9
Prerequisites: NUPN A101 with minimum grade of C and NUPN A105 with minimum grade of C and NUPN A110L with minimum grade of P.
Registration Restrictions: Admission to the Practical Nursing Certificate Program.
Corequisites: NUPN A110 and NUPN A115.
Grade Mode: Pass/No Pass.
Special Fees.
Application of knowledge gained in NUPN A110 to the acquisition of more advanced nursing skills and techniques for the care of adults experiencing medical-surgical illnesses.

NUPN A112 Mother-Baby Nursing for Practical Nurses 3 CR
Contact Hours: 3 + 0
Prerequisites: NUPN A101 with minimum grade of C and NUPN A105 with minimum grade of C and NUPN A112L with minimum grade of P.
Registration Restrictions: Admission to the Practical Nursing Certificate Program.
Corequisites: NUPN A112.
Normal care during pregnancy, including prenatal and postpartum care, fundamental principles of labor and delivery and nursing care of the mother and newborn. The role of the practical nurse in teaching and health promotion to impact the health environment of the newborn through its early development is discussed.

NUPN A112L Mother-Baby Nursing for Practical Nurses Lab 2 CR
Contact Hours: 0 + 6
Prerequisites: NUPN A101 with minimum grade of C and NUPN A105 with minimum grade of C and NUPN A112L with minimum grade of P.
Registration Restrictions: Admission to the Practical Nursing Certificate Program.
Corequisites: NUPN A112.
Grade Mode: Pass/No Pass.
Special Fees.
Application of knowledge gained in NUPN A112 toward the acquisition of nursing skills for the care of childbearing women and newborn infants.

NUPN A113 Nursing of Children for Practical Nurses 3 CR
Contact Hours: 3 + 0
Prerequisites: NUPN A101 with minimum grade of C and NUPN A105 with minimum grade of C and NUPN A113L with minimum grade of P.
Registration Restrictions: Admission to the Practical Nursing Certificate Program.
Corequisites: NUPN A113L.
Application of nursing care knowledge, skills, and processes to infants, children, adolescents, and families experiencing illness. Includes concepts and characteristics of growth and cognitive and physical development. The role of play and the impact of events and actions on development of a child's self-worth and caregiver teaching to prevent accidents and promote health are emphasized. Major health problems associated with each stage of growth and development and concepts in the care of the chronically ill and dying child are presented.

NUPN A113L Nursing of Children for Practical Nurses Lab 2 CR
Contact Hours: 0 + 6
Prerequisites: NUPN A101 with minimum grade of C and NUPN A105 with minimum grade of C and NUPN A113L with minimum grade of P.
Registration Restrictions: Admission to the Practical Nursing Certificate Program.
Corequisites: NUPN A113.
Grade Mode: Pass/No Pass.
Special Fees.
Application of knowledge gained in NUPN A113 to the acquisition of nursing skills for the care of infants, children, and adolescents.

NUPN A115 Concepts in Mental Health for Practical Nurses 1 CR
Contact Hours: 1 + 0
Prerequisites: NUPN A101 with minimum grade of C and NUPN A105 with minimum grade of C and NUPN A101L with minimum grade of P.
Registration Restrictions: Admission to the Practical Nursing Certificate Program.
Corequisites: NUPN A110 and NUPN A115L.
Special Fees.
Basic theory and principles of mental health nursing care for clients experiencing psychiatric disorders or situational crisis. Includes identification of resources for mental health care and discussion of the inter-relationship between disorders of physical and mental health across the life span. The role of the practical nurse in mental illness is explored.

NUPN A116 Role Transition to LPN 1 CR
Contact Hours: 1 + 0
Prerequisites: NUPN A110 with minimum grade of C and NUPN A112 with minimum grade of C and NUPN A113 with minimum grade of C and NUPN A115 with minimum grade of C and NUPN A110L with minimum grade of P and NUPN A112L with minimum grade of P and NUPN A113L with minimum grade of P.
Registration Restrictions: Admission to the Practical Nursing Certificate Program.
Corequisites: NUPN A116L.
Grade Mode: Pass/No Pass.
Special Fees.
Exploration of attitudes and expectations of the LPN and current and future trends in nursing, including licensure, scope of practice, legal and ethical issues. Emphasis is on the need to work as a member of the health care team and on the responsibility of the practical nurse to engage in life-long learning. Designed to prepare the soon-to-graduate practical nurse to integrate concepts, knowledge, and skills into a coherent whole ready to assume the beginning practical nurse role in the employment setting.

NUPN A118L Integrated Clinical Practicum for Practical Nurses 2 CR
Contact Hours: 2 + 0
Prerequisites: NUPN A110 with minimum grade of C and NUPN A112 with minimum grade of C and NUPN A113 with minimum grade of C and NUPN A115 with minimum grade of C and NUPN A110L with minimum grade of P and NUPN A112L with minimum grade of P and NUPN A113L with minimum grade of P.
Registration Restrictions: Admission to the Practical Nursing Certificate Program.
Corequisites: NUPN A116.
Grade Mode: Pass/No Pass.
Special Fees.
Concentrated clinical work to facilitate the transition of the graduating practical nurse to the full practical nurse role.

NURS - NURSING
Offered through the College of Health & Social Welfare
Professional Studies Building (PSB), Room 110, 786-4582
http://nursing.uaa.alaska.edu

NURS A101 Nursing Process 2 CR
Contact Hours: 1 + 2
Special Fees.
Introduction to nursing process as systematic approach to identifying patient problems and providing nursing care.

NURS A120 Nursing Fundamentals 3 CR
Contact Hours: 3 + 0
Prerequisites: (Biol A111 with minimum grade of C or concurrent enrollment) and (Engl A111 with minimum grade of C or concurrent enrollment) and (Psy A150 with minimum grade of C or concurrent enrollment).
Corequisites: NURS A120L.
Offered fall semesters.
Teaches fundamental skills and principles underlying nursing interventions. Nursing process is taught as a method to identify and meet each patient's basic nursing care needs which are prioritized according to Maslow's Hierarchy of Needs. Focus is on predicted responses in the health state; concepts related to health disruptions are introduced. Additional emphasis is placed on assessment for special needs according to developmental level. Admission to the associate of applied science in nursing program (clinical major).
COURSE DESCRIPTIONS

NURS A120L Nursing Fundamentals Lab 4 CR
Contact Hours: 0 + 12
Prerequisites: (BIOL A111 with minimum grade of C or concurrent enrollment) and (ENGL A111 with minimum grade of C or concurrent enrollment) and (PSY A150 with minimum grade of C or concurrent enrollment).
Corequisite: NURS A120L.
Grade Mode: Pass/No Pass.
Special Fees.
Offered fall semesters.
Provides laboratory and clinical experiences to reinforce student learning in NURS A120.

NURS A125 Adult Nursing I 3 CR
Contact Hours: 3 + 0
Prerequisites: NURS A120 with minimum grade of C and NURS A120L with minimum grade of C and ENGL A111 with minimum grade of C and BIOL A111 with minimum grade of C and PSY A150 with minimum grade of C and (NURS A125L with minimum grade of C or concurrent enrollment) and (NURS A180 with minimum grade of C or concurrent enrollment) and (BIOL A112 with minimum grade of C or concurrent enrollment) and (BIOL A240 with minimum grade of C or concurrent enrollment).
Corequisite: NURS A125.
Grade Mode: Pass/No Pass.
Special Fees.
Offered spring semesters.
Introduction to nursing care of ill adults. Builds upon knowledge gained in nursing fundamentals. Students learn pathophysiology, treatment options, and nursing care for adult patients with health problems that require some alteration in lifestyle to enable performance of activities of daily living.

NURS A125L Adult Nursing I Lab 4 CR
Contact Hours: 0 + 12
Prerequisites: (NURS A180 with minimum grade of C or concurrent enrollment) and (BIOL A112 with minimum grade of C or concurrent enrollment) and (BIOL A240 with minimum grade of C or concurrent enrollment).
Corequisite: NURS A125.
Grade Mode: Pass/No Pass.
Special Fees.
Offered spring semesters.
Provides laboratory and clinical experiences to reinforce student learning in NURS A125.

NURS A127 LPN to AAS Nursing Bridge 1 CR
Contact Hours: .7 + 1
Prerequisites: BIOL A111 with minimum grade of C and BIOL A112 with minimum grade of C and ENGL A111 with minimum grade of C and PSY A150 with minimum grade of C.
Registration Restrictions: Current Alaska LPN license, graduate of AVTECH LPN program, and admission to UAA Pre-nursing major.
Special Fees.

NURS A180 Basic Nursing Pharmacology 3 CR
Contact Hours: 3 + 0
Prerequisites: (NURS A125 with minimum grade of C or concurrent enrollment) and (NURS A125L with minimum grade of C or concurrent enrollment) and (BIOL A112 with minimum grade of C or concurrent enrollment) and (BIOL A240 with minimum grade of C or concurrent enrollment) and ENGL A111 with minimum grade of C and PSY A150 with minimum grade of C and BIOL A111 with minimum grade of C and NURS A120 with minimum grade of C.
Special Fees.
Offered spring semesters.
Introduction to drug therapy. Emphasis on basic pharmacology principles, drug action, correct dosages, methods of administration, and evaluation of patient response. Nursing process is used to identify priorities for care of patients receiving specific medications.

NURS A220 Perinatal Nursing 2 CR
Contact Hours: 2 + 0
Prerequisites: NURS A125 with minimum grade of C and NURS A125L with minimum grade of C and NURS A180 with minimum grade of C and BIOL A112 with minimum grade of C and (ENGL A111 with minimum grade of C or concurrent enrollment).
Corequisite: DN A203, NURS A220L, NURS A221, NURS A222 and NURS A222L.
Offered fall semesters.
Teaches utilization of the nursing process in providing nursing care for the patient experiencing pregnancy and childbirth and for the neonate, along the health-illness continuum. Ranges from normal, low risk perinatal care to high risk complications of the perinatal patient and family. Covers antepartal, intrapartal, postpartal and neonatal care.

NURS A220L Perinatal Nursing Lab 2 CR
Contact Hours: 0 + 6
Prerequisites: DN A203, NURS A220, NURS A221, NURS A222 and NURS A222L.
Corequisite: DN A203, NURS A220, NURS A220L, NURS A221 and NURS A222L.
Grade Mode: Pass/No Pass.
Special Fees.
Offered fall semesters.
Provides laboratory and clinical experiences to reinforce student learning in NURS A220.

NURS A221 Advanced Parenteral Therapy Lab 1 CR
Contact Hours: 0 + 3
Corequisite: DN A203, NURS A220, NURS A220L, NURS A221 and NURS A222L.
Grade Mode: Pass/No Pass.
Special Fees.
Offered fall semesters.
Advanced concepts in the therapeutic intervention and management of fluids administered via the parenteral route. Theoretical content and psychomotor skills related to intravenous therapy. Applicable to multiple patient care settings. Builds on prior content in the areas of IV therapy; nutritional support, and pain management.

NURS A222 Pediatric Nursing 2 CR
Contact Hours: 2 + 0
Corequisite: DN A203, NURS A220, NURS A220L, NURS A221 and NURS A222.
Grade Mode: Pass/No Pass.
Special Fees.
Offered fall semesters.
Designed to teach utilization of the nursing process and theories of growth and development as a framework for providing nursing care and fostering health promotion for infants, children, and adolescents and their families. Focus on normal growth and maturation and on acute and chronic alterations of health and development.

NURS A222L Pediatric Nursing Lab 2 CR
Contact Hours: 0 + 6
Corequisite: DN A203, NURS A220, NURS A220L, NURS A221 and NURS A222.
Grade Mode: Pass/No Pass.
Special Fees.
Offered fall semesters.
Provides laboratory and clinical experiences to reinforce student learning in NURS A222.

NURS A225 Adult Nursing II 3 CR
Contact Hours: 3 + 0
Corequisite: DN A203, NURS A220, NURS A220L, NURS A221 and NURS A222.
Grade Mode: Pass/No Pass.
Offered spring semesters.
Provides laboratory and clinical experiences to reinforce knowledge of pathophysiology and provide care for adult medical-surgical patients with acute, complex and life-threatening disorders.

NURS A225L Adult Nursing II Lab 3 CR
Contact Hours: 0 + 9
Corequisite: DN A203, NURS A220, NURS A220L, NURS A221 and NURS A222.
Grade Mode: Pass/No Pass.
Offered spring semesters.
Provides laboratory and clinical experiences to reinforce knowledge of pathophysiology and provide care for adult medical-surgical patients with acute, complex and life-threatening disorders.

NURS A226 Advanced Parenteral Therapy 2 CR
Contact Hours: 2 + 0
Corequisite: DN A203, NURS A220, NURS A220L, NURS A221 and NURS A222L.
Grade Mode: Pass/No Pass.
Special Fees.
Offered fall semesters.
Provides laboratory and clinical experiences to reinforce student learning in NURS A220.

NURS A226L Advanced Parenteral Therapy Lab 1 CR
Contact Hours: 0 + 3
Corequisite: DN A203, NURS A220, NURS A220L, NURS A221 and NURS A222L.
Grade Mode: Pass/No Pass.
Special Fees.
Offered fall semesters.
Advanced concepts in the therapeutic intervention and management of fluids administered via the parenteral route. Theoretical content and psychomotor skills related to intravenous therapy. Applicable to multiple patient care settings. Builds on prior content in the areas of IV therapy; nutritional support, and pain management.

NURS A227 Perinatal Nursing 2 CR
Contact Hours: 2 + 0
Corequisite: DN A203, NURS A220, NURS A220L, NURS A221 and NURS A222.
Grade Mode: Pass/No Pass.
Special Fees.
Offered fall semesters.
Provides laboratory and clinical experiences to reinforce student learning in NURS A220.

NURS A227L Perinatal Nursing Lab 2 CR
Contact Hours: 0 + 6
Corequisite: DN A203, NURS A220, NURS A220L, NURS A221 and NURS A222L.
Grade Mode: Pass/No Pass.
Special Fees.
Offered fall semesters.
Provides laboratory and clinical experiences to reinforce student learning in NURS A220.

NURS A228 Pediatric Nursing 2 CR
Contact Hours: 2 + 0
Corequisite: DN A203, NURS A220, NURS A220L, NURS A221 and NURS A222.
Grade Mode: Pass/No Pass.
Special Fees.
Offered fall semesters.
Provides laboratory and clinical experiences to reinforce student learning in NURS A220.

NURS A228L Pediatric Nursing Lab 2 CR
Contact Hours: 0 + 6
Corequisite: DN A203, NURS A220, NURS A220L, NURS A221 and NURS A222L.
Grade Mode: Pass/No Pass.
Special Fees.
Offered fall semesters.
Provides laboratory and clinical experiences to reinforce student learning in NURS A220.

NURS A229 Perinatal Nursing 2 CR
Contact Hours: 2 + 0
Corequisite: DN A203, NURS A220, NURS A220L, NURS A221 and NURS A222.
Grade Mode: Pass/No Pass.
Special Fees.
Offered fall semesters.
Provides laboratory and clinical experiences to reinforce student learning in NURS A220.

NURS A229L Perinatal Nursing Lab 2 CR
Contact Hours: 0 + 6
Corequisite: DN A203, NURS A220, NURS A220L, NURS A221 and NURS A222L.
Grade Mode: Pass/No Pass.
Special Fees.
Offered fall semesters.
Provides laboratory and clinical experiences to reinforce student learning in NURS A220.
NURS A250  Psychiatric Nursing  2 CR
Contact Hours: 2 + 0
Prerequisites: NURS A120 with minimum grade of C and NURS A210L with minimum grade of C and NURS A125 with minimum grade of C and NURS A210L with minimum grade of C and NURS A180 with minimum grade of C and NURS A220 with minimum grade of C and NURS A220L with minimum grade of C and NURS A222 with minimum grade of C and NURS A222L with minimum grade of C and NURS A220 with minimum grade of C and NURS A220L with minimum grade of C and NURS A222 with minimum grade of C and NURS A222L with minimum grade of C and NURS A220 with minimum grade of C and NURS A220L with minimum grade of C and NURS A222 with minimum grade of C and NURS A222L with minimum grade of C and NURS A220 with minimum grade of C and NURS A220L with minimum grade of C and NURS A222 with minimum grade of C and NURS A222L with minimum grade of C and ENGL A111 with minimum grade of C or ENGL A211 with minimum grade of C or ENGL A212 with minimum grade of C or ENGL A213 with minimum grade of C or ENGL A211 with minimum grade of C or BIOL A112 with minimum grade of C and BIOL A240 with minimum grade of C or PSY A150 with minimum grade of C and DN A203 with minimum grade of C.
Registration Restrictions: Complete one social science elective.
Corequisites: NURS A225, NURS A225L, NURS A220L, and NURS A2255.
Offered spring semesters.

Practices psychiatric nursing. Emphasis placed on the application of the nursing process utilizing technology in care for inpatients at all developmental levels. Students adapt communication skills to facilitate therapeutic interventions with patients experiencing mental illness.

NURS A250L  Psychiatric Nursing Lab  2 CR
Contact Hours: 0 + 6
Prerequisites: NURS A120 with minimum grade of C and NURS A210L with minimum grade of C and NURS A125 with minimum grade of C and NURS A210L with minimum grade of C and NURS A180 with minimum grade of C and NURS A220 with minimum grade of C and NURS A220L with minimum grade of C and NURS A222 with minimum grade of C and NURS A222L with minimum grade of C and ENGL A111 with minimum grade of C or ENGL A211 with minimum grade of C or ENGL A212 with minimum grade of C or ENGL A213 with minimum grade of C or ENGL A211 with minimum grade of C or BIOL A112 with minimum grade of C and BIOL A240 with minimum grade of C or PSY A150 with minimum grade of C and DN A203 with minimum grade of C.
Registration Restrictions: Complete one social science elective.
Corequisites: NURS A225, NURS A225L, NURS A220L and NURS A2255.
Grade Mode: Pass/No Pass
Special Fees: Offered spring semesters.

Provides laboratory and clinical experiences to reinforce student learning in NURS A250.

NURS A255  Staff Nurse: Legal, Ethical, and Organizational Issues  1 CR
Contact Hours: 2 + 0
Prerequisites: NURS A220 with minimum grade of C and NURS A220L with minimum grade of C and NURS A222 with minimum grade of C and NURS A222L with minimum grade of C and DN A203 with minimum grade of C and NURS A225 with minimum grade of C and NURS A225L with concurrent enrollment and (NURS A225L with minimum grade of C or concurrent enrollment) and (NURS A220L with minimum grade of C or concurrent enrollment) and (NURS A220L with minimum grade of C or concurrent enrollment).
Special Fees: Offered spring semesters.

Introductory seminar in application of the nursing process to legal, ethical, and organizational dilemmas encountered in daily nursing practice. Includes consideration of the role of the nurse within the organization; students develop knowledge necessary to function effectively in the staff nurse role as a member of the nursing and health care teams. Legal limits of nursing practice and trends in the regulation of nursing practice are discussed.

NURS 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.
Registration Restrictions: Good physical health.
Grade Mode: Pass/No Pass
Special Fees: Special Fees
Special Note: Two-week duration. 32 hours per week with preceptor and 2 hours per week in seminar. Some lifting may be required.

Concentrated clinical work to familiarize graduating nurses with clinical registered nurse responsibilities.

OSH A100  Introduction to Occupational Safety and Health  3 CR
Contact Hours: 3 + 0
Prerequisites: OSH A108.
Reviews 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
Prerequisites: MATH A105 and OSH A108.
Identifies safety, health management, and incident prevention in the workplace. Emphasizes hazards handling, electrical and machine safety, first response to fire and medical emergencies, safety and health hazards, and accident prevention.

OSH A110  Program Assessment, Development, and Implementation  4 CR
Contact Hours: 4 + 0
Prerequisites: OSH A108.
Examines the role of a safety program in the workplace. Emphasizes program assessment, design, development, implementation, and evaluation of safety programs.

OSH A120  Safety Program Management and Recordkeeping  2 CR
Contact Hours: 2 + 0
Prerequisites: OSH A108.
Discusses the role of safety in the business community. Emphasizes the philosophy of safety and health efforts by management. Examines the role of the safety manager and the types of and need for accurate record keeping.

OSH A180  Introduction to Industrial Hygiene  4 CR
Contact Hours: 3 + 2
Prerequisites: OSH A101.
Identifies acute and chronic health effects of exposure to chemicals, physical, and biological agents in the workplace. Emphasizes types of exposures and biological effects, exposure guidelines, and basic workplace monitoring.

OSH A201  Workplace Injury and Incident Evaluations  4 CR
Contact Hours: 4 + 0
Prerequisites: OSH A108.
Assesses and evaluates workplace hazards. Investigates worker complaints and actual health and safety incidents. Includes practical applications and basic accident investigation.

OSH A210  Training Needs and Methods  3 CR
Contact Hours: 3 + 0
Prerequisites: OSH A110.
Evaluates safety and health training needs in the workplace. Emphasizes safety and health training needs and regulatory compliance.

OSH A230  Principles of Ergonomics  3 CR
Contact Hours: 2 + 2
Prerequisites: BIOL A100 and OSH A201.
Examines workplace ergonomics, emphasizing types and sources of physiological stressors and their mitigation.

OSH A240  Workplace Monitoring: Instrumentation and Calibration  3 CR
Contact Hours: 2 + 2
Prerequisites: OSH A180.
Examines the equipment used in performing measurements of environmental factors in the workplace, including noise, lighting, vibration, chemicals, and heat stress. Emphasizes equipment and methods, equipment calibration, and evaluation of environmental factors found in Alaskan workplaces.

OSH A250  Hazardous Material Operation  3 CR
Contact Hours: 2 + 2
Prerequisites: OSH A180.
Identifies the policies, procedures and equipment needed to deal with hazardous material. Emphasizes the types of hazards, planning, organization, and training needed to work safely with hazardous material.
COURSE DESCRIPTIONS

PADM - PUBLIC ADMINISTRATION

Offered through the College of Business & Public Policy
Edward and Cathryn Rasmuson Hall (RH), Room 309, 786-4100
www.chpp.uaa.alaska.edu/pubadmin.html

Students taking any ACCT, BA, CIS, ECON, LGOP, LOG, or PADM course will be charged a single lab fee of $25 for the quarter. Applies to Elmendorf AFB or Fort Richardson classes only when specifically annotated. Does not apply to Eagle River.

PADM A601 Introduction to Public Administration 3 CR
Contact Hours: 3 + 0
Offered fall and spring semesters.
Introduction to the field of public administration. Deals with the scope, nature, history, current context, and basic tools in the study of public administration. Topics covered include social, economic, and political environments of public administration, and comparative administration, bureaucratic politics, power and authority, law, ethics and administration, basic models, and comparative administration.

PADM A602 Seminar in Public Management 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Faculty permission.
Offered spring semesters.
Introduction to basic management skills as well as concepts, approaches, and issues in organization structure, human resources administration, and budgeting and finance administration.

PADM A603 Management Analysis 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Faculty permission.
Offered fall semesters.
Introduction to organizational and systems analysis, systems theory, information systems, procedure analysis, management planning, and management problem solving.

PADM A604 Research Methods in Administration 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Introductory course in statistics.
Offered spring semesters.
Methods and techniques of empirical research. Scientific method, design of research, data collection and analysis methods, survey sampling, and statistical analysis including use of computers in data analysis.

PADM A606 The Policymaking Process 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Faculty permission.
Offered fall semesters.
Examination of the nature of public policy and the policymaking process. Considers the policy environment, levels and types of policy, models of the policy process, the uses of social science research in policymaking, and the role and limits of public participation. Alaska and national cases are used to illustrate basic concepts and issues.

PADM A610 Organizational Theory and Behavior 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
Offered spring semesters.
Role of the administrator, theories of complex organizations and their administration, administrative leadership, and ethics. A detailed study of organized behavior, including concepts of leadership style, authority, and organizational change.

PADM A618 Public Accountability, Ethics and Law 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Faculty permission.
The challenges of maintaining a responsive bureaucracy subject to democratic controls; implications of ethical standards and administrative due process of law; and selected case studies in government and non-profit administration.

PADM A620 Internship in Public Administration/Policy 1-3 CR
Contact Hours: 0 + 4-12
Registration Restrictions: Faculty permission.
Offered as Demand Warrants.
Applied work experience in public administration or policy analysis. The course consists of the equivalent of three months of full-time work in an approved state, federal, local, or private agency, under the supervision of a senior agency employee in cooperation with a faculty advisor. An internship journal and a final internship report are required.

PADM A624 Human Resources Administration 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Faculty permission.
Offered fall semesters.
Fundamental human resource topics dealing with problems in private and public sectors from an interdisciplinary viewpoint. Current and future development in selection and placement, classification and compensation, training and development, collective bargaining and managerial behavior, performance and effectiveness will be examined.

PADM A628 Administration of Financial Resources 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Faculty permission.
Offered spring semesters.
Public financial organization, problems of financial management in government units, revenue sources, budgetary planning and control, methods of debt financing and intergovernmental relationships.

PADM A632 Policy Analysis 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Faculty permission. PADM A604 recommended.
Offered as Demand Warrants.
Quick methods for policy analysis, emphasizing analytic thinking to narrow and focus the decision process, and quantitative and qualitative techniques to generate insight from information. Covers basic steps in the analytic process, and methods including legal research, decision analysis, and interpreting regressions. Exercises are from contemporary Alaska policy issues.

PADM A640 Alternative Dispute Resolution 1-3 CR
Contact Hours: 1-3 + 0
Reviews literature and principles of alternative dispute resolution. Focuses on negotiation and mediation as ways to resolve individual conflicts, group conflicts and public disputes.

PADM A659 Public Administration Capstone 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Faculty permission, based on substantial completion of MPA program. The core comprehensive exam must be passed before the student may enroll in the capstone course.
Offered as Demand Warrants.
Capstone course for master of public administration program. Includes in-depth discussions of case studies illustrating problems of organizational change, decision making, problem solving, and the interrelated processes of policy formulation, implementation, and evaluation. Emphasis on student participation, including presentation of a major policy or administrative report.

PADM A671 Selected Topics in Public Administration 1-3 CR
Contact Hours: 1-3 + 0
Registration Restrictions: Faculty permission.
Analysis of selected public administration issues. Topics will be announced in the published class schedule.

PADM A688 Program Evaluation and Measurement 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing; one undergraduate or graduate statistics course; PADM A604 recommended.
Covers theory and practice of program evaluation and performance measurement. Course topics include: needs assessment techniques, an understanding of program logic models, research designs for program evaluation, qualitative and quantitative evaluation approaches, and cost benefit analysis. Development of performance measures, ethics and communicating findings are also covered.

PARL - PARALEGAL STUDIES

Offered through the College of Health & Social Welfare
Social Sciences Building (SSB), Room 306, 786-1810
http://justice.uaa.alaska.edu

PARL A101 Introduction to Law 3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Social Sciences Requirement.
Survey course introduces legal processes in a democratic society. Emphasis on legal vocabulary, federal and state court systems, and judicial decision making. Study of basic concepts in contracts, torts, family law, criminal law, and property. Includes skills for conducting basic legal analysis.
PARI A215 Paralegal Studies 3 CR
Contact Hours: 3 + 0
Offered fall and spring semesters.
Foundation course for legal studies area. Explores role, responsibilities, and ethics of paralegal activities and relationship of paralegals to lawyers. Study of paralegal responsibilities including statute and regulation formats, litigation, insurance, probate and real estate. Covers interviewing, investigation, writing and application of social science techniques to paralegal problems.

PARI A235 Factual Investigation and Interviewing 2 CR
Contact Hours: 2 + 0
Prerequisites: PARI A101 and PARI A215.
Offered spring semesters.
Study of the fundamentals of investigation. Scene investigation and recording, collection and preservation of physical evidence and scientific aids. Sources of information, interviews, follow-up and case preparation.

PARI A236 Ethics and Paralegals 1 CR
Contact Hours: 1 + 0
Prerequisites: PARI A101 and PARI A215.
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. Focus upon rules and opinions directed at the practitioners of law in Alaska. Discussion of regulation by bar associations and attorneys.

PARI A238 Civil Procedure 3 CR
Contact Hours: 3 + 0
Prerequisites: PARI A101.
Offered spring semesters.
Introduction to procedural concepts of civil litigation with an emphasis on jurisdiction, venue, service of process, parties, pleading and discovery, trial processes, appellate review, and the common law doctrine of res judicata. Types of pleadings in civil actions, including complaints, answer and reply, joinder of parties and claims, class actions, discovery, motion practice, trial, and appeal.

PARI A256 Legal Research I 3 CR
Contact Hours: 3 + 0
Prerequisites: [PARI A101 or JUST A110] and ENGL A111 with minimum grade of B and [ENGL A211 with minimum grade of B or ENGL A212 with minimum grade of B or ENGL A213 with minimum grade of B or ENGL A311 with minimum grade of B or ENGL A312 with minimum grade of B or ENGL A414 with minimum grade of B]. Special Fees.
Special Note: Strong writing background required. Offered fall semesters.
Intensive introduction to legal research tools and techniques, including retrieval of case and statutory authority, use of encyclopedias, legal periodicals, treaties and other secondary authority, proper case citation form, use of computerized research and drafting of legal memoranda.

PARI A300 Family Law 3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110 or PARI A101.
Crosslisted with: JUST A340.

PARI A352 Substantive Criminal Law 3 CR
Contact Hours: 3 + 0
Prerequisites: JUST A110 or PARI A101.
Crosslisted with: JUST A352.
Offered fall semesters.
Study of elements, purposes, and functions of substantive criminal law. Includes casebook study of general law of crimes and defenses with concentration on Alaska cases and statutes in Alaska Criminal Code. Historical and philosophical concepts are covered.

PARI A354 Criminal Procedure 3 CR
Contact Hours: 3 + 0
Prerequisites: PARI A103 or JUST A110.
Crosslisted with: JUST A354.
Offered spring semesters.
Emphasis upon legal limitations of police and right of people to be secure from government under protection of federal and Alaska constitutions. Concentration on laws of arrest, search and seizure, wiretapping, electronic surveillance, and exclusionary rule. Interrogations and confessions, lineups and other pretrial identification procedures, right to counsel, trial by jury, entrapment, and double jeopardy. Study of cases decided by U.S. and Alaska Supreme Courts, along with applicable Alaska Statutes and Alaska Rules of Criminal Procedure.

PARI A362 Commercial Law 3 CR
Contact Hours: 3 + 0
Prerequisites: PARI A101.
Offered spring semesters.
Commercial law constitutes a study of the paralegal's role in a commercial practice with emphasis on such topics as contracts, remedies, bankruptcy, business formation and organization.

PARI A375 Litigation 3 CR
Contact Hours: 3 + 0
Prerequisites: PARI A238.
Registration Restrictions: Legal Research I recommended. Special Fees.
Intensive study of range of paralegal tasks associated with matters in litigation, from conducting the initial client interview through preparing an appeal and collecting a judgment. Includes extensive coverage of principles of evidence. Procedures for alternative dispute resolution are also addressed. Requires active student participation in preparing a hypothetical case for trial, and culminates in a student presentation of a mock trial. Individual production of a comprehensive litigation systems binder, comprising student-drafted checklists, forms, and practice tips, is required. Student participation is premised on a solid foundation in civil procedure and legal research.

PARI A455 Advanced Legal Analysis and Writing 4 CR
Contact Hours: 3 + 3
Prerequisites: ENGL A111 with minimum grade of B and [ENGL A211 with minimum grade of B or ENGL A212 with minimum grade of B or ENGL A213 with minimum grade of B or ENGL A311 with minimum grade of B or ENGL A312 with minimum grade of B or ENGL A414 with minimum grade of B] and PARI A256.
Special Fees.
Special Note: Requires knowledge of basic legal research techniques and the uniform system of citation, and use of computerized legal research. Offered spring semesters.
Extensive research and written work applying legal principles to assigned fact patterns. Develops students' ability to perform objective written evaluations of legal issues in legal memora nda as well as persuasive advocacy in formal briefs.

PARI A470 Law of Government Regulation 3 CR
Contact Hours: 3 + 0
Prerequisites: PARI A101.
Offered fall semesters.
Administrative law and procedure in the context of federal, state and local agencies operating in Alaska. Includes consideration of unfair competition and anti-trust law from the perspective of the businessman and consumer.

PEP - PHYSICAL EDUCATION PROFESSIONAL
Offered through the Community and Technical College
Eugene Short Hall (ESH), Room 125, 786-4083
www.uaa.alaska.edu/ctc/ptcr

PEP A103 SCUBA 2 CR
Contact Hours: 1.5 + 1
Special Fees.
Special Note: Students may need to pay a dive equipment fee as well as rent or purchase additional gear for practical sessions. Course meets Professional Association of Diving Instructors (PADI) and National Association of Underwater Instructors (NAUI) standards. Certification fees are not included in course fees.
Introduces skills for open water snorkeling and SCUBA diving. Emphasizes selection and use of specialized equipment, hyperbaric theory, proper planning, diving rescue skills, use of recreational dive tables and first-aid specific to the activity. Heavy emphasis placed on hazard assessment and safety issues.

PEP A110 Remote First Aid 1 CR
Contact Hours: 5 + 1
Special Fees.
Special Note: Wilderness First Aid and Adult CPR certifications provided upon successful completion of course.
Introduces knowledge and skills necessary to deal with accidents and injuries when 911 is not readily available. Covers assessment and management of the scene, assessment and management of life-threatening conditions, assessment and management/treatment of minor injuries and appropriate short-term care techniques. Also introduces decision-making as it relates to delayed transport.
PEP A112  First Aid and CPR for Professionals  1 CR  
Contact Hours:  5 + 1  
Grade Mode: Pass/No Pass.  
Special Fees.  
Provides CPR (infant, child, and adult) and first aid training. Successful completion of performance skills and written test will lead to national certification in first aid and CPR.

PEP A115  Introduction to Fitness Leadership  3 CR  
Contact Hours:  3 + 0  
Introduces basics of cardiopulmonary, metabolic, neuromuscular, environmental exercise physiology, biomechanics and kinesiology in regard to safe exercise. Designed for individuals interested in working in the fitness industry as a fitness instructor or personal trainer.

PEP A116  Techniques in Fitness Instruction I  2 CR  
Contact Hours:  1 + 2  
Special Fees.  
Introduces basic exercise program planning and progression, testing techniques, high risk exercises, music selection, choreography, and teaching techniques. Conducted in a classroom and lab setting for hands-on experience.

PEP A117  Techniques in Personal Training I  2 CR  
Contact Hours:  1 + 2  
Special Fees.  
Introduces techniques for client assessment, exercise program planning and progression, high risk exercises, proper use of variable resistance equipment, teaching techniques, and injury prevention. Designed for individuals interested in working in the fitness industry as a personal trainer. Conducted in a classroom and lab setting for hands-on experience.

PEP A130  Introduction to Coaching  2 CR  
Contact Hours:  2 + 0  
Special Fees.  
Introduces how to develop a successful coaching philosophy, physical training programs, strategies for teaching sport skills, and communication and motivational techniques. Develops coaching skills required to manage equipment, facilities, schedules, and other team logistics.

PEP A131  Sport First Aid  1 CR  
Contact Hours:  1 + 0  
Special Note: Successful completion provides students with national certification in Sport Safety and CPR.  
Introduces basic knowledge of sport injuries, including identifying common sport injuries and administering appropriate sport first aid.

PEP A145  Principles of Health and Physical Activity  2 CR  
Contact Hours:  1 + 2  
Special Fees.  
Examines key concepts associated with health and physical activity. Presents a variety of topics and activities for evaluation of personal health and wellness and strategies for making positive behavior changes. Combines lecture and lab activities.

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 A207  Emergency Water Safety  2 CR  
Contact Hours:  1 + 2  
Prerequisites: PER A135.  
Special Fees.  
Special Note: Prior to admission in this course, students must be able to swim 200 yards (crawl or breast stroke), foot first surface dive, retrieve a 100lb brick from 12ft depth, and tread water for two minutes using legs only.  
Presents professional lifeguard training to prevent, recognize, and manage aquatic emergencies. Successful completion can result in National Pool and Water Park Lifeguard License. Includes CPR/First Aid and supplemental oxygen support.

PEP A208  Water Safety Instructor Training  3 CR  
Contact Hours:  2 + 2  
Prerequisites: PER A135.  
Special Fees.  
Presents the knowledge and skills necessary for instructor candidates to teach a wide variety of aquatic programs, including water safety courses. Successful completion can result in a WSI certification.

PEP A210  Wilderness Emergency Medical Technician  4 CR  
Contact Hours:  2 + 4  
Prerequisites: EMT A130.  
Special Note: Students are required to obtain BLS Provider CPR certificate before end of course. Students in possession of current EMT will be awarded nationally recognized WEMT certificate upon successful completion of course.  
Provides knowledge and skills necessary to apply emergency medical training in non-rapid-transport settings. Emphasizes general medicine, trauma, environmental medicine and wilderness rescue. Provides opportunity for critical thinking, application of skills and evacuation decision-making.

PEP A215  Issues in Fitness Leadership  3 CR  
Contact Hours:  3 + 0  
Prerequisites: PEP A115.  
Special Fees.  
Examines special considerations for safely instructing an aqua fitness program. Examines principles of exercise in water, pool safety, deck versus water instruction, requirements of a water exercise instructor, designing a water exercise class, and use of equipment. Conducted in a classroom and lab setting for hands-on experience.

PEP A216  Techniques in Fitness Instruction II  2 CR  
Contact Hours:  1 + 2  
Prerequisites: PEP A116.  
Special Fees.  
Examines a wide range of issues related to exerciser’s varied needs. Presents techniques for program implementation, music selection, choreography and teaching exercise techniques for exercisers with special needs. Conducted in a classroom and lab setting for hands-on experience.

PEP A217  Techniques in Personal Training II  2 CR  
Contact Hours:  1 + 2  
Prerequisites: PEP A116.  
Special Fees.  
Examines a wide range of issues related to exerciser’s varied needs. Presents techniques for assessment, program implementation, progression and exercise prescription for general public and special populations. Conducted in a classroom and lab setting for hands-on experience.

PEP A218  Techniques in Aqua Fitness Instruction  2 CR  
Contact Hours:  1 + 2  
Prerequisites: PEP A116.  
Special Fees.  
Examines special considerations for safely instructing an aqua fitness program. Examines principles of exercise in water, pool safety, deck versus water instruction, requirements of a water exercise instructor, designing a water exercise class, and use of equipment. Conducted in a classroom and lab setting for hands-on experience.

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:  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 & Field/Running  2 CR  
Contact Hours:  1.5 + 1  
Introduces Track & Field and running coaching techniques including 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.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>PEP A235</td>
<td>Coaching Swimming and Diving</td>
<td>2 CR</td>
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<td>Contact Hours: 1.5 + 1</td>
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<td>Prerequisites: PER A135.</td>
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<td>Special Fees.</td>
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<td>Introduces swimming and diving coaching techniques, including creating a physical conditioning plan, developing skills, and handling competitive events.</td>
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<tr>
<td>PEP A236</td>
<td>Coaching Skating</td>
<td>2 CR</td>
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<td>Contact Hours: 1.5 + 1</td>
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<td>Special Fees.</td>
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<td></td>
<td>Introduces Nordic and alpine skiing coaching techniques, including creating a physical conditioning plan, developing skills, and handling competitive events.</td>
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<tr>
<td>PEP A237</td>
<td>Coaching Figure Skating</td>
<td>2 CR</td>
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<td>Contact Hours: 1.5 + 1</td>
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<td>Prerequisites: PER A137.</td>
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<td>Introduces figure skating coaching techniques, including creating a physical conditioning plan, developing skills, and handling competitive events.</td>
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<tr>
<td>PEP A238</td>
<td>Coaching Gymnastics</td>
<td>2 CR</td>
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<td>Contact Hours: 1.5 + 1</td>
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<td>Introduces gymnastics coaching techniques, including creating a physical conditioning plan, developing skills, and handling competitive events.</td>
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<tr>
<td>PEP A239</td>
<td>Coaching Baseball/Softball</td>
<td>2 CR</td>
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<td>Contact Hours: 1.5 + 1</td>
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<td>Special Fees.</td>
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<td>Introduces baseball/softball coaching techniques, including creating a physical conditioning plan, developing skills, and handling competitive events.</td>
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<tr>
<td>PEP A240</td>
<td>Coaching Football</td>
<td>2 CR</td>
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<td>Contact Hours: 1.5 + 1</td>
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<td>Introduces football coaching techniques, including creating a physical conditioning plan, developing skills, and handling competitive events.</td>
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<tr>
<td>PEP A241</td>
<td>Coaching Basketball</td>
<td>2 CR</td>
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<td>Contact Hours: 1.5 + 1</td>
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<td>Prerequisites: PER A141.</td>
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<td>Special Fees.</td>
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<td></td>
<td>Introduces basketball coaching techniques, including creating a physical conditioning plan, developing skills, and handling competitive events.</td>
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<tr>
<td>PEP A242</td>
<td>Coaching Soccer</td>
<td>2 CR</td>
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<td>Contact Hours: 1.5 + 1</td>
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<td>Prerequisites: PER A142.</td>
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<td>Special Fees.</td>
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<td>Introduces soccer coaching techniques, including creating a physical conditioning plan, developing skills, and handling competitive events.</td>
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<tr>
<td>PEP A243</td>
<td>Coaching Hockey</td>
<td>2 CR</td>
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<td>Contact Hours: 1.5 + 1</td>
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<td></td>
<td>Prerequisites: PER A143.</td>
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<td>Introduces hockey coaching techniques, including creating a physical conditioning plan, developing skills, and handling competitive events.</td>
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<tr>
<td>PEP A244</td>
<td>Coaching Volleyball</td>
<td>2 CR</td>
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<td>Contact Hours: 1.5 + 1</td>
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<td>Prerequisites: PER A144.</td>
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<td>Special Fees.</td>
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<td></td>
<td>Introduces volleyball coaching techniques, including creating a physical conditioning plan, developing skills, and handling competitive events.</td>
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<tr>
<td>PEP A251</td>
<td>Prevention and Care of Activity-Related Injuries</td>
<td>3 CR</td>
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<td>Contact Hours: 2 + 2</td>
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<td>Prerequisites: BIOL A111 and BIOL A112.</td>
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<td>Special Fees.</td>
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<td>Special Note: Field work is required.</td>
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<td></td>
<td>Introduces the profession of athletic training; examines theories and practices in preventing, recognizing, and treating common activity-related injuries.</td>
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<tr>
<td>PEP A262</td>
<td>Foundations of Adventure and Experiential Leadership</td>
<td>3 CR</td>
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<td>Contact Hours: 3 + 0</td>
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<td>Introduces the field and profession of adventure and experiential leadership.</td>
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<td>Examines philosophical, historical, theoretical, legal, and ethical foundations of the field.</td>
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<td>Explores career opportunities and options.</td>
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<td>PEP A281</td>
<td>Leadership in Activities for Diverse Populations</td>
<td>2 CR</td>
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<td>Contact Hours: 1 + 2</td>
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<td>Special Fees.</td>
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<td></td>
<td>Examines key concepts and presents a variety of activities adapted to meet the needs of diverse populations. Presents information and current research related to various disabilities. Examines and applies strategies for promoting physical activity experiences for individuals with special needs.</td>
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<tr>
<td>PEP A282</td>
<td>Leadership in Experiential Initiatives and Activities</td>
<td>2 CR</td>
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<td>Contact Hours: 1 + 2</td>
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<td>Examines key concepts and activities for facilitating experiential leadership, team-building, and personal growth initiatives. Presents a variety of game types, including those designed as icebreakers, de-inhibitors, team-builders, for cognitive development and for character development. Introduces planning, preparation, props, techniques, leadership, and safety, with an emphasis on facilitation and de-briefing.</td>
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<tr>
<td>PEP A283</td>
<td>Leadership in Aquatic Activities</td>
<td>2 CR</td>
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<td>Contact Hours: 1 + 2</td>
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<td>Special Fees.</td>
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<td>Examines key concepts associated with aquatic activities. Presents a variety of motor skill themes and movement concepts in a progression from the precontrol level to the proficiency level. Presents a variety of water activities.</td>
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<tr>
<td>PEP A284</td>
<td>Leadership in Fitness Activities</td>
<td>2 CR</td>
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<td>Contact Hours: 1 + 2</td>
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<td>Special Fees.</td>
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<td>Examines key concepts associated with fitness activities. Presents a variety of topics and activities designed to promote lifetime physical fitness. Evaluates and applies strategies for promoting positive behavior changes for personal health and wellness.</td>
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<tr>
<td>PEP A285</td>
<td>Leadership in Team Activities</td>
<td>2 CR</td>
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<td>Contact Hours: 1 + 2</td>
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<td>Special Fees.</td>
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<td>Examines key concepts and activities associated with team activities. Presents a variety of motor skill themes and movement concepts in a progression from the precontrol to the proficiency level. Examines preparation for game play through the combining of skills, using skills in more complex ways, and utilizing offensive and defensive strategies.</td>
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<tr>
<td>PEP A286</td>
<td>Leadership in Individual and Dual Activities</td>
<td>2 CR</td>
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<td>Contact Hours: 1 + 2</td>
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<td>Special Fees.</td>
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<td>Examines key concepts associated with individual and dual activities. Presents a variety of motor skill themes and movement concepts in a progression from the precontrol to the proficiency level. Examines preparation for game play through the combining of skills, using skills in more complex ways, and utilizing offensive and defensive strategies.</td>
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<tr>
<td>PEP A287</td>
<td>Leadership in Outdoor Recreation Activities</td>
<td>2 CR</td>
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<td>Contact Hours: 1 + 2</td>
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<td>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.</td>
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<tr>
<td>PEP A288</td>
<td>Leadership in Rhythmic Activities</td>
<td>2 CR</td>
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<td>Contact Hours: 1 + 2</td>
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<td>Special Fees.</td>
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<td>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.</td>
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<tr>
<td>PEP A346</td>
<td>Lower Body Injury Assessment Skills</td>
<td>3 CR</td>
</tr>
<tr>
<td></td>
<td>Contact Hours: 5 + 7.5</td>
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<td></td>
<td>Prerequisites: PEP A251.</td>
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<td></td>
<td>Special Fees.</td>
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<td></td>
<td>Special Note: This is a clinical/practicum course and field work is required.</td>
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<tr>
<td></td>
<td>Focuses on the recognition and assessment of athletic injuries. Emphasizes lower body injury assessment skills and proficiencies.</td>
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<tr>
<td>PEP A347</td>
<td>Upper Body Injury Assessment Skills</td>
<td>3 CR</td>
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<tr>
<td></td>
<td>Contact Hours: 5 + 7.5</td>
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<tr>
<td></td>
<td>Prerequisites: PEP A251 and PEP A346.</td>
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<td>Special Fees.</td>
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<td>Special Note: This is a clinical/practicum course and field work is required.</td>
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<td>Focuses on the recognition and assessment of athletic injuries. Emphasizes upper body injury assessment skills and proficiencies.</td>
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<tr>
<td>Course Code</td>
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<tr>
<td>PEP A363</td>
<td>Natural History Interpretation and Environmental Education</td>
<td>3 CR</td>
</tr>
<tr>
<td>PEP A364</td>
<td>Survival and Search and Rescue for Adventure Leaders</td>
<td>3 CR</td>
</tr>
<tr>
<td>PEP A365</td>
<td>Adventure Leadership Theory and Practice</td>
<td>3 CR</td>
</tr>
<tr>
<td>PEP A368</td>
<td>Movement Theory and Motor Development</td>
<td>3 CR</td>
</tr>
<tr>
<td>PEP A382</td>
<td>Kinesiology and Biomechanics</td>
<td>4 CR</td>
</tr>
<tr>
<td>PEP A384</td>
<td>Cultural and Psychological Aspects of Health and Physical Activity</td>
<td>3 CR</td>
</tr>
<tr>
<td>PEP A385</td>
<td>Physiology of Exercise</td>
<td>4 CR</td>
</tr>
<tr>
<td>PEP A422</td>
<td>Exercise and Aging</td>
<td>3 CR</td>
</tr>
<tr>
<td>PEP A452</td>
<td>Challenges in Health and Fitness Leadership</td>
<td>1 CR</td>
</tr>
<tr>
<td>PEP A453</td>
<td>Health Promotion</td>
<td>2 CR</td>
</tr>
<tr>
<td>PEP A454</td>
<td>Exercise Testing and Prescription</td>
<td>3 CR</td>
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<tr>
<td>PEP A455</td>
<td>Cardiac Rehabilitation</td>
<td>3 CR</td>
</tr>
<tr>
<td>PEP A456</td>
<td>Contemporary Personal Health Issues</td>
<td>3 CR</td>
</tr>
<tr>
<td>PEP A466</td>
<td>Organizational Safety and Risk Management</td>
<td>3 CR</td>
</tr>
<tr>
<td>PEP A467A</td>
<td>Challenge Course Adventure Leadership</td>
<td>2 CR</td>
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<tr>
<td>PEP A467B</td>
<td>Climbing-Based Adventure Leadership</td>
<td>2 CR</td>
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<tr>
<td>PEP A467C</td>
<td>Land-Based Adventure Leadership</td>
<td>2 CR</td>
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<tr>
<td>PEP A467D</td>
<td>Water-Based Adventure Leadership</td>
<td>2 CR</td>
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</table>

**Contact Hours:**
- PEP A363: 3 + 0
- PEP A364: 3 + 0
- PEP A365: 3 + 0
- PEP A368: 3 + 0
- PEP A382: 3 + 2
- PEP A384: 3 + 0
- PEP A385: 3 + 2
- PEP A422: 2.5 + 1
- PEP A452: 1 + 0
- PEP A453: 2 + 0
- PEP A454: 2 + 2
- PEP A455: 2 + 2
- PEP A456: 3 + 0
- PEP A466: 3 + 0
- PEP A467A: 5 + 3
- PEP A467B: 5 + 3
- PEP A467C: 5 + 3
- PEP A467D: 5 + 3

**Prerequisites:**
- BIOL A104 or GEOL A104 or ENVI A202
- PEP A161 and PEP A262
- PEP A262 and PEP A282 and PEP A287 and (PEP A384 or concurrent enrollment)
- BIOL A111 and BIOL A112
- PSY A111 or PSY A115
- BIOL A111 and BIOL A112
- PEP A150 or PSY A111
- PEP A282 and PEP A364 and PEP A365
- PEP A385
- PEP A161 and PEP A364 and (PEP A365 or concurrent enrollment)
- PEP A161 and PEP A364
- PEP A151 and [PER A152 or PER A153] and PEP A161 and (PEP A365 or concurrent enrollment)
- PER A146 and PER A147 and PER A148 and PER A181 and PER A246 and PEP A161 and PEP A365
- PER A169 or PER A182 and PEP A161 and PEP A365
- PEP A151 and [PER A152 or PER A153] and PEP A161 and (PEP A365 or concurrent enrollment)
- [PER A151 or PER A152 or PER A153] and PEP A161 and (PEP A365 or concurrent enrollment)

**Contact Restrictions:**
- Activity course requirements completed; instructor approval.
- Instructor permission.
- Instructor permission.
- Instructor permission.
- Instructor permission.

**Special Fees:**
- Recommended for juniors or seniors who have had at least one course in psychology of loss and survivorship.
- Special Fees.
- Special Fees.
- Special Fees.
- Special Fees.
- Special Fees.

**Registration Restrictions:**
- Completion of GER Tier 1 (Basic college-level skills) courses and junior standing.
- Senior status.
- Instructor permission.
- Instructor permission.
<table>
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<tr>
<th>COURSE DESCRIPTIONS</th>
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| **PEP A486** Standards and Assessment in Health, Physical Education, and Recreation 3 CR
| Contact Hours: 3 + 0
| Prerequisites: PEP A181.
| Emphasizes program development and planning based on national, state, and local standards in health, physical education, recreation, and adventure leadership. Applies appropriate strategies to assess program and client success. |

| **PEP A487** Administration and Supervision in Health, Physical Education and Recreation 3 CR
| Contact Hours: 3 + 0
| Prerequisites: PEP A181.
| Critiques and evaluates the technical, leadership, and supervisory skills necessary to safely and effectively administer health, physical education and recreation programs. Theoretical, practical, and research perspectives will be presented. |

| **PEP A495** Internship in Health and Fitness Leadership 6 CR
| Contact Hours: 5 + 16.5
| Registration Restrictions: Successful completion of a minimum of 12 hours of upper level emphasis-specific courses; Grade of C or better in all emphasis-specific courses with minimum GPA of 2.75; 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.
| Provides advanced professional experience in an approved position with supervision and training in health and fitness programming. |

| **PEP A496** Internship in Adventure Leadership 6 CR
| Contact Hours: 5 + 16.5
| Prerequisites: PEP A365 and PEP A466 and PEP A487.
| Registration Restrictions: A grade of C or better in all emphasis-specific courses with a minimum overall GPA of 2.75; 100 days of field leadership, at least 50 of which are outside UAA; Instructor approval; Current CPR/First Aid certification required for placement; Admission to BS in PE; Senior status.
| Special Fees.
| Special Note: Special clothing may be required.
| Provides advanced professional experience in an approved position with supervision and training in various aspects of adventure programming. |

**PER - PHYSICAL EDUCATION & RECREATION**

*Offered through the Community & Technical College*

Eugene Short Hall (ESH) 125, 786-4083

www.uaa.alaska.edu/ctc/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: 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: 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: 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 A105** Low Impact Aerobics 1 CR
| Contact Hours: 5 + 1
| Special Fees.
| Introduces key concepts related to lifetime personal fitness. Presents a variety of beginning level aerobic exercise routines for improved physical fitness. Designed for individuals who have not participated in regular exercise and would like to begin a safe and effective fitness program. |

| **PER A106** Aerobics 1 CR
| Contact Hours: 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: 5 + 1
| Special Fees.
| Presents the fundamentals of intermediate intensity kickboxing, martial arts-based aerobics, and interval training for improved physical fitness. |

| **PER A109** Aqua Aerobics 1 CR
| Contact Hours: 5 + 1
| Special Fees.
| Introduces key concepts related to lifetime personal fitness. Presents a variety of aqua aerobic exercise routines such as deep water jogging, aerobics to music, circuit training, and interval training. Designed for swimmers and non-swimmers. |

| **PER A111** Country Line Style Workout 1 CR
| Contact Hours: 5 + 1
| Special Fees.
| Introduces country line dancing as an effective way to improve cardio-respiratory fitness and muscular endurance. Covers basic dance terminology and conditioning exercise for specific muscles. |

| **PER A113** Beginning Pilates 1 CR
| Contact Hours: 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 (abdomens, lower back, buttocks, hips, and thighs) by utilizing one’s own body weight for resistance. |

| **PER A114** Muscle Fitness 1 CR
| Contact Hours: 5 + 1
| Special Fees.
| Introduces key concepts related to lifetime personal fitness. Presents a variety of non-aerobic exercises such as light weight training, resistance bands, circuit training, and interval training for improved skill-related fitness, muscular endurance, and flexibility. |

| **PER A116** Circuit Training 1 CR
| Contact Hours: 5 + 1
| Special Fees.
| Introduces key concepts related to lifetime personal fitness. Presents circuit training as a way to improve strength, physical conditioning, and general sports performance. Covers cardiorespiratory training, flexibility exercises, and safe techniques for improved muscular strength and endurance. |

| **PER A117** Shape Up with Weights 1 CR
| Contact Hours: 5 + 1
| Special Fees.
| Introduces key concepts related to lifetime personal fitness. Presents weight room resistance exercises to tone and condition major muscle groups. Introduces total program planning, including cardiorespiratory training, flexibility exercises, and healthy nutritional practices. |

| **PER A118** Beginning Weight Training 1 CR
| Contact Hours: 5 + 1
| Special Fees.
| Introduces key concepts related to lifetime personal fitness. Presents resistance exercises to strengthen and condition major muscle groups. |

| **PER A120** Beginning Yoga 1 CR
| Contact Hours: 5 + 1
| Special Fees.
| Introduces Kundalini yoga physical exercises, breathing techniques, and relaxation exercises. |
PER A121 Yoga for Runners and Skiers 1 CR
Contact Hours: .5 + 1
Special Fees.
Introduces Kundalini yoga physical exercises, breathing techniques, and relaxation exercises designed for recreational and competitive runners and cross country skiers. Presents stretching, strengthening, breath control, and mental conditioning exercises for improved performance and enjoyment.

PER A123 Beginning Tai Chi 1 CR
Contact Hours: .5 + 1
Special Fees.
Introduces Chen Style Tai Chi exercises designed for improved health, tranquility, energy, and strength.

PER A124 Beginning Karate 1 CR
Contact Hours: .5 + 1
Special Fees.
Introduces Taekwondo principles of karate through active participation.

PER A125 Beginning Kung Fu 1 CR
Contact Hours: .5 + 1
Special Fees.
Introduces Northern Shaolin Kung Fu philosophy, principles, and applications. Training and discipline on the physical, mental, and spiritual levels will be covered.

PER A126 Beginning Kendo 1 CR
Contact Hours: .5 + 1
Special Fees.
Introduces Kendo, the art of Japanese fencing. Training and discipline on the physical, mental, and spiritual levels will be covered.

PER A127 Beginning Tae Kwon Do 1 CR
Contact Hours: .5 + 1
Special Fees.
Introduces Tae Kwon Do philosophy, principles, and applications. Training and discipline on the physical, mental, and spiritual levels will be covered.

PER A128 Wing Tsun for Self Defense 1 CR
Contact Hours: .5 + 1
Special Fees.
Introduces Wing Tsun (a form of Kung Fu) concepts and applications. Focuses on self-defense. Basic history and philosophy as well as benefits of Wing Tsun will also be presented.

PER A130 Beginning Tennis 1 CR
Contact Hours: .5 + 1
Special Fees.
Introduces basic skills and knowledge to play singles and doubles tennis. Applies basic principles of tennis through active participation.

PER A131 Beginning Racquetball 1 CR
Contact Hours: .5 + 1
Special Fees.
Introduces the basic skills and knowledge associated with playing racquetball. Applies basic principles of racquetball through active participation.

PER A132 Beginning Golf 1 CR
Contact Hours: .5 + 1
Special Fees.
Introduces the basic skills and knowledge associated with playing golf. Applies basic principles of golf through active participation.

PER A133 Beginning Bowling 1 CR
Contact Hours: .5 + 1
Special Fees.
Introduces basic skills associated with bowling. Applies basic principles of bowling through active participation.

PER A135 Beginning Swimming 1 CR
Contact Hours: .5 + 1
Special Fees.
Introduces proper breathing technique and basic strokes for those with little or no swimming background. Emphasizes personal water safety.

PER A136 Beginning In-Line Skating 1 CR
Contact Hours: .5 + 1
Special Fees.
Introduces the basic skills and knowledge associated with in-line skating. Applies basic principles of in-line skating through active participation.

PER A137 Beginning Ice Skating 1 CR
Contact Hours: .5 + 1
Special Fees.
Introduces the basic skills and knowledge associated with ice skating. Applies basic principles of skating through active participation.

PER A139 Recreational Latin Dance 1 CR
Contact Hours: .5 + 1
Special Fees.
Introduces basic skills associated with social Latin dances. Covers various dances including Merengue, Bachata, Cumbia, Cha-Cha-Cha, and Salsa. Applies concepts of fitness, but focuses on Latin dance as a form of recreation.

PER A141 Beginning Basketball 1 CR
Contact Hours: .5 + 1
Special Fees.
Introduces the basic skills and knowledge associated with playing basketball. Applies basic principles of basketball through active participation.

PER A142 Beginning Soccer 1 CR
Contact Hours: .5 + 1
Special Fees.
Introduces the basic skills and knowledge associated with playing soccer. Applies basic principles of soccer through active participation.

PER A143 Beginning Hockey 1 CR
Contact Hours: .5 + 1
Special Fees.
Introduces the basic skills and knowledge associated with playing hockey. Applies basic principles of hockey through active participation.

PER A144 Beginning Volleyball 1 CR
Contact Hours: .5 + 1
Special Fees.
Introduces the basic skills and knowledge associated with playing volleyball. Applies basic principles of volleyball through active participation.

PER A146 Beginning Rock Climbing 1 CR
Contact Hours: .5 + 1
Special Fees.
Introduces the fundamentals of rock climbing in Alaska. Covers hazard evaluation and risk assessment, selection of personal gear, technical needs, and safety equipment. Provides opportunity to practice knots, rope handling, belay, basic descending techniques, and top-rope rock climbing.

PER A147 Beginning Ice Climbing 1 CR
Contact Hours: .5 + 1
Special Fees.
Introduces the fundamentals of ice climbing in Alaska. Covers hazard evaluation and risk assessment, selection of personal gear, technical needs, safety equipment. Introduces knots, rope handling, belay, basic descending techniques, and top-roping.

PER A148 Beginning Indoor Sport Climbing 1 CR
Contact Hours: .5 + 1
Special Fees.
Introduces the fundamentals of sport climbing in an indoor environment. Covers hazard evaluation and risk assessment specific to climbing gyms. Also covers selection of personal gear, technical needs, and safety equipment specific to indoor climbing. Introduces and provides opportunity to practice knots, rope handling, belaying, descent techniques, and top-roping on an indoor climbing wall.

PER A151 Beginning Canoeing 1 CR
Contact Hours: .5 + 1
Special Fees.
Introduces the most commonly used equipment, techniques, challenges, and risks found in the sport of canoeing. Includes instruction on equipment selection, trip planning, canoeing strokes and re-entry techniques with an emphasis on risk assessment and risk management.

PER A152 Beginning River Rafting 1 CR
Contact Hours: .5 + 1
Special Fees.
Introduces the most commonly used equipment, techniques, challenges, and risks found in the sport of river rafting. Includes instruction on equipment selection, trip planning, preparing to paddle/row and minimum impact practices with emphasis on risk assessment and risk management.
Introduces the fundamentals of sea kayaking in Alaska. Includes the most commonly used equipment, techniques, challenges, and risks found in the sport. Provides instruction in selecting equipment, trip planning, transporting boats, preparing to paddle, boat handling, revetancy techniques, and sea kayaking strokes. Emphasizes risk assessment and safety skills.

PER A153 Beginning Sea Kayaking 1 CR
Contact Hours: 5 + 1
Special Fees.

Introduces snowboarding techniques and ski-hill weather.

PER A154 Beginning Sailing 1 CR
Contact Hours: 5 + 1
Special Fees.

Introduces fundamentals of sea kayaking in Alaska. Includes the most commonly used equipment, techniques, challenges, and risks found in the sport. Provides instruction in selecting equipment, trip planning, transporting boats, preparing to paddle, boat handling, revetancy techniques, and sea kayaking strokes. Emphasizes risk assessment and safety skills.

PER A158 Winter Camping Alaska 1 CR
Contact Hours: 5 + 1
Special Fees.

Special Note: Special Note: Requires good physical condition and ability to perform comfortably in extremely cold and/or inclement weather. Introduces winter camping in Alaska. Covers selection of personal, group and safety equipment appropriate for an overnight outing. Emphasizes snow shelter construction and learning to assess risk in the field. Course includes an overnight outing.

PER A159 Four-Season Backpacking 3 CR
Contact Hours: 1 + 4
Special Fees.

Special Note: Special Note: Requires ability to function comfortably in extremely cold and/or inclement weather. An overnight field outing may be included in the course.

PER A160 Beginning Cross-Country Ski: Diagonal Stride 1 CR
Contact Hours: 5 + 1
Special Fees.

Introduces snowboarding techniques for groomed trail conditions. Covers selection of personal clothing, ski and safety equipment, recognition and prevention of cold-weather injuries, and skiing skills and trail ethics.

PER A161 Beginning Cross-Country Skate Skiing 1 CR
Contact Hours: 5 + 1
Special Fees.

Introduces fundamentals of telemark skiing. Covers hazard evaluation, selection of personal and safety equipment, recognition and prevention of cold-weather injuries, and skiing skills and trail ethics.

PER A162 Beginning Telemark Skiing 1 CR
Contact Hours: 5 + 1
Special Fees.

Introduces fundamentals of downhill skiing. Covers hazard evaluation, selection of personal ski and safety equipment, recognition and prevention of cold-weather injuries, skiing skills, and ski hill rules.

PER A163 Beginning Alpine Skiing 1 CR
Contact Hours: 5 + 1
Special Fees.

Introduces fundamentals of diagonal-stride cross-country skiing. Covers selection of personal clothing, ski and safety equipment, recognition and prevention of cold-weather injuries, and skiing skills and trail ethics.

PER A164 Skiing Alaska's Backcountry 1 CR
Contact Hours: 5 + 1
Special Fees.

Introduces snowboarding and the equipment, techniques, challenges, and risks common to the sport. Covers selecting personal and safety equipment, recognizing and preventing cold-weather injuries, and learning snowboarding techniques and ski-hill rules.

PER A165 Nature Observation and Tracking 3 CR
Contact Hours: 1 + 4
Special Fees.

Special Note: Special Note: Requires the ability to function comfortably in inclement weather. Introduces fundamentals of recognizing birds and plants as well as observing and tracking Alaskan mammals. Uses extensive reading and written assignments, as well as hands-on application of field techniques, to provide students with a solid, academic foundation for understanding animal behaviors and their signs.

PER A166 Beginning Snowboarding 1 CR
Contact Hours: 5 + 1
Special Fees.

Introduces snowboarding techniques for groomed trail conditions. Covers selection of personal clothing, ski and safety equipment, recognition and prevention of cold-weather injuries, and skiing skills and trail ethics.

PER A167 Dog Mushing 1 CR
Contact Hours: 5 + 1
Special Fees.

Introduces the practice of dog mushing, including the sport's history, dog breeds and characteristics, their training and feeding needs, kennel-management routines, and dog-handling skills.

PER A168 Dog Mushing 1 CR
Contact Hours: 5 + 1
Special Fees.

Introduces dog mushing, including the sport's history, dog breeds and characteristics, their training and feeding needs, kennel-management routines, and dog-handling skills.

PER A169 Four-Season Backpacking 3 CR
Contact Hours: 1 + 4
Special Fees.

Special Note: 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.

PER A170 Backpack Alaska 3 CR
Contact Hours: 1 + 4
Special Fees.

Special Note: Special Note: Requires good physical condition and ability to perform comfortably in extremely cold and/or inclement weather. Students may need to rent or purchase additional equipment for this course.

PER A171 Outdoor Adventure in Alaska 2 CR
Contact Hours: 1 + 2
Special Fees.

Introduces fundamentals of recognizing birds and plants as well as observing and tracking Alaskan mammals. Uses extensive reading and written assignments, as well as hands-on application of field techniques, to provide students with a solid, academic foundation for understanding animal behaviors and their signs.

PER A172 Discovering Wild Plants 1 CR
Contact Hours: 5 + 1
Special Fees.

Introduces the diversity of Alaska's flora and its myriad uses. Addresses risk assessment and hazard evaluation, especially in relation to learning to identify and/or use edible, poisonous and medicinal species.

PER A173 Alaska's Wild Mushrooms 1 CR
Contact Hours: 5 + 1
Special Fees.

Introduces the diversity of Alaska's flora and its myriad uses. Addresses risk assessment and hazard evaluation, especially in relation to learning to identify and/or use edible, poisonous and medicinal species.

PER A174 Alaska's Wild Mushrooms 1 CR
Contact Hours: 5 + 1
Special Fees.

Introduces the diversity of Alaska's flora and its myriad uses. Addresses risk assessment and hazard evaluation, especially in relation to learning to identify and/or use edible, poisonous and medicinal species.

PER A175 Alaska's Wild Mushrooms 1 CR
Contact Hours: 5 + 1
Special Fees.

Introduces the diversity of Alaska's flora and its myriad uses. Addresses risk assessment and hazard evaluation, especially in relation to learning to identify and/or use edible, poisonous and medicinal species.

PER A176 Alaska's Wild Mushrooms 1 CR
Contact Hours: 5 + 1
Special Fees.

Introduces the diversity of Alaska's flora and its myriad uses. Addresses risk assessment and hazard evaluation, especially in relation to learning to identify and/or use edible, poisonous and medicinal species.

PER A177 Alaska's Wild Mushrooms 1 CR
Contact Hours: 5 + 1
Special Fees.

Introduces the diversity of Alaska's flora and its myriad uses. Addresses risk assessment and hazard evaluation, especially in relation to learning to identify and/or use edible, poisonous and medicinal species.

PER A178 Alaska's Wild Mushrooms 1 CR
Contact Hours: 5 + 1
Special Fees.

Introduces the diversity of Alaska's flora and its myriad uses. Addresses risk assessment and hazard evaluation, especially in relation to learning to identify and/or use edible, poisonous and medicinal species.

PER A179 Alaska's Wild Mushrooms 1 CR
Contact Hours: 5 + 1
Special Fees.

Introduces the diversity of Alaska's flora and its myriad uses. Addresses risk assessment and hazard evaluation, especially in relation to learning to identify and/or use edible, poisonous and medicinal species.

PER A180 Alaska's Wild Mushrooms 1 CR
Contact Hours: 5 + 1
Special Fees.

Introduces the diversity of Alaska's flora and its myriad uses. Addresses risk assessment and hazard evaluation, especially in relation to learning to identify and/or use edible, poisonous and medicinal species.
PER A181 Crevasse Rescue Techniques 1 CR
Contact Hours: .5 + 1
Registration Restrictions: Instructor approval.
Special Fees.
Special Note: Requires the ability to perform comfortably in extremely cold and/or inclement weather. Field sessions include all-day clinics and my 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 A183 Alaska Marine Survival 1 CR
Contact Hours: .5 + 1
Special Fees.
Special Note: Requires excellent backcountry camping skills and the ability to function comfortably in inclement weather. An overnight field outing may be included in this course.
Introduces the most common risks and challenges encountered in a marine survival situation. Emphasizes hazard evaluation, physical and psychological factors that affect survival, and preparation tips that can help prevent worst-case scenarios. Provides opportunity to practice field 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 A206 Intermediate Aerobics 1 CR
Contact Hours: .5 + 1
Prerequisites: PER A106. Special Fees.
Key concepts related to lifetime personal fitness. Applies intermediate-advanced level exercise routines for improved cardiorespiratory fitness, flexibility and muscular endurance. A wide variety of aerobic exercise routines will be presented, such as step aerobics, lateral training, circuit training, and interval training.

PER A209 Intermediate Aqua Aerobics 1 CR
Contact Hours: .5 + 1
Prerequisites: PER A109. Special Fees.
Key concepts related to lifetime personal fitness. Applies intermediate level aquatic exercise routines for improved cardiorespiratory fitness, flexibility, and muscular endurance. A wide variety of water aerobic exercise routines will be presented, such as deep water jogging, aerobics to music, circuit training, and interval training. Designed for swimmers and non-swimmers.

PER A220 Intermediate Yoga 1 CR
Contact Hours: .5 + 1
Prerequisites: PER A120.
Introduces level Kundalini yoga physical exercises, breathing techniques, meditation, and relaxation exercises.

PER A223 Intermediate Tai Chi 1 CR
Contact Hours: .5 + 1
Prerequisites: PER A123. Special Fees.
Introduces level Chen Style Tai Chi exercises designed for improved health, tranquility, energy, and strength.

PER A224 Intermediate Karate 1 CR
Contact Hours: .5 + 1
Prerequisites: PER A124. Special Fees.
Introduces level Shotokan Karate principles and applications. Training and discipline on the physical, mental, and spiritual levels will be covered.

PER A225 Intermediate Kung Fu 1 CR
Contact Hours: .5 + 1
Prerequisites: PER A125. Special Fees.
Presents intermediate level Northern Shaolin Kung Fu principles and applications. Training and discipline on the physical, mental, and spiritual levels will be covered.

PER A226 Intermediate Kendo 1 CR
Contact Hours: .5 + 1
Prerequisites: PER A126. Special Fees.
Presents intermediate level Kendo principles and applications. Training and discipline on the physical, mental, and spiritual levels will be covered.

PER A227 Intermediate Tae Kwon Do 1 CR
Contact Hours: .5 + 1
Prerequisites: PER A127. Special Fees.
Presents intermediate level Tae Kwon Do principles and applications. Training and discipline on the physical, mental, and spiritual levels will be covered.

PER A230 Intermediate Tennis 1 CR
Contact Hours: .5 + 1
Prerequisites: PER A130. Special Fees.
Presents intermediate level tennis. Applies offensive and defensive strategies of tennis through active participation.

PER A231 Intermediate Racquetball 1 CR
Contact Hours: .5 + 1
Prerequisites: PER A131. Special Fees.
Presents intermediate level racquetball. Applies offensive and defensive strategies of racquetball through active participation.

PER A232 Intermediate Golf 1 CR
Contact Hours: .5 + 1
Prerequisites: PER A132. Special Fees.
Presents intermediate level golf. Applies offensive and defensive strategies of golf through active participation.

PER A233 Intermediate Bowling 1 CR
Contact Hours: .5 + 1
Prerequisites: PER A133. Special Fees.
Presents intermediate level bowling. Applies offensive and defensive strategies of bowling through active participation.

PER A234 Swimming Conditioning 1 CR
Contact Hours: .5 + 1
Prerequisites: PER A134. Special Fees.
Develops and refines swimming skills, physical conditioning, and knowledge of training and competition. Designed for intermediate to competitive level swimmers.

PER A235 Intermediate Swimming 1 CR
Contact Hours: .5 + 1
Prerequisites: PER A135. Special Fees.
Develops and refines competitive swimming skills. Designed for intermediate to competitive level swimmers.

PER A236 Intermediate In-Line Skating 1 CR
Contact Hours: .5 + 1
Prerequisites: PER A136. Special Fees.
Presents intermediate level in-line skating skills and stunts. Applies intermediate level in-line skating skills through active participation.

PER A237 Intermediate Ice Skating 1 CR
Contact Hours: .5 + 1
Prerequisites: PER A137. Special Fees.
Presents intermediate level ice skating skills. Applies intermediate level ice skating skills through active participation.

PER A241 Intermediate Basketball 1 CR
Contact Hours: .5 + 1
Prerequisites: PER A141. Special Fees.
Presents intermediate level basketball. Applies offensive and defensive strategies of basketball through active participation.
PER A242  Intermediate Soccer  1 CR  Contact Hours:  5 + 1  Prerequisites: PER A142.  Special Fees.  Emphasizes game strategy and develops intermediate and advanced soccer skills. Applies offensive and defensive strategies of soccer through active participation.

PER A243  Intermediate Hockey  1 CR  Contact Hours:  5 + 1  Prerequisites: PER A143.  Special Fees.  Develops intermediate level power skating techniques and hockey skills. Applies defensive and offensive strategies and tactics.

PER A244  Intermediate Volleyball  1 CR  Contact Hours:  5 + 1  Prerequisites: PER A144.  Special Fees.  Emphasizes game strategy and develops intermediate and advanced volleyball skills. Applies offensive and defensive strategies of volleyball through active participation.

PER A246  Intermediate Rock Climbing  1 CR  Contact Hours:  5 + 1  Prerequisites: PER A146.  Special Fees.  Special Note: Requires ability to function comfortably in inclement weather. Builds on the skills and knowledge gained in Beginning Rock Climbing. Emphasizes risk management skills, learning to build/use a variety of anchors, and ascending and descending techniques. Introduces a risk/benefit analysis of, but not the practice of, lead climbing vs. following. Provides opportunity to practice protection placement and mock lead climbing.

PER A272  Advanced Weight Training  1 CR  Contact Hours:  5 + 1  Prerequisites: PER A117 or PER A118.  Special Fees.  Presents key concepts related to lifetime personal fitness. Applies advanced techniques for resistance exercises to strengthen and condition major muscle groups through correct use of variable resistance equipment and free weights.

PER A273  Strength Training Through Periodization  2 CR  Contact Hours:  1 + 2  Prerequisites: PER A117 or PER A118.  Special Fees.  Expands on key concepts related to strength and power training using the periodization model. Applies designing, planning, and implementing complete strength training programs in lecture and weight room sessions.

PER A275  Advanced T’ai Chi Ch’uan  1 CR  Contact Hours:  5 + 1  Prerequisites: PER A223 and PER A222.  Instruction and guided practice in advanced T’ai Chi Ch’uan Yang Long form. Focuses on exercises for the improvement of health, muscle endurance, energy, and relaxation.

PER A277  Advanced Racquetball  1 CR  Contact Hours:  5 + 1  Prerequisites: PER A231.  Special Fees.  Emphasizes game strategy and develops advanced racquetball skills. Applies advanced offensive and defensive strategies of racquetball through active participation.

PER A278  Advanced Figure Skating  1 CR  Contact Hours:  5 + 1  Prerequisites: PER A227.  Emphasizes and develops intermediate to advanced figure skating skills. Applies advanced principles of ice skating, program development, and choreography.

PER A280  Power Skating  1 CR  Contact Hours:  5 + 1  Prerequisites: PER A137.  Expands on key concepts related to power skating for improved performance in ice hockey. Applies principles of balance, skating strides, crossovers, and physical conditioning through active participation.

PER A281  Advanced Hockey  1 CR  Contact Hours:  5 + 1  Prerequisites: PER A243.  Special Fees.  Emphasizes strategy and develops advanced skating and hockey skills. Applies advanced offensive and defensive strategies of hockey through active participation. Presents winning hockey coaching techniques.

PER A285  Expedition Glacier School  2 CR  Contact Hours:  1 + 2  Registration Restrictions: Instructor approval.  Special Fees.  Special Note: Requires excellent physical condition and the ability to function comfortably in extremely cold and/or inclement weather. A student must attend the shakedown weekend in order to participate in the expedition. Applies backpacking and mountaineering techniques in a multi-day glacier expedition. Introduces glacier-travel and crevasse-rescue techniques as well as expedition planning. Emphasizes risk assessment and learning to minimize the inherent risks associated with the activity.

PER A287  Expedition Backpacking  2 CR  Contact Hours:  1 + 2  Prerequisites: PER A170.  Special Fees.  Special Note: Requires excellent physical condition and ability to function comfortably in inclement weather. A student must attend the shakedown weekend in order to participate in the expedition. Provides experienced backpackers with the fundamentals of planning and participating on a multi-day backpacking trip. Emphasizes risk assessment, selection of group members, and importance of group dynamics, route selection, and logistics.

PETR A105  Petroleum Science I  3 CR  Contact Hours:  3 + 0  Prerequisites: MATH A055.  Offered at Kenai Peninsula College.  Surveys physical and chemical properties of hydrocarbon gases and liquids. Introduces fluid flow processing including head, friction, and fluid power. Introduces basic unit processes such as two-phase and three-phase separation.

PETR A121  Surface Oil Field Equipment II  3 CR  Contact Hours:  3 + 0  Prerequisites: PETR A120.  Offered at Kenai Peninsula College.  Continuation of PETR A120. Emphasizes post-drilling operations such as well stimulation fundamentals, well logging and wireline procedures, knowledge of waterflood and gas lift procedures and equipment. Introduces fishing and directional drilling.

PETR A140  Industrial Process Instrumentation I  3 CR  Contact Hours:  3 + 0  Prerequisites: MATH A055.  Registration Restrictions: Reading Placement Test.  Crosslisted with: PRT A140.  Offered only at Kenai Peninsula College.  Covers physics of pressure, temperature, level and flow; mechanical and electrical aspects of instruments used to control dynamics of processes. Also covers dynamics of automatic control including proportional control, automatic reset, derivative action and integral timing.

PETR A144  Industrial Process Instrumentation II  3 CR  Contact Hours:  3 + 0  Prerequisites: PETR A140 with minimum grade of C or PRT A140 with minimum grade of C.  Crosslisted with: PRT A144.  A continuation of PETR/PRTA140. Subjects covered will be the repair, maintenance, and calibration of a wide range of industrial process instruments. Hands on training will emphasized.

PETR A155  Blueprint Reading  3 CR  Contact Hours:  3 + 0  Offered only at Kenai Peninsula College.  Covers basics of reading machine, welding, architectural, instrumentation, hydraulic, and process flow drawings. Includes freehand sketching of simple mechanical and flow diagrams.

PETR A240  Industrial Process Instrumentation III  3 CR  Contact Hours:  3 + 0  Prerequisites: PETR A144.  Offered only at Kenai Peninsula College.  Study of methods, installation, and identification of proper instruments for use with particular industrial processes, and operation of instrumentation under live load conditions through use of sophisticated process simulators.
PETR A244 Industrial Process Instrumentation IV 3 CR
Contact Hours: 3 + 0
Prerequisites: PETR A240.
Offered only at Kenai Peninsula College.
Explores techniques used in designing and developing control loops. Control loop engineering and developments of loops for maximum efficiency and energy control. Program will develop basic engineering skills.

PHAR A111 Techniques of Pharmacy Practice 3 CR
Contact Hours: 3 + 0
Special Fees.
Introduces techniques and demonstrations of pharmacy practices including accepting prescriptions and insurance cards, checking for required information, processing, filling, labeling, and completing patient profiles. Concentrates on compounding, mixing, IV preparation, and sterile techniques.

PHAR A112 Information Technology for Pharmacy Technicians 2 CR
Contact Hours: 2 + 0
Registration Restrictions: Department approval.
Special Fees.
Surveys computer usage in various pharmacy settings. Introduces inputting, compiling, editing, and manipulation of pharmaceutical information systems utilizing various current computer technologies.

PHAR A114 Survey of Pharmacotherapeutics II 3 CR
Contact Hours: 3 + 0
Prerequisites: PHAR A104 with minimum grade of C.
Registration Restrictions: Department approval.
Completes pharmacological foundation that is required for jobs in pharmacy industry. Emphasizes efficacy, usage, and comparative value of drug therapy in a variety of conditions affecting human disease processes.

PHAR A115 Pharmacology for Technicians II 3 CR
Contact Hours: 3 + 0
Prerequisites: PHAR A105 with minimum grade of C.
Special Fees.
Introduces drug terms, definitions, origins and uses with an emphasis on factors affecting drug actions and adverse reactions. Focus on anti-infectives, pain relievers, muscle relaxants, other central nervous system, hormone, diabetic, and topical medications.

PHAR A115 Pharmacy Practice I 1-7 CR
Course Attributes: Pharmacy Technicians certificate.
Prerequisites: PHAR A101 with minimum grade of C and PHAR A112 with minimum grade of C and PHAR A103 with minimum grade of C and PHAR A107 with minimum grade of C.
Contact Hours: 0 + 3-21
Registration Restrictions: Departmental approval.
Surveys computer usage in various pharmacy settings. Introduces inputting, compiling, editing, and manipulation of pharmaceutical information systems utilizing various current computer technologies.

PHIL - PHILOSOPHY
Offered through the College of Arts and Sciences
Administration/Humanities Building (ADM), Room 254, 786-4455
http://philosophy.uaa.alaska.edu

PHIL A211 History of Philosophy I 3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Humanities Requirement.
Introduction to the great thinkers of the Greek, Latin, Medieval, and Renaissance periods in Western civilization. Comparative examination of cosmological, religious, ethical, political, and scientific ideas which shaped each of these epochs.
PHIL A212  History of Philosophy II  3 CR
Contact Hours:  3 + 0  
Course Attributes: UAA GER Humanities Requirement.  
Introduces great thinkers of the 17th century Scientific Revolution, The Enlightenment, German idealism, contemporary positivism and existentialism.  
Comparative examination of cosmological, ethical, political, and scientific ideas which shaped each of these periods.

PHIL A231  Truth, Beauty, and Goodness  3 CR
Contact Hours:  3 + 0  
Prerequisites: (ENGL A111 or concurrent enrollment).  
Crosslisted with: LISC 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  
Course Attributes: UAA GER Humanities Requirement.  
An introduction to the great moral thinkers of Western Civilization and the use of their ethical systems in an attempt to resolve contemporary issues such as abortion, euthanasia, equal rights, civil disobedience, and professional ethics.

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 value uses 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 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 A311  Metaphysics and Epistemology  3 CR
Contact Hours:  3 + 0  
Registration Restrictions: Junior standing and 6 credits from PHIL A101, PHIL A201, PHIL A211, PHIL A212, or PHIL A301 with a minimum grade of C.  
Focus on the topics of existence, universals and particulars, individuals and classes, change and the persistence of objects and persons, knowledge and belief, internalism and externalism, perception, materialism, truth, and reality.

PHIL A313A  Eastern Philosophy and Religion  1 CR
Contact Hours:  1 + 0  
Registration Restrictions: Recommended: ENGL A111.  
Grade Mode: Pass/No Pass.  
May be stacked with: PHIL A313B.  
Special Note: One credit requires regular attendance and minimal weekly assignments.  
Does not satisfy the humanities GER.  
Survey of philosophical-religious traditions of the Far East: Confucian, Taoist, Buddhist (including Zen), and Hindu.

PHIL A313B  Eastern Philosophy and Religion  3 CR
Contact Hours:  3 + 0  
May be stacked with: PHIL A313A.  
Course Attributes: UAA GER Humanities Requirement.  
Survey of philosophical-religious traditions of the Far East: Confucian, Taoist, Buddhist, (including Zen), and Hindu.

PHIL A314  Western Religion  3 CR
Contact Hours:  3 + 0  
Prerequisites: ENGL A111.  
Course Attributes: UAA GER Humanities Requirement.  
Survey and comparative study of the major religious traditions of the West: Judaism, Christianity, and Islam.  Concepts of redemption and revelation, the life of worship, and religious transformation will be stressed.

PHIL A390  Selected Topics in Philosophy  3 CR
Contact Hours:  3 + 0  
Registration Restrictions: Upper-division standing.  
Special Note: Course can be repeated for credit with a different subtitle.  
Detailed study of a selected topic in philosophy.

PHIL A400  Ethics, Community, and Society  3 CR
Contact Hours:  3 + 0  
Prerequisites: PHIL A301.  
Registration Restrictions: Completion of GER Tier 1 (Basic college-level skills) courses and junior standing (at least 60 credit hours).  
Course Attributes: UAA GER Integrative Capstone.  
An integrated study of a selected topic on a global ethical issue and the interests and responsibilities of individuals, communities and societies.  Topics may vary from semester to semester.

PHIL A401  Aesthetics  3 CR
Contact Hours:  3 + 0  
An investigation into the nature of art and the creative process from both an historical and theoretical perspective, utilizing especially the philosophy of the ancient Greeks, the Romantic thinkers and contemporary semiotics.

PHIL A405  Professional Ethics  3 CR
Contact Hours:  3 + 0  
Registration Restrictions: Junior standing.  
Study of the common ethical concerns of professional practices, including professional-client relationships, confidentiality, integrity, the role of professional codes, conflicts of interest, conflicts of duties, questions of responsibility, and the concept of a profession.  Includes an account of professional virtues, and an analysis of moral decision-making.  Case studies and practical examples selected from various professions.

PHIL A406  Philosophy of Law  3 CR
Contact Hours:  3 + 0  
Registration Restrictions: JUST A250 or 6 credits in Philosophy, and Junior standing.  
Considers various philosophical accounts of the nature of law and grounds of its authority; the relationship between law and morality; connections between law and political ideals such as liberty, equality, and economic well-being; and methods of constitutional interpretation.  Addresses contemporary controversies in the law such as civil disobedience, criminal responsibility, capital punishment, property rights, religious freedom, freedom of speech, and affirmative action.

PHIL A415  Feminist Philosophy  3 CR
Contact Hours:  3 + 0  
Registration Restrictions: WS A200 or 6 credits in philosophy, and Junior standing.  
Examines women's position in the writings of prominent thinkers in the Western philosophical canon; contemporary theories concerning the nature of gender and its intersection with race, class, and sexuality; and feminist contributions to philosophical inquiry in ethics, social/political philosophy, theories of knowledge, and/or the philosophy of science.

PHIL A421  Philosophy of the Sciences  3 CR
Contact Hours:  3 + 0  
Registration Restrictions: Junior or Senior standing.  
A general introduction to the philosophical problems common to the physical, biological, behavioral, and social sciences, focusing on issues concerning method, epistemology, modes of explanation, and the differences between the natural and the human sciences.

PHIL A490  Topics in Contemporary Philosophy  3 CR
Contact Hours:  3 + 0  
Prerequisites: PHIL A101 with minimum grade of C and PHIL A201 with minimum grade of C and PHIL A211 with minimum grade of C and PHIL A212 with minimum grade of C and PHIL A301 with minimum grade of C.  
Registration Restrictions: Junior standing.  
An intensive and detailed study of a topic in contemporary philosophy in a seminar format.
PHIL A492  Seminar on an Enduring Philosopher  3 CR
Contact Hours: 3 + 0
Prerequisites: PHIL A101 with minimum grade of C and PHIL A201 with minimum grade of C and PHIL A211 with minimum grade of C and PHIL A212 with minimum grade of C and PHIL A301 with minimum grade of C.
Registration Restrictions: Junior standing.

An in-depth investigation of the historical background to and philosophical content of an important philosopher's thought. Philosophers studied may include Socrates, Plato, Aristotle, Augustine, Aquinas, Hobbes, Descartes, Locke, Hume, Kant, Nietzsche, or many others.

PHIL A495  Service Learning in Applied Ethics  3 CR
Contact Hours: 3 + 0
Prerequisites: PHIL A101 with minimum grade of C and PHIL A201 with minimum grade of C and PHIL A211 with minimum grade of C and PHIL A212 with minimum grade of C and PHIL A301 with minimum grade of C.
Registration Restrictions: Junior standing.

Work with a community partner in an area related to applied ethics. A service learning project will be identified and coordinated by a faculty committee in cooperation with a community partner, as related to the student's interests. Students will use the project as a means of applying and reflecting on relevant ethical concepts, decision-making, and practical reasoning skills.

PHIL A498  Senior Research Project  3 CR
Contact Hours: 3 + 0
Prerequisites: PHIL A101 with minimum grade of C and PHIL A201 with minimum grade of C and PHIL A211 with minimum grade of C and PHIL A212 with minimum grade of C and PHIL A301 with minimum grade of C.
Registration Restrictions: Senior standing, nine credits of philosophy in addition to the prerequisites, and faculty permission.

Senior-level course in which the student will engage in independent research on a topic of his or her choosing under the supervision of a faculty member. The course culminates with the completion of a research paper of significant length prepared to publication standards.

PHIL A607  Ethics in Clinical Medicine  1 CR
Contact Hours: 1 + 0
Registration Restrictions: Admission to the WWAMI program or the MS program in Nursing Science, or with the consent of the instructor.
Grade Mode: Pass/No Pass.
Focuses on ethical issues in medical training and clinical practice, as well as on core topics in biomedical ethics.

PHYS - PHYSICS
Offered through the College of Arts and Sciences
Engineering Building (ENGR), Room 333, 786-1238
http://salt.uaa.alaska.edu

PHYS A101  Physics for 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 I for Technicians  4 CR
Contact Hours: 3 + 3
Prerequisites: MATH A055.
Exposes students to basic concepts in physics. 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: MATH A105 and (PHYS A123 or concurrent enrollment).
Registration Restrictions: High school trigonometry.
Course Attributes: UAA GER Natural Sciences Lab Only.
Special Fees.
Introductory physics laboratory, with experiments in mechanics, fluids, and thermodynamics.

PHYS A124  Basic Physics II  3 CR
Contact Hours: 3 + 0
Prerequisites: PHYS A123 with minimum grade of C.
Course Attributes: UAA GER Natural Sciences Requirement.
Non-calculus introduction to electricity and magnetism, waves, optics, light, some modern and nuclear physics. Limited emphasis on historical development of physics.

PHYS A124L  Basic Physics II Laboratory  1 CR
Contact Hours: 0 + 3
Prerequisites: PHYS A123 with minimum grade of C and PHYS A123L with minimum grade of C and (PHYS A124 or concurrent enrollment).
Course Attributes: UAA GER Natural Sciences Lab Only.
Special Fees.
Introductory physics laboratory, with experiments in electricity and magnetism, waves, and optics.

PHYS A130  Survey of College Physics  3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A108.
Introduction to core principles of physics in classical mechanics, waves, electricity and magnetism, and optics. Specifically designed to prepare students for entry into calculus based physics.

PHYS A211  General Physics I  3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A200 with minimum grade of C and (MATH A201 or concurrent enrollment) and PHYS A130 with minimum grade of C.
Registration Restrictions: If PHYS A130 prerequisite is not satisfied, then a passing score on department exam is required.
Course Attributes: UAA GER Natural Sciences Requirement.
Calculus-based course covering classical mechanics (statics and dynamics of translational and rotational motion), fluids, elasticity, and introduction to thermodynamics.

PHYS A211L  General Physics I Laboratory  1 CR
Contact Hours: 0 + 3
Prerequisites: (PHYS A211 with minimum grade of C or concurrent enrollment).
Registration Restrictions: If PHYS A211 is taken from another institution, it must be completed prior to taking PHYS A211L.
Course Attributes: UAA GER Natural 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 A 212 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.

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.

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.

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.

PHYS A303 Modern Physics 3 CR
Contact Hours: 3 + 0
Prerequisites: PHYS A212 and MATH A302.
Introduces modern physics, including special relativity, atomic and molecular physics, electromagnetic radiation, solid-state physics, elementary particles, simple transport theory, kinetic theory, and concepts of quantum mechanics.

PHYS A311 Intermediate Classical Mechanics 3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A302 with minimum grade of C and PHYS A212 with minimum grade of C.
Newtonian, Lagrangian, and Hamiltonian mechanics, dynamics of systems of particles and rigid bodies.

PHYS A314 Electromagnetics 3 CR
Contact Hours: 3 + 0
Prerequisites: PHYS A212 and PHYS A212R and MATH A302.
Crosstown 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 A212 or PHYS A212R.
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.
Crosstown 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.
Crosstown with: BIOL A456 and CHEM A456.
Course Attributes: UAA GER Integrative Capstone.
An introduction to nonlinear dynamics and chaos. Concrete examples from physics, biology, chemistry, and engineering are used to develop analytical methods and geometric intuition. Topics covered include phase plane analysis, iterated maps, fractals, and strange attractors.

PHYS A498 Individual Research 1-6 CR
Contact Hours: 0 + 3-18
Registration Restrictions: Department permission.
Special Note: May be repeated for a maximum of 6 credits.
Research projects to be arranged with individual faculty members who will direct the research program.

PM - PROJECT MANAGEMENT

Offered through the School of Engineering
Engineering Building (ENGR), Room 201, 786-1900
www.engr.uaa.alaska.edu

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 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 A612 Project Time Management 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate level standing.
Special Fees.
Advanced project time management processes utilized to ensure on-time project completion. Processes include defining project activities, sequencing activities, estimating activity duration, and developing and controlling the project schedule. Project scheduling software will be utilized in these processes.

PM A614 Project Cost Management 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate level standing.
Special Fees.
Advanced cost management process and procedures utilized to ensure project completion is within budget. Cost estimating, WBS, scheduling, resource planning, accounting interface, cost budgeting, cost and schedule integration, and cost control are examined.

PM A616 Project Quality Management 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate level standing.
Special Fees.
Examination and implementation of contemporary team-based quality leadership. Major emphasis will be placed on understanding the philosophy and metrics for building and maintaining team-based continuous quality improvement. Special focus will be placed on developing an organizational climate for continuous quality leadership in public, non-profit, and private sector service-based enterprises.

PM A620 Project Human Resource Management 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate level standing.
Special Fees.
Covers the processes required to make effective use of people involved with the project. This forum- or discussion-style course is intended to open students to a wide variety of subject matter that will ultimately form the basis of their personal tool kit. Topics will include leadership, team leadership, delegating, motivation, performance measurement and reward systems, innovation and creativity, communications, and management systems.

PM A622 Project Communications Management 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate level standing.
Special Fees.
Advanced communication processes and techniques used to successfully manage the project on time, within budget, and to the satisfaction of the customer. Includes compilation, distribution, storage, and disposing of project information.

PM A624 Project Risk Management 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate level standing.
Special Fees.
Examines methods and processes of planning for, identifying, assessing, monitoring, and responding to project risk. Qualitative and quantitative risk analysis procedures, including decision free analysis, risk simulation, risk ranking, and risk responding techniques.
PM A626  Project Procurement Management  3 CR
Contact Hours:  3 + 0
Registration Restrictions: Graduate level standing.
Special Fees.
  Procurement management processes for project planning, solicitation, source
  selection, contract administration, and contract closeout are presented.

PM A685  Project Management Case Study and Research  6 CR
Contact Hours:  6 + 0
Registration Restrictions: Graduate level standing and instructor's permission.
Special Fees.
  Team-based case studies of actual project management problems that should be
  identified in the students' workplace and will result in a written report. The report
  will include recommendations for action regarding the problem.

PMED - PARAMEDICAL TECHNOLOGY
Offered through Kenai Peninsula College
34820 College Drive, Soldotna, AK 99669, 907-262-0330
www.kpcc.alaska.edu
PMED A241  Paramedicine I  8 CR
Contact Hours:  7 + 2
Prerequisites: BIOL A111 with minimum grade of C and BIOL A111L and BIOL A112 with
  minimum grade of C and BIOL A112L.
Registration Restrictions: Current Alaska EMT-1 or National Registry EMT-Basic;
  Acceptance into the PMED Program.
Corequisite: PMED A242.
  Applies the knowledge and skills of airway management and ventilation while
  integrating pathophysiological principles and assessment findings to formulate
  impressions and implement treatment plans needed while caring for patients who have
  suffered an acute injury or illness.

PMED A242  Clinical Rotation I  4 CR
Contact Hours:  0 + 8
Prerequisites: BIOL A111 with minimum grade of C and BIOL A111L and BIOL A112 with
  minimum grade of C and BIOL A112L.
Registration Restrictions: Current Alaska EMT-1 or National Registry EMT-Basic;
  Acceptance into the PMED Program.
Corequisite: PMED A241.
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 II  4 CR
Contact Hours:  0 + 8
Prerequisites: PMED A241 and PMED A242.
Corequisite: PMED A251.
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 vehicle operations.

PMED A262  Clinical Rotation III  4 CR
Contact Hours:  0 + 8
Prerequisites: PMED A251 and PMED A252.
Corequisite: PMED A261.
Grade Mode: Pass/No Pass.
  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/cte/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 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 A052  Campus Orientation  1 CR
Contact Hours:  1 + 0
Prerequisites: ASSET Reading Skills with score of 27.
Grade Mode: Pass/No Pass.
  Introduces resources found on the UAA campus and in the University of Alaska
  system and teaches use of those resources to overcome common barriers to success in
  college.

PRPE A054  Learning Strategies  1-3 CR
Contact Hours:  1-3 + 0
Registration Restrictions: Appropriate score on reading placement test.
Grade Mode: Pass/No Pass.
Special Fees.
  Presents basic learning strategies. Develops time management, learning styles, textbook
  study, note taking, and test taking skills.

PRPE A060  Slingerland I  3 CR
Contact Hours:  3 + 0
Grade Mode: Pass/No Pass.
Special Note: Referral or Slingerland Screening Test recommended. These course
  methods are not effective for students with a visual or hearing impairment or who speak
  English as a second language at a beginning level.
  Provides intensive, guided practice in handwriting, spelling, and word attack skills
  for English speaking students who have specific language processing problems. Uses all
  learning channels (sight, hearing, and touch) and a phonics-based approach.

PRPE A062  Multi-Sensory Reading  3 CR
Contact Hours:  3 + 0
Special Fees.
  Special Note: These course methods are not effective for students with a visual or
  hearing impairment.
  Gives instruction and practice in using Slingerland method and Lindamood-Bell
  visualizing and verbalizing techniques to increase the student's ability to sound out
  unknown words, extend reading vocabulary, and increase comprehension and retention.

PRPE A064  Multi-Sensory Grammar/Writing  3 CR
Contact Hours:  3 + 0
Special Fees.
  Special Note: These course methods are not effective for students with a visual or
  hearing impairment.
  Increases ability to write Standard American English by using the Slingerland
  method to introduce basic grammar and its use in writing. Covers simple parts of
  speech, word choice, agreement of sentence elements and basic sentence construction.
PRPE A070  Basic Reading  2-4 CR
Contact Hours: 2-4 + 0
Registration Restrictions: Appropriate score on English placement test.
Special Fees.
Special Note: Concurrent enrollment in PRPE 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 Fees.
Special Note: May be repeated for a maximum of 3 credits.
Provides individualized instruction in basic reading skills, text comprehension, vocabulary development, dictionary skills, and readjustment of reading rate, in an open lab format.

PRPE A074  Vocabulary Skill Building  1-3 CR
Contact Hours: 1-3 + 0
Prerequisites: ASSET 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.
Special Fees.
Introduces skills to increase reading speed and comprehension. Presents techniques for efficient reading of different types of material.

PRPE A076  Reading Strategies  3 CR
Contact Hours: 3 + 0
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 English placement test.
Special Fees.
Special Note: Concurrent enrollment in PRPE A070 is strongly recommended.
Improves basic writing skills to develop sentences and paragraphs that conform to Standard American English.

PRPE A082  Refresher Writing Lab  1-3 CR
Contact Hours: 1-3 + 0
Registration Restrictions: Appropriate score on English placement test.
Special Fees.
Special Note: May be repeated for a maximum of 3 credits.
Provides individualized instruction in basic writing skills for school, work, personal, or creative development.

PRPE A084  Sentence Skills  1-3 CR
Contact Hours: 1-3 + 0
Registration Restrictions: Appropriate score on English placement test.
Special Fees.
Supports students in composition courses. Provides tools for improving sentences that conform to Standard American English. Focuses on common sentence errors for accuracy in drafting and editing.

PRPE A086  Writing Strategies  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Appropriate score on English placement test.
Special Fees.
Introduces composition of paragraphs and short essays that conform to Standard American English for college writing. Emphasizes basic reading skills to enhance students’ writing. Reviews the basics of grammar, effective sentences, and sentence combining.

PRPE A105  Introduction to College Study Skills  1-3 CR
Contact Hours: 1-3 + 0
Prerequisites: PRPE A076 with minimum grade of C.
Registration Restrictions: If prerequisite is not satisfied, then appropriate score on reading placement test is required.
Special Fees.
Introduces study skills necessary for success in college-level courses. Presents strategies for information processing, lecture and textbook note-taking, and test-taking in academic settings.

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.
Special Fees.
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.
Registration Restrictions: If prerequisite is not satisfied, then appropriate scores on reading and writing placement tests required.
Special Fees.
Preparation for ENGL A111 and alternative to ENGL A109. Introduces composition of multi-paragraph essays that conform to Standard American English for college writing. Includes critical reading skills to enhance students’ writing. Continues intensive practice in punctuation, sentence combining, revising, and editing.

PRT - PROCESS TECHNOLOGY
Offered through Kenai Peninsula College
34820 College Dr., Soldotna, Alaska, 99669, (907) 262-0300
www.kpc.alaska.edu

PRT A101  Introduction to Process Technology  3 CR
Contact Hours: 3 + 0
Prerequisites: PETR A140.
Introduction to process operations in industry through an overview of general information, processes, procedures, and equipment.

PRT A110  Introduction to Occupational Safety, Health, and Environmental Awareness  3 CR
Contact Hours: 3 + 0
Introduction to the field of safety, health, and environment within the process industry. Covers various types of plant hazards, safety and environmental systems equipment, and applicable government regulations, and industry standards.

PRT A130  Process Technology I: Equipment  4 CR
Contact Hours: 4 + 0
Prerequisites: PRT A101.
In-depth treatment of selected process equipment including rotating machinery and process units. Equipment components, construction, preventive maintenance, and safety will be emphasized.

PRT A140  Industrial Process Instrumentation I  3 CR
Contact Hours: 3 + 0
Prerequisites: MATH A055.
Crosslisted with: PETR A140.
Covers physics of pressure, temperature, level, and flow measurement; mechanical and electrical aspects of instruments used to control dynamics of processes. Also covers dynamics of automatic control including proportional control, automatic reset, derivative action, and integral timing.

PRT A144  Industrial Process Instrumentation II  3 CR
Contact Hours: 3 + 0
Prerequisites: PETR A140 with minimum grade of C or PRT A140 with minimum grade of C.
Crosslisted with: PETR A144.
A continuation of PETR/PRT A140. Subjects covered will be the repair, maintenance, and calibration of a wide range of industrial process instruments. Hands-on training will be emphasized.
COURSE DESCRIPTIONS

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.

An introduction to the discipline of political science focusing on the whole realm of political science concepts, political activities, and political processes, worldwide.

PS A201  Topics in Politics  1-3 CR
Contact Hours:  1-3 + 0
Special Note: Subtitle varies; may be repeated for credit with a different subtitle.

A topic of contemporary or continuing interest in Alaska politics, American politics, comparative politics, and/or international relations, treated at the introductory level.

PS A301  Comparative Political Economy  3 CR
Contact Hours:  3 + 0
Prerequisites: PS A101 or PS A102.

The dynamic interaction of politics and economics in a variety of local, national, and international settings. The course considers how power determines the nature of the economic system and how the economic process redistributes power and wealth.

PS A311  Comparative Politics  3 CR
Contact Hours:  3 + 0
Course Attributes: UAA GER Social Sciences Requirement.

A comprehensive introduction and review of this major subfield of the discipline of political science. The subject matter, goals and purposes, concepts, and methods of comparative politics are covered. This course prepares students for comparative analysis of politics.

PS A312  Comparative Politics: Case Studies  3 CR
Contact Hours:  3 + 0
Prerequisites: PS A311.

A detailed analysis and comparison of the political systems of several selected independent, sovereign nation-states. The cases selected for study represent contrasting types of political systems in different regions of the world.

PS A321  International Relations  3 CR
Contact Hours:  3 + 0
Prerequisites: PS A101 or PS A102.

A comprehensive introduction to the concepts, processes, and structures of international relations. Topics include the international environment, the nation-state system, transnational institutions, diplomacy, and war. Selected contemporary international issues and the state of international organization are also treated.

PS A322  United States Foreign Policy  3 CR
Contact Hours:  3 + 0
Prerequisites: PS A101 or PS A102.

A comprehensive introduction to United States foreign policy. Constitutional provisions and the politics of policy making are treated. This course also focuses on contemporary foreign policy problems.

PS A324  Model United Nations  1/3 CR
Contact Hours: 1+3 or 0
Special Fees.
Special Note: To earn 1 credit, students must prepare to debate by acquainting themselves with their nation-state and the topic. To earn 3 credits, students must also submit two term papers. May be repeated once for credit.

A student simulation of the United Nations. Acting as nation-state delegates, students research and debate a topic of international concern.

PS A325  Northeast Asia in 21st Century  3 CR
Contact Hours:  3 + 0
Registration Restrictions: Junior standing. Completion of GER Tier 1 (basic college-level skills) courses. Six credits of Tier 2 GEOG, HIST, or PS courses.
Crosslisted with: HIST A325 and INTL A325.
Course Attributes: UAA GER Integrative Capstone.

An interdisciplinary examination and analysis of Northeast Asia covering China, the Koreas, and Japan, designed to provide students with the means to understand how the societies of this region have developed separate and distinct identities despite their common cultural and philosophic roots.

PS A327  Political Geography  3 CR
Contact Hours:  3 + 0
Prerequisites: [GEOG A101 or INTL A101 or PS A102].
Crosslisted with: GEOG A327.

Study of the spatial forms and processes of political phenomena. Concepts, models, and current literature related to territories such as nation-states and congressional districts, the formation and dissolution of empires, geopolitics, and international conflict are examined.

PS A330  The American Political Tradition  3 CR
Contact Hours:  3 + 0
The political theory of liberal democracy examined in its application to crucial events in American political history.

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
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
Course Attributes: UAA GER Humanities Requirement.

Political philosophy from Machiavelli to Nietzsche, with emphasis on liberalism and its critics.

PS A334  Model United Nations  1/3 CR
Contact Hours: 1+3 or 0
Special Fees.
Special Note: To earn 1 credit, students must prepare to debate by acquainting themselves with their nation-state and the topic. To earn 3 credits, students must also submit two term papers. May be repeated once for credit.

A student simulation of the United Nations. Acting as nation-state delegates, students research and debate a topic of international concern.

PS A325  Northeast Asia in 21st Century  3 CR
Contact Hours:  3 + 0
Registration Restrictions: Junior standing. Completion of GER Tier 1 (basic college-level skills) courses. Six credits of Tier 2 GEOG, HIST, or PS courses.
Crosslisted with: HIST A325 and INTL A325.
Course Attributes: UAA GER Integrative Capstone.

An interdisciplinary examination and analysis of Northeast Asia covering China, the Koreas, and Japan, designed to provide students with the means to understand how the societies of this region have developed separate and distinct identities despite their common cultural and philosophic roots.

PS A327  Political Geography  3 CR
Contact Hours:  3 + 0
Prerequisites: [GEOG A101 or INTL A101 or PS A102].
Crosslisted with: GEOG A327.

Study of the spatial forms and processes of political phenomena. Concepts, models, and current literature related to territories such as nation-states and congressional districts, the formation and dissolution of empires, geopolitics, and international conflict are examined.

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Contact Hours:  3 + 0
The political theory of liberal democracy examined in its application to crucial events in American political history.

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Contact Hours:  3 + 0
Prerequisites: ENGL A111.
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PS A332  History of Political Philosophy I: Classical  3 CR
Contact Hours:  3 + 0
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
Course Attributes: UAA GER Humanities Requirement.

Political philosophy from Machiavelli to Nietzsche, with emphasis on liberalism and its critics.

Chapter 13  Page 442  University of Alaska Anchorage 2007-2008 Course Catalog  www.uaa.alaska.edu
PS A341 Congress 3 CR
Contact Hours: 3 + 0
Prerequisites: PS A101 or PS A102.

The organization of Congress and its role in the American political system. Theories of representative government, the internal dynamics of Congress, and forces influencing Congress's ability to act within the constitutional system are among the topics examined.

PS A342 The American Presidency 3 CR
Contact Hours: 3 + 0
Prerequisites: PS A101 or PS A102.

The evolution of the executive branch of United States government. Focuses on presidential power, relations with Congress, presidential selection, contemporary policymaking, and the Constitution.

PS A343 Constitutional Law 3 CR
Contact Hours: 3 + 0
Prerequisites: PS A101 or JUST A110.
Crosslisted with: JUST A343.

An introduction to American constitutional law through study of selected Supreme Court cases. Among the topics considered are judicial review; separation of powers; property, commerce, and taxation; liberties guaranteed by the Bill of Rights; equal protection; and privacy. Comparisons are made with the Alaska Constitution.

PS A344 State and Local Politics 3 CR
Contact Hours: 3 + 0
Prerequisites: PS A101.

State and local politics and governments in the United States and their interrelationships. The course focuses on how the political process works, how decisions are made, and current issues and policies.

PS A345 Alaska Government and Politics 3 CR
Contact Hours: 3 + 0
Prerequisites: PS A101.
Special Note: May be applied to the Alaska Culture and History requirements for State of Alaska teacher recertification.

Governmental structures and the political process in Alaska. The course examines the history of government in Alaska, the cultural diversity of the population, and its effect on politics, contemporary policy issues, and political change.

PS A346 Alaska Native Politics 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Upper Division Standing.
Crosslisted with: AKNS A411.


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
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.

Exploration of the relation between the organization of society, political behavior, and efforts to influence the distribution of wealth, property, information and other valuable resources. The course considers the effects of tradition, economic circumstances, education, the media, and other factors on our political beliefs and activities, and the impact of individual and collective actions on public decisions and policies.

PS A361 Social Science Research Methods 3 CR
Contact Hours: 3 + 0
Prerequisites: PS A102 or SOC A101.
Crosslisted with: SOC A361.

An introduction to research methods, including definition of research problems, development of hypotheses, experimental and non-experimental research design, sampling, and data collection and analysis. Students participate in field exercises to develop critical capacities for evaluating research studies.

PS A411 Tribes, Nations, and Peoples 3 CR
Contact Hours: 3 + 0
Registration Restrictions: PS A101 or PS A102 or Junior standing.
Crosslisted with: AKNS A411.
The politics of tribes, nations, and peoples lacking state representation. Case studies are drawn from Africa, Asia, Australia, North and South America, the South Pacific, Europe, and the former Soviet Union. Focuses on the nature of the economic system and how the economic process redistributes power and wealth.

PS A418 Politics and Economics of the Russian Far East 3 CR
Contact Hours: 3 + 0
Prerequisites: ECON A201 or INTL A355 or PS A102.
Registration Restrictions: Junior standing.
Crosslisted with: ECON A418.

Special Note: May not be used for satisfying upper-division economics electives requirements of the Economics major.

Examines the political and economic system of the Russian Far East (RFE) during the pre-Soviet, Soviet, and post-Soviet periods; political and economic conditions in different regions of the RFE; and contemporary political and economic issues.

PS A424 International Law and Organization 3 CR
Contact Hours: 3 + 0
Prerequisites: PS A101 or PS A102.

An examination of the nature, subjects, and status of international law, and the purposes, roles, and development of international organizations. The course considers the significance of international law and organization in the contemporary global arena. Specific issues are analyzed to demonstrate the application of international law and the operation of international organizations.

PS A435 Organization Theory 3 CR
Contact Hours: 3 + 0
Prerequisites: PS A101.

An examination of the dominant form of institutions in modern society, i.e., organizations, and the behavior of individuals and groups within organizations. Emphasis on the relationship between the structure and design of organizations, conflicts within and between organizations, and organizations' (and individuals') 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: PS A690.

Special Note: Title 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 1-3 CR
Contact Hours: 1-3 + 0
Registration Restrictions: Faculty permission required.

Special Note: Internships vary; may be repeated once for credit with a different internship.

An opportunity for students to apply the subject matter of political science to the practical life of the community. Internships are available in a variety of governmental and private settings and require a formal agreement between the student, the faculty member, and the supervisor; a work evaluation, and a student report.
**PSY - PSYCHOLOGY**

Offered through the College of Arts and Sciences
Social Sciences Building (SSB), Room 214, 786-1711
http://psych.uaa.alaska.edu

**PSY A111** General Psychology 3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Social Sciences Requirement.
Introduces methods, theories, and research in the psychological sciences. Core topics include psychological research methods, biopsychology, learning, cognition, lifespan development, personality, psychological disorders, and social psychology.

**PSY A112** Psychology Short Courses 1 CR
Contact Hours: 1 + 0
Special Note: May be repeated for a maximum of 3 credits.
- Presents topics in general psychology. Specific topics to be announced.

**PSY A115** Memory: How it Works and How to Improve It 3 CR
Contact Hours: 3 + 0
- An overview of current theories and research about human memory with an emphasis on practical techniques for memory improvement.

**PSY A130** Crisis Line/Shelter Advocacy 1 CR
Contact Hours: 1 + 0
Offered only at Kodiak College.
- Basic listening skills and crisis intervention techniques. Overview of domestic violence, adult and child sexual assault, legal alternatives, and community resources.

**PSY A135** Domestic Violence and Sexual Assault Advocacy Training 1 CR
Contact Hours: 1 + 0
Offered only at Kodiak College.
- In-depth review of fundamentals of domestic violence and sexual assault advocacy with specific emphasis on law enforcement, legal, medical, and social services. Focuses on regulation and program standards, dynamics of advocacy case work, development of techniques of effective interaction with clients, and working knowledge of community resources.

**PSY A143** Death and Dying 3 CR
Contact Hours: 3 + 0
Special Fees.
- An examination of the event of death and the process of dying in contemporary society. Psychological aspects of loss, grieving, and acceptance of one's own mortality are presented along with an exploration of helping services available in the local community. Social issues involving death are discussed.

**PSY A150** Lifespan Development 3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Social Sciences Requirement.
- Reviews physical, cognitive, and socioemotional aspects of human growth, 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
Croslisted 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.
COURSE DESCRIPTIONS

PSY A328  Evolutionary Psychology  3 CR  
Contact Hours: 3 + 0  
Prerequisites: PSY A111.  
Registration Restrictions: One other three (3) credit psychology course.  
Survey of behavioral traits across multiple animal species, including humans, and possible explanations for their occurrence. Explores the role of genes, natural selection, and other factors which may be used to explain the behavior of individuals.

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 multicultural, gender, 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 A260 and PSY A261.  
Special Fees.  
Special Note: Laboratory work requires that students be familiar with research designs and statistical calculations.  
Offered fall and spring semesters.  
Overview of major learning principles including classical conditioning 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 A366  Perception  3 CR  
Contact Hours: 3 + 0  
Prerequisites: PSY A111 and PSY A261.  
Special Fees.  
Presents current theories and phenomena which effect how we perceive the world around us. Explores the capacities and limitations of the sensory apparatus, particularly vision. Considers implications of the human tendency to "Misperceive" situations.

PSY A368  Personality  3 CR  
Contact Hours: 3 + 0  
Prerequisites: PSY A111 or PSY A150.  
Offered fall and spring semesters.  
Survey of contemporary and modern theories of personality, emphasizing relevant research findings. Develops student competencies in the understanding and prediction of human behavior, thought, and feeling.

PSY A370  Biological Psychology  3 CR  
Contact Hours: 3 + 0  
Prerequisites: PSY A261 and [PSY A260 or STAT A252 or STAT A253] and [BIOL A102 or BIOL A111 or BIOL A115].  
Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses and junior standing.  
Course Attributes: UAA GER Integrative Capstone.  
Special Note: This course does not meet the Psychology major capstone requirement.  
Examines how behavior and cognition are mediated by biological processes. The course overviews neural activity, the organization of the nervous system, psychopharmacology, and biological basis of normal and abnormal behaviors.

PSY A372  Community Psychology  3 CR  
Contact Hours: 3 + 0  
Prerequisites: PSY A111.  
Registration Restrictions: One other three (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: 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 three (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 A261.  
Registration Restrictions: Faculty permission.  
Grade Mode: Pass/No Pass.  
Special Fees.  
Special Note: May be repeated for a maximum of 9 credits.  
Participation in a collaborative research group under the supervision of a faculty member. The student will help formulate a research question and assist in carrying out the study. The findings will be reported in a paper or presented at a conference.

PSY A412  Foundations of Modern Psychology  3 CR  
Contact Hours: 3 + 0  
Prerequisites: PSY A260 and PSY A261.  
Special Note: Course meets the capstone requirement for the psychology major. Recommended for seniors. Seminar format.  
Provides an overview of psychology's history that leads up to a discussion of the most significant issues in contemporary psychology. The course 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  Advanced Field Experience in Psychology  3 CR  
Contact Hours: 1 + 6  
Prerequisites: PSY A327.  
Registration Restrictions: Declared psychology major and 12 credits of psychology. For non-majors, faculty permission required.  
Special Note: This course meets the capstone requirement for the psychology degree.  
Arranged placement in supervised settings that provide social services. Focus on increasing responsibility for providing services to individuals and families. Emphasis on communication skills, assessment, service planning, program evaluation, and grant writing. Students are expected to complete 90 hours of supervised experience.

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.
COURSE DESCRIPTIONS

PSY A453 Application of Statistics to the Social Sciences 4 CR
Contact Hours: 3 + 2
Registration Restrictions: STAT A252 for BA Sociology or STAT A253 for BS Sociology or PSY A260 for BA/BS Psychology, and SOC A361 or PSY A261. Crosslisted with: SOC A453.
Special Fees. Demonstrates application of statistics to various types of studies in the social sciences. Students analyze social science journal articles that utilize statistics.

PSY A455 Mental Health Services in Alaska 3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A345. Emphasizes behavioral health topics in Alaska such as developmental disabilities, fetal alcohol spectrum disorders, traumatic brain injury, substance abuse, and suicide. The course will present culturally sensitive, community-based services that address these problems throughout the life span.

PSY A465 Cross-Cultural Psychology 3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A111 and PSY F380. Registration Restrictions: Three other psychology courses; PSY A425 recommended. May be stacked with: PSY A654. 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 A466 Health Psychology 3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A111 and PSY A370. Course examines psychological, physical, and environmental factors that influence mental and physical health. Topics include: epidemiology, stress theories, brain anatomy, psychophysiology, psychoneuroimmunology, chronic pain, tobacco/alcohol abuse, diet, exercise, terminal illness, and how doctor/patient communication affects basic health care delivery. The biopsychosocial orientation is presented from both disease and prevention strategies.

PSY A486 Forensic Psychology 3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A111 or SOC A101. Introduces the development and application of psychology’s scientific contribution to civil and criminal legal issues. Topics include history and philosophy of forensic psychology, report preparation (methods, assessment, and writing), practice and research ethics, expert testimony, mediation, domestic violence, child abuse, discrimination, sexual harassment, and criminal profiling.

PSY A490 Distinguished Practitioners Series 1 CR
Contact Hours: 1 + 0
Registration Restrictions: 12 credits of psychology. May be stacked with: PSY A690. Special Note: May be repeated for a maximum of 6 credits with a change of subtitle. Topics in clinical or applied psychology presented by practicing members of the professional community. Specific titles as announced.

PSY A492 Senior Seminar: Contemporary Issues in Psychology 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Declared psychology major or minor and completion of four psychology courses. May be stacked with: PSY A690. Special Note: Check schedules for specific titles being offered. Seminar for senior students who are pursuing a major or minor in psychology to discuss issues in contemporary psychology.

PSY A498 Individual Research 3 CR
Contact Hours: 1 + 6
Prerequisites: PSY A398. Registration Restrictions: Faculty permission. Grade Mode: Pass/No Pass. Special Fees. Special Note: May be repeated for a maximum of 9 credits. Serve as a project leader in a collaborative research effort under the supervision of a faculty member. The research group will select a topic for research, read relevant studies, formulate a research question and carry out an original study. The findings will be reported in a paper or presented at a conference.

PSY A499 Senior Thesis 3 CR
Contact Hours: 0 + 9
Registration Restrictions: Senior standing in psychology and PSY A420 or current enrollment and advisor’s signature. Independent or collaborative research under faculty supervision. Culminates in document prepared to publication standards. Presentation at behavioral sciences conference of the North is encouraged.

PSY A601 Clinical/Community/Cross-Cultural Integration Seminar 1 CR
Contact Hours: 1 + 0
Registration Restrictions: Admission to the Ph.D. Program in Clinical-Community Psychology. Grade Mode: Pass/No Pass. 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
Registration Restrictions: Graduate standing in Psychology. Covers the 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 A632. Registration Restrictions: Graduate standing in Psychology. Introduces rural community psychology, including the diversity of rural communities with emphasis on Alaska, and the rural circumpolar north. Provides an introduction to rural health promotion, prevention, and behavioral health care and a basis for understanding many of the issues of services planning and delivery in rural areas.

PSY A604 Biological and Pharmacological Bases of Behavior 3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A622. Registration Restrictions: Graduate standing in Psychology. Explores biological underpinnings of behavior and the basic principles of pharmacology. Deals with physiological causes and contributors to psychopathology and with the medical sequellae 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.  
Prerequisites: None  
Introduces history and development, as well as a critical survey of prevailing theories of cognitive and affective processes. The role of culture, ethnicity, gender, and social class in symptom formation and the experience of psychological disorders will be examined.  

PSY A609  
**Applied Research Methods**  
3 CR  
Contact Hours: 3 + 0  
Prerequisites: PSY A260 and PSY A261.  
Registration Restrictions: Graduate standing in Psychology.  
Introduces students to a variety of research designs in clinical and applied psychology, including experimental and quasi-experimental designs, single-subject designs, and program evaluation. Reviews issues of statistical, construct, internal, and external validity. Focus is placed on understanding the application of research methods and issues of validity, with emphasis placed on developing the skills needed to evaluate and apply the findings from published research in clinical practice. Examples drawn from the applied psychology literature and meta-analyses are used to develop skills and knowledge in the critical evaluation and application of the extant research literature.  

PSY A611  
**Ethics and Professional Practice**  
3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: Graduate standing in Psychology.  
Comprehensive overview of the ethical principles and legal statutes involved in the practice of counseling and psychotherapy. Designed to serve as a forum for the discussion of ethical issues and other concerns relevant to professionals in the fields of counseling and psychotherapy. Topics covered will play an important role in the preparation and development of ethical and competent professionals.  

PSY A612  
**Human Development in a Cultural Context**  
3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: Graduate standing in Psychology.  
Study of developmental theory, research, and substantive applied issues across the life span. Particular emphasis is placed on understanding how culture and sociocultural context impact the interplay of biology and environment in the development of essential qualities and characteristics of individuals.  

PSY A616  
**Program Evaluation and Community Consultation I**  
3 CR  
Contact Hours: 3 + 0  
Prerequisites: PSY A609.  
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  
Registration Restrictions: Graduate standing in Psychology. Special Fees.  
An overview of contemporary views on child and adult psychopathology from a multicultural perspective. Reviews the fundamentals of clinical interviewing and diagnosis. Includes training in the DSM-IV diagnostic system. The role of culture, ethnicity, gender and social class in symptom formation and the experience of psychological disorders will be examined.  

PSY A623  
**Intervention I**  
3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: Graduate standing in Psychology. Special Fees.  
Increases knowledge and skills related to traditional and nontraditional therapeutic interventions. Students are provided with a range of theoretical perspectives, a conceptual understanding of, and an opportunity to practice a wide range of culturally relevant and appropriate techniques that are applicable in traditional and nontraditional community mental health settings.  

PSY A624  
**Group Therapy**  
3 CR  
Contact Hours: 3 + 0  
Prerequisites: (PSY A623 or concurrent enrollment).  
Registration Restrictions: Graduate standing in Psychology. Special Fees.  
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.  
Special Fees.  
Covers systems theory of family dynamics and behavioral change concepts. Includes history and development, as well as a critical survey of prevailing interventions. Cultural relevance in family therapy is emphasized.  

PSY A627  
**Community-Based Intervention Skills**  
3 CR  
Contact Hours: 3 + 0  
Prerequisites: PSY A623.  
Special Fees.  
A theoretical review and practical applications of community-based interventions, including brief therapy, crisis intervention, and case management. Contemporary issues affecting the delivery of mental health services in community-based settings are reviewed, with a focus on imparting skills for the community mental health practitioner.  

PSY A629  
**Intervention II**  
3 CR  
Contact Hours: 3 + 0  
Prerequisites: PSY A623.  
Registration Restrictions: Graduate standing in Psychology.  
Deepens understanding of the variety and application of intervention techniques in diverse settings. Directs students to explore the efficacy of specific interventions in a range of settings and with a variety of populations. Shapes critical thinking and basic intervention evaluation skills.  

PSY A631  
**Cognitive Behavior Therapy**  
3 CR  
Contact Hours: 3 + 0  
Prerequisites: (PSY A623 or concurrent enrollment).  
Registration Restrictions: Graduate standing in Psychology.  
Behavioral strategies of major clinical relevance (e.g., treatment of anxiety, depression). Procedures (including behavioral assessment) are examined in detail and related to evidence for efficacy, with emphasis on adult populations.  

PSY A632  
**Community Psychology Across Cultures**  
3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: Graduate standing in Psychology.  
An overview of theory, research, and practice of community psychology with particular emphasis on cross-cultural themes, the design and evaluation of interventions in remote and rural community settings, prevention and health promotion, and social change. Particular emphasis will be on issues relevant to Alaska Native communities.  

PSY A633  
**Tests and Measurement in Multicultural Context**  
3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: Graduate standing in Psychology. Special Fees.  
Surveys principles of construction, analysis and evaluation of psychological tests in a multicultural context. Emphasizes culturally sensitive application of psychological tests and measurements. Focuses on the history, theory and methods of psychological testing by examining the areas of intelligence, personality, and vocation. Discusses widely-used intelligence and personality tests and procedures.
PSY A638  Child Clinical Psychology  3 CR
Contact Hours: 3 + 0
Prerequisites: (PSY A622 or concurrent enrollment) and (PSY A623 or concurrent enrollment).
Registration Restrictions: Graduate standing in Psychology or baccalaureate degree and professional experience.
Special Fees.
Reviews childhood behavior and developmental disorders and provides an introduction to ethical issues, assessment approaches and intervention strategies to address these disorders. Emphasis is placed on incorporating contextual factors (development, family, culture) and empirically-validated interventions into the treatment of children.

PSY A639  Research Methods  3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A260.
Registration Restrictions: Graduate standing in Psychology.
Special Fees.
Provides an advanced clinical practicum experience designed to provide 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 A650  Systems of Human Behavior I  3 CR
Contact Hours: 3 + 0
Registration Restrictions: Admission to graduate program in Psychology. Biomedical Program Director and faculty approval.
Grade Mode: Pass/No Pass.
Crosslisted with: BIOM A650.
Special Fees.
Provides a supervised clinical practicum experience in psychological interviewing, diagnosis, and psychotherapy. Applied techniques focusing on delivery of clinical services in traditional or nontraditional clinical settings. Cultural factors are considered in each of these areas.

PSY A652  Practicum Placement - Clinical I  3 CR
Contact Hours: 3 + 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.
Provides an advanced clinical practicum experience designed to provide increased depth in applying theory to the practice and improving skills as a clinician. Covers application of psychological assessment principles. Impact of cultural factors continues as a major aspect of the practicum experience.

PSY A653  Practicum Placement - Clinical II  3 CR
Contact Hours: 3 + 20
Prerequisites: PSY A652.
Registration Restrictions: Admission to the Ph.D. Program in Clinical-Community Psychology.
Special Fees.
Provides an advanced clinical practicum experience designed to provide increased depth in applying theory to 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.
Special Note: PSY A654 cannot be applied toward the MS degree in Clinical Psychology if PSY A465 was previously taken for credit. Offered spring semesters.
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.
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 designing 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 supervised clinical practicum experience in psychological interviewing, diagnosis, and psychotherapy. Applied techniques focusing on delivery of clinical services in traditional or nontraditional clinical settings. Cultural factors are considered in each of these areas.

PSY A665  Psychotherapy Practicum  1-3 CR
Contact Hours: 2 + 0-20
Prerequisites: (PSY A622 or concurrent enrollment) and PSY A623.
Registration Restrictions: Graduate standing in Psychology, only with instructor permission.
Special Fees.
Provides an advanced clinical practicum experience in psychological interviewing, diagnosis, and psychotherapy. Applied techniques focusing on delivery of clinical services in traditional or nontraditional clinical settings. Cultural factors are considered in each of these areas.

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.
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 focus on NIH grant application and review process, and secondary attention to NSF process.

PSY A672  Practicum Placement - Community I  3 CR
Contact Hours: 3 + 20
Registration Restrictions: Admission to Ph.D. Program in Clinical-Community Psychology.
Special Fees.
Provides an advanced clinical 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  3 CR
Contact Hours: 3 + 20
Prerequisites: PSY A672.
Registration Restrictions: Admission to Ph.D. Program in Clinical-Community Psychology.
Advanced community practicum experience that provides hands-on opportunities to create depth and breadth in designing creative applications of theory to practice and independently applying and honing skills as a community psychologist. Impact of cultural factors will be a major aspect of the practicum experience.
PSY A679 Multicultural Psychological Assessment I 3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A633.
Registration Restrictions: Admission to the Ph.D. Program in Clinical-Community Psychology.
Introduces administration, scoring, and interpretation of various intellectual and objective personality assessment instruments, as well as their psychometric properties, for children and adults. Emphasis on the meaningful integration of test results into a culturally sensitive assessment report. Highlights professional and ethical issues related to multicultural practices emphasizing Alaska Natives.

PSY A681 Substances of Abuse in Alaska 1 CR
Contact Hours: 1 + 0
Registration Restrictions: Graduate standing in psychology or related field. 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. Special Fees.
Assessment, measurement issues, and treatment planning in the context of clinical work with substance abusing individuals.

PSY A684 Clinical Supervision 3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A633.
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 A685 Quantitative Methods in Psychology 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing in Psychology and an undergraduate statistics course. Offered fall semesters. Principles of quantitative methods for data analysis in psychology. Topics include basic (e.g., correlation, reliability, power analysis, t-test) and advanced (e.g., logistic regression, factor analysis) methods of data analysis that are commonly found in psychological research. This course is designed to enhance rather than substitute for knowledge of quantitative methods gained at the undergraduate level. Both theoretical underpinnings and applied applications are stressed so that students can select appropriate quantitative methods, implement the data analysis, and report results according to American Psychological Association Standards.

PSY A686 Predoctoral Internship 6 CR
Contact Hours: 6 + 4
Registration Restrictions: Admission to the Ph.D. Program in Clinical-Community Psychology; approval of dissertation proposal; approval by the Director of Clinical Training.
Grade Mode: Pass/No Pass.
Special Fees.
Special Note: Must be taken for three consecutive semesters.
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.
Presents advanced psychological assessment tools including interviews, projective techniques and neurocognitive assessment. Emphasis on the integration of cognitive, personality and other test results derived from an assessment battery into a meaningful and culturally sensitive psychological assessment report.

PSY A689 Advanced Psychological Assessment 3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A633.
Registration Restrictions: Graduate standing in Psychology. Special Fees.
Presents advanced psychological assessment topics and techniques including tests of intelligence, personality, and various projective techniques. Also teaches test battery administration, integrative report writing and involves practical application.

PSY A690 Selected Topics in Psychotherapy 1-3 CR
Contact Hours: 1-3 + 0
Registration Restrictions: Baccalaureate degree. Some sections in this series may require additional prerequisites. May be stacked with: PSY A490 and PSY A492.
A combined theory and technique course focused on specifically designated issues and problems in counseling and psychotherapy. Designed for students seeking advanced training in special areas of clinical psychology.

PSY A695 Teaching Practicum in Psychology 3 CR
Contact Hours: 2 + 8
Registration Restrictions: Graduate standing in Psychology; faculty permission.
Provides the psychology student an opportunity to learn basic principles of classroom teaching under close faculty supervision. Responsibilities include lecture preparation, exam construction, lecturing, grading, and other teaching-related tasks as agreed upon by the student and supervising faculty in a written contract.

PSY A698 Individual Research 1-3 CR
Contact Hours: 0 + 3-9
Registration Restrictions: Admission to graduate studies in Psychology and faculty permission. Special Fees.
Individual research activities, such as literature reviews, protocol development, and pilot studies, conducted under faculty supervision. May alternatively include individual contributions to team research projects.

PSY A699 Thesis 1-6 CR
Prerequisites: PSY A639.
Registration Restrictions: Candidacy status and permission of thesis chair.
Independent project under the supervision of a thesis advisor and thesis committee, culminating in a document prepared to publication standards.

PSY A699D Dissertation 3-6 CR
Contact Hours: 0 + 9-18
Registration Restrictions: Admission to the Ph.D. Program in Clinical-Community Psychology; passage of Research Competency; approval by the Director of Clinical Training. Special Note: Students may enroll for variable credit, but 18 credits are both the minimum required and the maximum allowed for graduation.
Involves independent empirical research under the supervision of an individual dissertation committee. Culminates in a document prepared to publication standards and a public presentation.

RADT - RADIOLOGIC TECHNOLOGY

Offered through the Community and Technical College Allied Health Sciences Building (AHS), Room 155B, 786-6940
www.uaa.alaska.edu/ctc/programs/alliedhealth/radt

RADT A101 Radiation Protection and Biology for Limited Radiography Professionals 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Must be 18 years or older
Introduces theory and application of diagnostic radiography for limited radiographers. Includes medical and legal responsibilities of radiographers; principles of radiation protection, equipment operation and maintenance, image production and evaluation, and patient care and management.
COURSE DESCRIPTIONS

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, and axial and appendicular skeleton.

RADT A104 Radiographic Procedures for Limited Practice III 2 CR
Contact Hours: 1 + 2
Prerequisites: RADT A101.
Covers basic principles of radiographic procedures in performing skull and trauma examinations. Continues to incorporate radiographic terminology and anatomy and allows for demonstration, practice, and evaluation of performance in a laboratory environment.

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 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, trauma, mobile, pediatric, and other specialized imaging examinations. Continues to incorporate radiographic terminology and anatomy and allows 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
Provides 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 3 CR
Contact Hours: 3 + 0
Prerequisites: RADT A131 and RADT A151.
Provides knowledge of equipment requirements and design for radiographic, fluoroscopic, mobile, and conventional tomographic units. Includes introduction to electronic imaging concepts, applications, imaging standards, and computer usage with imaging equipment. Includes an understanding of the development and use of radiographic techniques.

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, upper and lower extremities, and pelvic girdle. 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.
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 A251 Radiobiology and Protection 2 CR
Contact Hours: 2 + 0
Prerequisites: RADT A171.
Provides a comprehensive overview of the principles of radiation protection as they pertain to the interaction of radiation with living systems. Discusses effects of radiation on molecules, cells, tissues, and the body systems. Factors affecting biological response are presented, including acute and chronic effects of radiation.

RADT A273 Quality Control in Medical Imaging 2 CR
Contact Hours: 2 + 0
Prerequisites: RADT A171.
Registration Restrictions: Prerequisite or Registered Radiologic Technologist.
Provides introduction to principles and practices governing quality control programs in medical imaging. Demonstrates the interrelatedness of accreditation, certification, licensure, and service delivery standards. Discusses the operational and administrative aspects of quality control as it relates to quality management.
RH - REFRIGERATION & HEATING

Offered through Matanuska-Susitna College
P.O. Box 2889, Palmer, Alaska, 99645, (907) 745-9715
www.matsu.alaska.edu

RH A101 Refrigeration and Air Conditioning Fundamentals 4 CR
Contact Hours: 3 + 2
Offered only at Matanuska-Susitna College.
Explores compressors, condensers, evaporators, metering devices, and related components. Offers instruction in the proper use of tools and testing devices applicable to the HVAC/R trades, and experimentation with refrigeration system training devices. Provides instruction and experience on piping layout and assembly. Provides students with practice at swaging, flaring, bending, soldering, and brazing. Includes design, construction, service, and repair of household refrigerators and freezers.

RH A103 Technical Mathematics for Industrial Trades 3 CR
Contact Hours: 3 + 0
Offered only at Matanuska-Susitna College.
Practical use of mathematics as applied to trade and vocational work, designed to increase skills involving trade and technical problems. Covers fractions, decimals, percentage, powers of numbers, and basic algebraic elements. Also explores geometric concepts, ration and proportion, scale drawings, and trigonometric functions.

RH A105 Electrical Circuits for Refrigeration and Heating 3 CR
Contact Hours: 2 + 2
Offered only at Matanuska-Susitna College.
Explores the fundamentals of energy, sources of electricity, conductors and semiconductors, insulators, inductance, capacitance, resistance, and AC-DC motors. Provides students with the opportunity to apply principles and develop skills by using test instruments and training devices.

RH A109 Principles of Thermodynamics 3 CR
Contact Hours: 3 + 0
Corequisite: RH A103.
Offered only at Matanuska-Susitna College.
Focuses on physical laws applied to refrigeration and heating. Introduces practical aspects of psychrometrics, load calculations, heat quantities, heat transfer, insulation factors and coefficients, gases, 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 A103 and RH A105 and RH A107.
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 A101 and RH A103 and RH A105 and RH A107.
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 A130 Blueprint Reading for HVAC/R Systems 3 CR
Contact Hours: 2 + 2
Offered only at Matanuska-Susitna College.
Introduces skills and methods for reading and analyzing building plans and blueprints. Correlates architectural, structural and electrical plans with those that are required for mechanical and heating, ventilation, and air conditioning work. Includes Section 15 building specification topics and requirements related to the development of As-Built drawings.

RH A132 Troubleshooting for HVAC/R Systems 3 CR
Contact Hours: 2 + 2
Prerequisites: RH A101 and RH A105 and RH A109.
Offered only at Matanuska-Susitna College.
Emphasis on systematically analyzing and troubleshooting HVAC/R systems to include mechanical, electrical, piping, and control systems. Heavy emphasis on lab activities and training devices. Actual equipment with component faults is used to strengthen and test troubleshooting skills.

RH A201 Commercial and Ammonia Refrigeration 4 CR
Contact Hours: 3 + 2
Prerequisites: RH A122.
Offered only at Matanuska-Susitna College.
Provides an understanding of commercial refrigeration systems including hot gas defrosting, lubrication, 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.
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 A105 and RH A126.
Offered only at Matanuska-Susitna College.
Assumes no previous knowledge of heating plants. Introduces knowledge and skills needed for the installation and service of forced air heating systems. Instruction ranges from beginning maintenance and installation to advanced troubleshooting of heating systems.

RH A226  Commercial HVAC/R Systems  4 CR
Contact Hours: 3 + 2
Prerequisites: RH A105.
Offered only at Matanuska-Susitna College.
Introduces commercial heating, ventilation, and air conditioning systems by category and application types. Includes both air-side and water-side systems along with humidification, ventilation, and air filtration requirements.

RH A228  Advanced Hydronic Heat Systems  4 CR
Contact Hours: 3 + 2
Prerequisites: RH A225.
Offered only at Matanuska-Susitna College.
Explores hydronic heating sources and emitters. Covers residential and light commercial boilers and hydronic heating systems. Includes radiant panel heating with a strong emphasis on wiring and troubleshooting of hydronic controls.

RH A290  Selected Topics in Refrigeration and Heating  1-3 CR
Contact Hours: 0-3 + 0-9
Offered only at 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
http://language.uaa.alaska.edu

RUSS A101  Elementary Russian I  4 CR
Contact Hours: 4 + 0
Course Attributes: UAA GER Humanities Requirement.
Special Fees.
Special Note: Requires use of language lab outside of class time.
Introduces Russian language and culture for students with no background in Russian. Students learn alphabet, past and future tenses, and read simple paragraphs. Focuses on life in the Russian-speaking countries. Emphasizes conversation.

RUSS A101E  Elementary Russian I  3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Humanities Requirement.
Offered only at extended colleges.
Special Fees.
Introduces Russian language and culture for students with no background in Russian. Students learn alphabet, past and future tenses, and read simple paragraphs. Focuses on life in the Russian-speaking countries. Emphasizes conversation.

RUSS A102  Elementary Russian II  4 CR
Contact Hours: 4 + 0
Prerequisites: RUSS A101.
Course Attributes: UAA GER Humanities Requirement.
Special Fees.
Special Note: Requires use of language lab outside of class time.
Students learn rudiments of Russian grammar while continuing to build vocabulary and conversational skills. Use of Russian language newspapers, magazines and atlases to enhance reading skills.

RUSS A102E  Elementary Russian II  3 CR
Contact Hours: 3 + 0
Prerequisites: RUSS A101E.
Course Attributes: UAA GER Humanities Requirement.
Offered only at extended colleges.
Special Fees.
Students learn rudiments of Russian grammar while continuing to build vocabulary and conversational skills. Use of Russian language newspapers, magazines and atlases to enhance reading skills.

RUSS A105  Conversational Skills  1 CR
Contact Hours: 0 + 2
Registration Restrictions: Proficiency as after one semester of college-level or one year of high school study in Russian.
Grade Mode: Pass/No Pass.
May be stacked with: RUSS A205.
Special Fees.
Special Note: May be repeated once for credit.
A maintenance and skills enhancement course at the elementary level, designed primarily to help students of Russian to retain what they have learned. With the focus on oral communication, the course emphasizes speaking, listening comprehension, and vocabulary building.

RUSS A201  Intermediate Russian I  4 CR
Contact Hours: 4 + 0
Prerequisites: RUSS A102.
Course Attributes: UAA GER Humanities Requirement.
Special Fees.
Special Note: Requires use of language lab outside of class time.
Continuing study of rudimentary Russian grammar. Emphasizes vocabulary expansion, along with enhancement of speaking skills in real-life situations.

RUSS A202  Intermediate Russian II  4 CR
Contact Hours: 4 + 0
Prerequisites: RUSS A201.
Course Attributes: UAA GER Humanities Requirement.
Special Fees.
Special Note: Requires use of language lab outside of class time.
Introduces intermediate grammar concepts. Students read independently and discuss readings in class. Cultural material incorporated at all times.

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.
May be stacked with: RUSS A105.
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.
Special Fees.
Offered only in the fall semester.
Further development of speaking, listening, reading and writing proficiency. Students are introduced to more sophisticated grammatical structures and to a wide range of discussion topics. Activities include class discussions, reading Russian texts and writing short essays. Conducted mainly in Russian.
RUSS A302  Advanced Russian II  4 CR
Contact Hours: 4 + 0
Prerequisites: RUSS A301 with minimum grade of C.
Special Fees.
Offered only in the spring semester.
A continuation of Russian 301. Further development of students’ speaking, listening, reading and writing proficiency. Students are introduced to more sophisticated grammatical structures and to a wide range of discussion topics. Activities include class discussions, reading Russian texts and writing short essays. Conducted mainly in Russian.

RUSS A384  Russian Women  3 CR
Contact Hours: 3 + 0
Special Fees.
Special Note: Readings and course are conducted in English.
Examines literary images and historical contributions of Russian women through memoirs, novels, and historical and literary analysis. The central questions of the course revolve around the predominant ideals, images, and expectations of Russian women and how these values have been expressed.

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: 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 Language  1-3 CR
Contact Hours: 1-3 + 0
Prerequisites: RUSS A202.
Special Fees.
Special Note: May be offered in one-, two-, or three-credit segments. Repeatable for credit with a change of subtitle. Up to three credits can count toward a minor or major in Languages with an emphasis 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: RUSS A427.
Course Attributes: UAA GER Integrative Capstone.
Special Fees.
Interdisciplinary examination and analysis of contemporary Russian culture and society. Explores major themes in post-Soviet society including shifting identities and changing social, cultural, political, and economic realities, and examines how these are expressed in a variety of contemporary sources. Conducted in English.

RUSS A490A  Selected Topics in Russian Culture  1-3 CR
Contact Hours: 1-3 + 0
Registration Restrictions: RUSS A302 or comparable proficiency level.
Special Fees.
Special Note: Conducted in Russian. May be repeated for credit with a change of subtitle.
For advanced students interested in Russian culture with sufficient language proficiency to read, write, and converse in Russian.

RUSS A490B  Selected Topics: Russian Culture in Translation  1-3 CR
Contact Hours: 1-3 + 0
Registration Restrictions: Junior Standing.
Special Fees.
Special Note: Conducted in English. May be repeated for credit with a change of subtitle.
Covers various aspects of Russian culture. Readings are in English translation, but students who read Russian may choose to read the texts in the original.

SOC - Sociology
Offered through the College of Arts and Sciences
Social Sciences Building (SSB), Room 372, 786-1714
http://www.uaa.alaska.edu/sociology

SOC A101  Introduction to Sociology  3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Social Sciences Requirement.
Offered fall and spring semesters.
Introduction to the study of society and social behavior. Emphasizes the application of sociological concepts to the understanding of human behavior within the individual, group, and society.

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.

SOC A201  Social Problems and Solutions  3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Social Sciences Requirement.
Offered alternate fall semesters.
Examination of various ways in which societies develop social structures such as family, work, and social institutions. Focuses on the relationship between social structures and social problems.

SOC A202  The Social Organization of Society  3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Social Sciences Requirement.
Offered alternate spring semesters.
Examination of various ways in which societies develop social structures such as family, work, and social institutions. Focuses on the relationship between social structures and social problems.

SOC A203  Juvenile Delinquency  3 CR
Contact Hours: 3 + 0
Prerequisites: SOC A101.
Crosslisted with: JUST A203.
Offered fall and spring semesters.
Examination of the psychological, social, and biological factors that contribute to delinquency and the psychological, social, and biological factors that influence the treatment of juvenile offenders.

SOC A206  Social Psychology  3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Social Sciences Requirement.
Offered alternate spring semesters.
Examination of the psychological processes that influence social behavior.

SOC A222  Small and Rural Communities  3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Social Sciences Requirement.
Offered alternate spring semesters.
Examination of the psychological processes that influence social behavior.

SOC A242  An Introduction to Marriage, Family and Intimate Relationships  3 CR
Contact Hours: 3 + 0
Registration Restrictions: A sociology course recommended. Special Fees.
Offered fall and spring semesters.
Introduction to the study of marriage, family, and intimate relationships. Focuses on the social, economic, and legal aspects of marriage, family, and intimate relationships.

SOC A246  Adolescence  3 CR
Contact Hours: 3 + 0
Prerequisites: SOC A101 or PSY A111.
Offered spring semesters.
Examination of the psychological processes that influence social behavior.

SOC A280  Seminar in Contemporary Issues  3 CR
Contact Hours: 3 + 0
Special Note: Subtitle varies; may be repeated for credit with a different subtitle. It analyzes contemporary issues from a variety of social science perspectives.
SOC A307  Demography  3 CR  
Contact Hours: 3 + 0  
Prerequisites: SOC A101.  
Offered fall semesters.  
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.

SOC A309  Urban Sociology  3 CR  
Contact Hours: 3 + 0  
Prerequisites: SOC A101.  
Offered spring semesters.  
Growth and development of urban communities with reference to migration patterns, differentiation of functions, ecological patterns of land use, social control, and secondary group associations of metropolitan magnitude.

SOC A310  Sociology of Aging  3 CR  
Contact Hours: 3 + 0  
Prerequisites: SOC A101 or SOC A110.  
Registration Restrictions: SOC A110 for Gerontology Minors.  
A comparative analysis of the social status and role of the aging in various societies with emphasis on problems of aging in contemporary U.S.

SOC A342  Sexual, Marital and Family Lifestyles  3 CR  
Contact Hours: 3 + 0  
Prerequisites: SOC A101.  
Course Attributes: UAA GER Social Sciences Requirement.  
Offered spring semesters.  
An upper-division course which emphasizes theories and research that explain today's marital, family and sexual lifestyles, as well as class and cultural variations found in the U.S. It includes a survey of why and how people meet, interact, love, fight, change, sustain or dissolve relationships, have children and age together.

SOC A343  Sociology of Deviant Behavior  3 CR  
Contact Hours: 3 + 0  
Prerequisites: SOC A101.  
A study of the social etiology of deviant behavior, both criminal and non-criminal with an emphasis on the nature of group interaction, and an examination of the institutions involved.

SOC A347  Sociology of Religion  3 CR  
Contact Hours: 3 + 0  
Prerequisites: SOC A101.  
Offered spring semesters.  
The study of the historical development and functional significance of religion, values, and forms of institutions, groups, reform movements, and their influence on social organization.

SOC A351  Political Sociology  3 CR  
Contact Hours: 3 + 0  
Crosslisted with: PS A351.  
Course Attributes: UAA GER Social Sciences Requirement.  
Offered fall semesters.  
Introduces social aspects of politics and nature and distribution of power in society: examines the dynamic relationship of the political process and the institutions of society.

SOC A352  Women and Social Action  3 CR  
Contact Hours: 3 + 0  
Prerequisites: SOC A101.  
Demonstrates how sociological and feminist theory and research can be applied to solving social issues in communities. Also demonstrates how women working together can empower themselves, their families, and their communities.

SOC A361  Social Science Research Methods  3 CR  
Contact Hours: 3 + 0  
Prerequisites: SOC A101 or PS A102.  
Crosslisted with: PS A361.  
Special Fees.  
Offered fall and spring semesters.  
Introduces research methods, including definition of research problems, development of hypotheses, experimental and non-experimental research design, sampling, and data collection and analysis. Students participate in field exercises to develop critical capacities for evaluating research studies.

SOC A363  Social Stratification  3 CR  
Contact Hours: 3 + 0  
Prerequisites: SOC A101.  
Offered fall semesters.  
The study of the differential distribution of social power, privilege and life chances in class and caste as the basis for social organization. Emphasis on occupational, educational, and other correlates which determine social structure.

SOC A370  Medical Sociology  3 CR  
Contact Hours: 3 + 0  
Prerequisites: SOC A101.  
Crosslisted with: HS A370.  
Offered alternate fall semesters.  
Provides a historical and contemporary overview of selected social, political, and economic factors that influence the provision of health care in America. Focuses on the relationship between health care and race, sex, social stratification, and geographical location. Brief international comparisons with alternative for-profit and not-for-profit national health care systems.

SOC A375  Social Psychology  3 CR  
Contact Hours: 3 + 0  
Prerequisites: PSY A111 or SOC A101.  
Introduces differences in sociological approaches to social psychology. Effects of group interaction and social structural factors on individuals' values, attitudes, and behaviors are examined. Topics include socialization, perception, interpersonal relationships, conformity, helping behavior, aggression, and collective behavior. Theory, research, and application emphasized.

SOC A377  Men, Women and Change  3 CR  
Contact Hours: 3 + 0  
Prerequisites: SOC A101 or SOC A275.  
Offered fall semesters.  
Examines how gender in our society affects from birth individuals' roles, socialization, achievements, opportunities, and overall personality and self-development. Studies changes that have taken place over the past several decades. Relevant theories and research form the foundation of the course.

SOC A387  Gay and Lesbian Lifestyles  3 CR  
Contact Hours: 3 + 0  
Prerequisites: SOC A101 and PSY A111.  
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  Theories of Sociology  3 CR  
Contact Hours: 3 + 0  
Prerequisites: SOC A101.  
Offered fall and spring semesters.  
Major sociological theories and theorists of Western civilization; review of important contributions and approaches of various "National schools" with emphasis on current American and European trends.

SOC A404  Environmental Sociology  3 CR  
Contact Hours: 3 + 0  
Prerequisites: SOC A101.  
Offered alternate spring semesters.  
A critical analysis of the interactions between society and the environment from an ecological perspective, focusing on processes of industrial and economic growth, natural resource development, community change and social impact assessment, environmental values and environmental movement, land use planning and resource management decision making, and comparative perspectives on human relation to and use of the natural environment.

SOC A405  Social Change  3 CR  
Contact Hours: 3 + 0  
Prerequisites: SOC A101.  
Offered fall semesters.  
Social change in long-term perspective, with emphasis on social movements and the influence of technology.
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| SOC A407 | Formal Organizations 3 CR  
Contact Hours: 3 + 0  
Prerequisites: SOC A101.  
Offered fall semesters.  
Modern formal organizations are examined in historical and contemporary contexts. Interrelationships between organizational structures, stakeholders, and environments are examined. Current trends in management and organizational analysis are reviewed. Profi...  
**Registration Restrictions:** Faculty permission.  
**Special Note:** Use of language lab is required outside of class time.  
**Course Attributes:** UAA GER Humanities Requirement. |
| SOC A408 | Sociology of Race and Ethnicity 3 CR  
Contact Hours: 3 + 0  
Prerequisites: SOC A101.  
Offered spring semesters.  
Present status of ethnic, religious and national minorities and their changing sociological, economic, and political status. |
| SOC A452 | Violence in Intimate Relationships 3 CR  
Contact Hours: 3 + 0  
Prerequisites: SOC A101.  
Registration Restrictions: Social research methods recommended.  
Offered fall semesters.  
The study of violence among individuals who are at least theoretically linked together in intimate relationships (e.g., family members, lovers and dates) from a sociological perspective. Thus, the course focuses on factors in society such as norms, laws and institutes that may produce and/or perpetuate violence among intimates. In addition, the course focuses on current prevention and treatment programs aimed at reducing this type of violence. |
| SOC A453 | Application of Statistics to the Social Sciences 4 CR  
Contact Hours: 3 + 2  
Registration Restrictions: STAT A252 for BA Sociology or STAT A253 for BS Sociology or PSY A260 for BA/BS Psychology, and SOC A361 or PSY A261.  
Crosslisted with: PSY A453.  
Special Fees.  
Offered spring semesters.  
Demonstrates application of statistics to various types of studies in the social sciences. Students analyze social science journal articles that utilize statistics. |
| SOC A454 | Evaluation Research and Change 3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: A social science methods course.  
Crosslisted with: JUST A454.  
Offered alternate fall semesters.  
Application of evaluation research to policy-making process. Presents evaluative research strategies including monitoring, process evaluation, cost-benefit analysis, and impact evaluation. Special attention given to designing evaluation projects, analyzing and interpreting results, preparing and presenting evaluation research reports in justice, human and community service fields. |
| SOC A477 | Sociology Practicum 3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: Faculty permission.  
Special Note: May be repeated once for credit. Offered fall and spring semesters.  
Course in which student participates in a significant field research project and/or community action/agency program that applies sociological skills and analysis toward the resolution of specific social problems. Students attend a seminar, class or individual meeting with a faculty member on a weekly basis, and complete a minimum of six hours each week in the field on an approved research or community project which does not have to be localized in the Anchorage area. All students will be expected to participate in the design and program formulation of the project and a final term or progress paper will be required. |
| SOC A488 | Capstone Seminar 3 CR  
Contact Hours: 3 + 0  
Prerequisites: SOC A361 and SOC A402.  
Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses and senior standing.  
Course Attributes: UAA GER Integrative Capstone.  
Overview of the discipline emphasizing synthesis of theory and research, critical reflection and evaluation, and recent developments in sociology with social action. Particular emphasis will be given to the integration of sociology with other social sciences. |

### SPAN - SPANISH

**Overview of the discipline emphasizing synthesis of theory and research, critical reflection and evaluation, and recent developments in sociology with social action. Interrelationships between organizational structures, stakeholders, and environments are examined. Current trends in management and organizational analysis are reviewed. Profi...**  
**Registration Restrictions:** Faculty permission.  
**Special Note:** Use of language lab is required outside of class time.  
**Course Attributes:** UAA GER Humanities Requirement.  
**Offered through the College of Arts and Sciences Administration/Humanities Building (ADM) Suite 287, 786-4030**  
[http://language.uaa.alaska.edu](http://language.uaa.alaska.edu)

<table>
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<th>COURSE</th>
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| SPAN A101 | Elementary Spanish I 4 CR  
Contact Hours: 4 + 0  
Course Attributes: UAA GER Humanities Requirement.  
Special Fees.  
Special Note: Use of language lab is required outside of class time.  
Foundations of Spanish: alphabet, proper pronunciation, basic vocabulary and sentence structure. Grammar covers articles, gender of nouns, adjectives, pronouns, and regular/irregular verb patterns through preterite tenses. Emphasizes speaking and understanding Spanish through frequent classroom practice and lab exercises.  
**Crosslisted with:** JUST A454. |
| SPAN A101E | Elementary Spanish I 3 CR  
Contact Hours: 3 + 0  
Course Attributes: UAA GER Humanities Requirement.  
Offered only at extended colleges.  
Special Fees.  
Foundations of Spanish: alphabet, proper pronunciation, basic vocabulary and sentence structure. Grammar covers articles, gender of nouns, adjectives, pronouns, and regular/irregular verb patterns through preterite tenses. Emphasizes speaking and understanding Spanish through frequent classroom practice and lab exercises. |
| SPAN A102 | Elementary Spanish II 4 CR  
Contact Hours: 4 + 0  
Prerequisites: SPAN A101.  
Course Attributes: UAA GER Humanities Requirement.  
Special Fees.  
Special Note: Use of language lab is required outside of class time.  
Foundations of oral and written Spanish: continuation of basic Spanish vocabulary and grammar. Imperfect, future and conditional tenses, including their compound forms, will be studied along with other verbal patterns.  
**Crosslisted with:** PSY A453. |
| SPAN A102E | Elementary Spanish II 3 CR  
Contact Hours: 3 + 0  
Prerequisites: SPAN A101E.  
Course Attributes: UAA GER Humanities Requirement.  
Offered only at extended colleges.  
Special Fees.  
Foundations of oral and written Spanish: continuation of basic Spanish vocabulary and grammar. Imperfect, future and conditional tenses, including their compound forms, will be studied along with other verbal patterns. |
| SPAN A201 | Intermediate Spanish I 4 CR  
Contact Hours: 4 + 0  
Prerequisites: SPAN A102.  
Course Attributes: UAA GER Humanities Requirement.  
Special Fees.  
Special Note: Use of language lab is required outside of class time.  
Reviews fundamental structures of Spanish grammar and vocabulary. Gives special attention to command forms and present and past subjunctive. Familiarizes students with normal sound and usage of the language by taking dictation, reading and writing short compositions. Enhances essentials of conversational fluency through study of thematic vocabularies and idiomatic expressions.  
**Crosslisted with:** PSY A453. |
| SPAN A201E | Intermediate Spanish I 3 CR  
Contact Hours: 3 + 0  
Prerequisites: SPAN A102E.  
Course Attributes: UAA GER Humanities Requirement.  
Offered only at extended colleges.  
Special Fees.  
Reviews fundamental structures of Spanish grammar and vocabulary. Gives special attention to command forms and present and past subjunctive. Familiarizes students with normal sound and usage of the language by taking dictation, reading and writing short compositions. Enhances essentials of conversational fluency through study of thematic vocabularies and idiomatic expressions. |
| SPAN A202 | Intermediate Spanish II 4 CR  
Contact Hours: 4 + 0  
Prerequisites: SPAN A201.  
Course Attributes: UAA GER Humanities Requirement.  
Special Fees.  
Special Note: Use of language lab is required outside of class time.  
Continuation of SPAN 201. Includes review of grammar and study of new vocabulary and expressions. Emphasizes reading and writing of short compositions or essays. Articles from magazines and newspapers on issues of current interest will be analyzed and discussed to expand ability of students to read, write and speak fluently. |
COURSE DESCRIPTIONS

SPAN A301  Advanced Spanish I: Composition  4 CR
Contact Hours:  4 + 0
Prerequisites: SPAN A202.
Special Fees.
Special Note: Spanish speaking students can gain entrance to the course with the instructor's signature.

Studies a wide variety of Spanish model sentences taken from expository writing and excerpts from the works of thinkers known for their insight and mastery of style. Based on this information, students begin writing short, simple compositions and advance into more complex ways of expressing their opinions. The study of synonyms, antonyms, and other vocabulary building techniques, to expand the students' expressive capacity, is put into practice in regular verbal and written exercises. Conducted in Spanish.

SPAN A302  Advanced Spanish II: Composition and Analysis  4 CR
Contact Hours:  4 + 0
Prerequisites: SPAN A301.
Special Note: Spanish speaking students can gain entrance to the course with the instructor's signature.

Continue to achieve language fluency and style through the reading, analysis, and production of expository material other than texts. Introduces written exercises. A diversity of progressively more difficult prose samples, short stories, and poetry are presented as archetypes to perfect the student's expression of ideas in Spanish. Written practice is complemented by reading assignments and classroom discussion of the most simplified texts to prepare students for the literature courses. Conducted in Spanish.

SPAN A310  Spanish Readings and Conversations  3 CR
Contact Hours:  3 + 0
Registration Restrictions: Two years of college Spanish or equivalent.
Special Fees.
Special Note: May be repeated for credit.

Students will improve their conversational skills by participating in skits, interviews, debates, and discussions based on material read. Some grammar introduced informally, but emphasis is on improving listening and speaking skills. Books and activities vary from semester to semester.

SPAN A432  Studies in Literature and Culture (Selected Topics)  3 CR
Contact Hours:  3 + 0
Prerequisites: SPAN A302.
Special Fees.
Special Note: May be repeated twice for credit with a change of subtitle. Conducted in Spanish.

Offered as Demand Warrants.

Intensive study of authors, literary movements, periods, and/or genres. Students will analyze and synthesize cultural material other than texts. Introduces students to Hispanic literature or various periods and genres in its historical and cultural context.

SPAN A470  Spanish Linguistics-History of the Language  3 CR
Contact Hours:  3 + 0
Prerequisites: SPAN A302.
Special Fees.
Special Note: Conducted in Spanish

Survey of the history of Spanish from the fall of the Roman Empire to the present. The student will learn the history of some of the most important linguistic changes in Spanish from a synchronic and diachronic perspective. Special attention will be paid to the linguistic changes (both vocalic, consonantal, and structural) that most affected the transformation of Late Latin an turned it into what can be known as Castilian in the Middle Ages from its inception in the IX century in a small, isolated area of the Iberian Peninsula. Through readings of contemporary discussions of the interaction between power and language in a cultural setting, the course will analyze the social, political, and historical forces that go into the creation of a national language.

SPAN A490  Selected Topics in Hispanic Culture and Civilization  3 CR
Contact Hours:  3 + 0
Prerequisites: SPAN A302.
Special Fees.
Special Note: Conducted in Spanish. May be repeated twice for credit with a different subtitle.

Surveys Spain's or Latin America's history and culture. Literature, painting, folklore, dance, film, and other artistic traditions are studied from a social, political, and economic perspective. Readings and lectures emphasize the multicultural patterns and the rich artistic traditions of the various peoples composing the Spanish and the Latin American worlds from ancient to modern times. Concentrates on either Spain and its culture and civilization, or Latin America and its cultures and civilizations, or in any one particular period thereof.

STAT - STATISTICS

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.

Introduction to statistical reasoning. Emphasis on concepts rather than in-depth coverage of traditional statistical methods. Topics include sampling and experimentation, descriptive statistics, probability, binomial and normal distributions, estimation, single-sample and two-sample hypothesis tests. Additional topics will be selected from descriptive methods in regression and correlation, or contingency table analysis.

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  3 CR
Contact Hours:  3 + 0
Prerequisites: MATH A200 with minimum grade of C or MATH A272 with minimum grade of C.

Course Attributes: UAA GER Quantitative Skill Requirement.
Probability, applied combinatorics, random variables, multivariate random variables, discrete distributions, continuous distributions, expectations, and estimation.

STAT A308  Intermediate Statistics for the Sciences  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 compete 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, ridge regression, nonlinear regression, and normal correlation models. A major statistical software package is used as a tool to aid calculations required for many of the techniques.
COURSE DESCRIPTIONS

STAT A404  Analysis of Variance  3 CR
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  3 CR
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  3 CR
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  3 CR
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  1-3 CR
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 subtitle.
Advanced topics in statistics selected as a continuation of, or a complement to, the content of upper-division undergraduate statistics courses. Emphasis on applications.

STAT A601  Statistical Methods  3 CR
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 for many of the techniques. A research project is required from each student as part of the course requirement.

SWK - SOCIAL WORK

Offered through the College of Health & Social Welfare
Gordon Hartlieb Hall (GHH), Room 106, 786-6900
http://swk.uaa.alaska.edu

SWK A106  Introduction to Social Welfare  3 CR
Contact Hours: 3 + 0
Prerequisites: SOC A101.
Crosslisted with: HUMS A106.
Course Attributes: UAA GER Social Sciences Requirement.
Offered fall and spring semesters.
Analyzes social inequality and American social welfare system. Traces historical development of government response to social inequality. Explores historical and persisting dilemmas—ethical, political, social, and economic—explicit and implicit in social welfare provisioning. Assists in understanding of social welfare problems and their solutions.

SWK A121  Advocating for Victims of Domestic Violence and Sexual Assault  3 CR
Contact Hours: 3 + 0
Crosslisted with: HUMS A121.
Offered only at Matanuska-Susitna College.
Focuses on developing the skills and knowledge needed to be an effective advocate for victims of domestic violence and sexual assault. Provides historical perspective, identifies physical, sexual and emotional abuse that defines battering. Examines cycle of violence, power and control issues and why women stay in abusive relationships. Identifies five stages of living without violence (denial, self-blame, help seeking, ambivalence and living violence free lives). Discusses ways of helping victims become survivors.

SWK A122  Introduction to Hospice: Volunteer Training  2 CR
Contact Hours: 2 + 0
Registration Restrictions: Homecare program staff or volunteer.
Grade Mode: Pass/No Pass.
Offered only at Matanuska-Susitna College.
Includes the philosophy of hospice; physical, psycho-social and spiritual needs of the terminally ill and appropriate interventions; care of the family; therapeutic communications; death and dying; and bereavement follow-up.

SWK A206  Introduction to Social Work  3 CR
Contact Hours: 3 + 0
Prerequisites: HUMS A106 or SWK A106.
Introduces the profession of social work and its place in the social welfare institution. Special emphasis on consumer-centered, generalist social work and the knowledge, skills, abilities, and values necessary for professional practice. Fields of practice are studied in terms of the programs and services provided to consumer systems and social work's role within these fields.

SWK A233  Cultural Diversity and Community Services  3 CR
Contact Hours: 3 + 0
Course Attributes: UAA GER Social Sciences Requirement.
Introduces the issues of cultural diversity and cultural sensitivity from a social work perspective in the United States. This course will introduce students to the broad and far-reaching effects of both positive and negative responses to cultural diversity in the United States. Students will participate in a community volunteer experience as part of the course requirements.

SWK A330  Social Work Practice I  3 CR
Contact Hours: 3 + 0
Prerequisites: SWK A206.
Introduces basic interview skills and the planned change process for the social work profession. Supported by social work values, ethics, skills, and theory, emphasis will be on understanding and implementing a planned change process with individuals.

SWK A331  Social Work Practice II  3 CR
Contact Hours: 3 + 0
Prerequisites: SWK A330.
Macro generalist social work practice with emphasis on the utilization of the planned change process model with organizations and communities. Covers selected theoretical frameworks applicable to professional practice with these consumer systems. A service learning component is included.

SWK A342  Human Behavior in the Social Environment  3 CR
Contact Hours: 3 + 0
Prerequisites: PSY A150.
Registration Restrictions: Human biology course content equivalent to one 3-credit course.
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 impact and influence behavior, growth, development and change.

SWK A343  Human Behavior: Diversity and Discrimination  3 CR
Contact Hours: 3 + 0
Prerequisites: SWK A342.
Examination of human diversity in relation to ethnic, racial, cultural and other minority group affiliation and membership. Discrimination against various groups will be addressed with focus on individual and group development, opportunity, aspirations and self-concept.
**Course Descriptions**

**SWK A363** Great Books in Social Work 3 CR  
Contact Hours: 3 + 0  
Prerequisites: ENGL A111 and SWK A106.

Focuses on the directed reading of a social work text which has enduring significance for the profession, supplemented by other readings. The focal text and supplemental readings will vary with the instructor.

**SWK A406** Social Welfare: Policies and Issues 3 CR  
Contact Hours: 3 + 0  
Prerequisites: SWK A206.

Formulation of social welfare policy as the result of interacting social, political and economic factors. Emphasis is placed on analyzing various current social welfare policies and on various methods of influencing policy development and change.

**SWK A409** Introduction to Child Welfare 3 CR  
Contact Hours: 3 + 0  
Survey of public and private child welfare services from a historical perspective and examination of current child welfare services available to children and their families. National standards for services are reviewed along with policy development, legislation, funding and research related to programs, and service delivery. Services such as in-home support, permanency planning, child protection, foster care, adoption and residential care will be addressed.

**SWK A424** Social Work Research with Statistical Applications 3 CR  
Contact Hours: 3 + 0  
Prerequisites: SWK A106 and SWK A206.

Covers the identification of issues, procedures, responsibilities, skills, and processes required for generalist practice and entry into the profession. Special Fees.

**SWK A443** Mental Health Practice, Programs and Services 3 CR  
Contact Hours: 3 + 0  
Study of mental health problems presented by people and the response of service delivery systems. A broad overview of current mental health programs and service delivery systems is presented including their development through history. The political and economic issues of mental health policy making will be addressed. Special Note: Taken concurrently with SWK A461B; the student completes 224 hours per semester in an approved agency under the supervision of a field instructor appointed by the university and participates in a weekly field work seminar.

**SWK A450** Child Protective Services 3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: Admission to the MSW program.

Focuses on the historical evolution of mutual aid into the social welfare system as it includes contemporary social welfare programs, new service delivery, the role of social work in responding to those issues. Gerontological content from human behavior, social policy, research and direct/indirect practice is analyzed in relation to social work practice with people who are aging and elderly.

**SWK A461B** Social Work Practicum I 6 CR  
Contact Hours: 3 + 15  
Prerequisites: SWK A330.

Corequisite: SWK A430.

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 A462B** Social Work Practicum II 6 CR  
Contact Hours: 3 + 15  
Prerequisites: SWK A430 and SWK A461B.

Corequisite: SWK A431.

Special Fees.

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 A470** Social Work with the Aging and Elderly 3 CR  
Contact Hours: 3 + 0  
Development of concepts related to psychological, biological and economic issues of aging and the role of social work in responding to those issues. Gerontological content from human behavior, social policy, research and direct/indirect practice is analyzed in relation to social work practice with people who are aging and elderly.

**SWK A471** Addictions and Social Work 3 CR  
Contact Hours: 3 + 0  
Analysis of addictions, particularly alcohol and substance abuse, along with prevention, management, and treatment issues. Differential consequences, theoretical and conceptual frameworks, social attitudes, organizational contexts, family dynamics, historical roots, cultural influences, contemporary research, and professional/personal issues are considered along with principles of intervention.

**SWK A481** Case Management in Social Work Practice 3 CR  
Contact Hours: 3 + 0  
Prerequisites: SWK A330.

Covers the identification of issues, procedures, responsibilities, skills, and processes for effective case management. Client identification and outreach, assessment, service planning, coordination, monitoring, advocacy, and evaluation along with written communication skills for coordinated service delivery are topics to be taught. Issues relevant to various 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.

Focus on current topics related to social work services, diverse client groups and field of practice.

**SWK A606** Social Welfare History and Contemporary Programs 3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: Admission to the MSW program, and full-time student status.

Focus on the historical evolution of mutual aid into the social welfare system as it includes contemporary United States society. Analysis of structures and functions of current social welfare institutions is undertaken and the role of professional social work within those systems is addressed.
SWK A607 Contemporary Social Welfare Policy and Change 3 CR
Contact Hours: 3 + 0
Prerequisites: SWK A606.
Registration Restrictions: Admission to the MSW program, full-time student status.
Contemporary social welfare policy and the influence of interacting political, economic, and social factors on its development and change. Current federal, state, and local social policies are analyzed for their impact on diverse groups in society with emphasis on influencing and changing policy in ways that maximize social justice and improve access to needed social resources.

SWK A608 Social Policy for Advanced Generalist Practice 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Admission to the MSW program, full-time student standing, and successful completion of year one of the MSW program or advanced standing.
Advanced generalist policy course for social workers. Prepares practitioners for developing policies and programs in a political economy. Examines contemporary social needs in a diverse and inequitable society. Emphasizes roles of research and evaluation in a policy process.

SWK A624 Social Work Research 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Admission to the MSW program and full-time student status. Research design for graduate students beginning research activities related to professional development. Development of research questions, selection of theoretical frames of reference, creation of research design, literature search, sampling, data collection, analysis and organization of findings are addressed. Research strategies for various system sizes, from single subject design to program evaluation, are addressed. Students engage in a practice related research project and develop skills for utilization of existing research findings.

SWK A625 Social Work Research Lab 1 CR
Contact Hours: 1 + 0
Registration Restrictions: Admission to the MSW program, full-time student status, and successful completion of year one of the MSW program or advanced standing.
Develop skills using the professional standards and new technologies available in social work practice. Emphasis is on developing technical writing skills and accessing the Internet as a professional tool.

SWK A628 Program Evaluation 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Admission to the MSW program, full-time student standing, and successful completion of year one of the MSW program or advanced standing. Health Sciences, or related discipline. Prior research courses or research experience desirable. Crosslisted with: HS A628.
Prerequisites: SWK A633A, SWK A632A, SWK A631A.
Registration Restrictions: Admission to the MSW program, full-time student status, and successful completion of year one of the MSW program, or advanced standing.
Social work practicum to apply concepts, knowledge, skills, and values to client-centered problem solving in generalist social work practice. Emphasis is on application of generalist skills in the areas of interviewing, assessment, and planning. The student completes a total of 240 practicum hours per semester in an approved agency under the supervision of a field instructor appointed by the University and attends a weekly field work seminar.

SWK A632A Social Work Practice II 3 CR
Contact Hours: 3 + 0
Prerequisites: SWK A631A, SWK A632B, SWK A633A, SWK A634A, SWK A635A.
Registration Restrictions: Admission to the MSW program and full-time student status.
Knowledge base for generalist social work practice with emphasis on problem-solving applications to client systems in need of professional intervention. Building on assessment and planning processes covered in SWK A631A, intervention application, evaluation, termination, and follow-up in generalist social work practice with individuals, families, groups, organizations, and communities are covered.

SWK A632B Generalist Practicum II 3 CR
Contact Hours: 0 + 18
Registration Restrictions: Admission to the MSW program and full-time student status. Special Fees.
Social work practicum in which concepts, knowledge, skills, and values are applied to client-centered problem solving in generalist social work. Emphasis is on application of generalist practice skills in the areas of designing, planning, implementing, evaluating, and terminating change efforts with various client systems. The student completes 240 practicum hours per semester in an approved agency under the supervision of a field instructor appointed by the University and attends a weekly field work seminar.

SWK A633A Social Work Practice III: Direct Practice 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Admission to the MSW program, full-time student standing, and successful completion of year one of the MSW program, or advanced standing.
Part one of the advanced generalist methods sequence. Provides an ecosystemic perspective for understanding people in their social environment. Reviews direct social work practice with multiple systems. Covers specific skills such as advanced problem-solving model for prevention, crisis intervention and multisystemic individual, family and group work. Special attention given to the bio-psycho-social development of dysfunction.

SWK A633B Advanced Generalist Practicum III 3 CR
Contact Hours: 0 + 18
Registration Restrictions: Admission to MSW program, full-time student standing, and advancement to candidacy for the MSW degree. Special Fees.
Supervised direct and indirect practice experience under a qualified MSW social work practitioner. The student is expected to perform as an advanced generalist social worker within the agency setting. Emphasis is on application of knowledge, values and ethics, skills, and special issues covered in the MSW curriculum. The student completes 240 practicum hours per semester of work within the agency, following agency policy and procedure.

SWK A634A Social Work Practice IV: Organizational Practice 3 CR
Contact Hours: 3 + 0
Prerequisites: SWK A633A.
Registration Restrictions: Must be admitted to, or possess a degree from, an MSW program accredited by the Council on Social Work Education.
Advanced generalist methods sequence. Provides an ecosystemic perspective for providing services for people in their social environment. Organizational social work practice skills with programs, staff, organizations, and larger systems are emphasized. 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 A634B Advanced Generalist Practicum IV 4 CR
Contact Hours: 0 + 20
Registration Restrictions: Admission to the MSW program, full-time student standing, and successful completion of year one of the MSW program, or advanced standing. Special Fees.
Supervised direct and indirect practice experience under a qualified MSW social work practitioner. The student is expected to perform as an advanced generalist social worker within the agency setting. Emphasis is on application of knowledge, values and ethics, skills, and special issues covered in the MSW curriculum. The student completes 300 practicum hours per semester of work within the agency, following agency policy and procedure.

SWK A635 Advanced Generalist Integrative Seminar 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Admission to the MSW program, full-time student standing, and advancement to candidacy for the MSW degree. Crossquisite: SWK A634B.
Capstone course for the advanced generalist practice sequence. Provides students with the opportunity to integrate ecosystemic theory and advanced problem-solving approaches with direct and indirect practice from the student's field of practice. Provides process for completion of the competency exam.
SWK A639B  Advanced Generalist Distance Practicum 7 CR
Contact Hours: 0 + 38
Registration Restrictions: Advancement to Candidacy and permission of Field Education Coordinator. Must be graduate admitted to UAA MSW Program. Special Fees.
Supervised direct and indirect practice experience under a qualified MSW practitioner in communities outside the Anchorage/Mat-Su area. The student completes 540 practicum hours as an advanced generalist social worker within the agency setting. Emphasis is on application of knowledge, skills, values, and ethics specific to social work practice and the Alaskan context as taught in the MSW curriculum.

SWK A642  Human Behavior in the Social Environment 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Admission to the MSW program and full-time student status.
Identification and advanced analysis of various theoretical frameworks for understanding human behavior with emphasis on the interactions between the individual and their social environment. Developmental stages and tasks are viewed in the context of social systems and societal institutions with focus on the diverse influences which impact upon human growth and change. Behaviors related to family, group, organizational, and community interactions and their reciprocal influence on individuals are addressed.

SWK A643  Human Diversity in Social Work Practice 3 CR
Contact Hours: 3 + 0
Prerequisites: SWK A642.
Registration Restrictions: Admission to the MSW program and full-time student status.
Examination of human diversity in relation to ethnicity, race, gender, age, religion, orientation, age, class, and opportunity. Historical and contemporary influence on group membership and affiliation are addressed along with required values, knowledge and skills for effective generalist social work practice with diverse populations and clients.

SWK A651  Social Work Practice in Addictions and Mental Health 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Must be admitted to, or possess a degree from, an MSW program accredited by the Council on Social Work Education.
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.

SWK A654  Supervisory Management in Social Work 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
Preparation for work in 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.

SWK A656  Treatment of Families 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Admission to Graduate Studies and the MSW Degree Program.
Explores systems theory with specific attention to applications to and implications for family treatment. Understanding relationship dynamics from a systemic point of view. Major family therapy and treatment approaches, issues, and dynamics.

SWK A657  Fetal Alcohol Syndrome and Fetal Alcohol Effects 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate Standing.
An introduction to Fetal Alcohol Syndrome and Fetal Alcohol Effects (FAS/E). The purpose of the course is to develop skills and knowledge necessary for the identification of different ages; diagnosis; understanding of primary and secondary effects of prenatal alcohol exposure in the context of human development; intervention strategies with parents, teachers, social services agencies and the justice system; primary and secondary prevention issues and public policy dilemmas with FAS/E. The course emphasis is on a biopsychosocial understanding of the issues grounded in research.

SWK A658  Rural Social Work 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing at UAA.
Focus on development of knowledge and skills for practice in rural environments. Emphasizes is placed upon understanding the contextual elements of practice in the small communities of rural and “bush” Alaska, and the unique roles and tasks of social workers who work with the diverse populations present in rural communities. Rural and urban policy and practice similarities and differences will be explored, along with a survey of some current service delivery models.

SWK A659  Leadership and Decision Making in Social Work 3 CR
Contact Hours: 3 + 0
Prerequisites: SWK A643A.
Registration Restrictions: Current MSW students or MSW graduates.
Focuses on knowledge and skills related to leadership and decision-making for potential leaders of social service organizations. Emphasizes include leadership theory and analysis of leadership styles and decision-making theory and techniques. Issues of gender and race as they relate to leadership and decision-making will also be explored.

SWK A660  Budgeting and Fiscal Management for Social Work Administrators 2 CR
Contact Hours: 2 + 0
Prerequisites: SWK A643A.
Registration Restrictions: Must be admitted to, or possess a degree from, an MSW program accredited by the Council on Social Work Education.
Focuses on the budgeting process and how it relates to social service program planning, accounting methods and procedures, financial evaluation, and financial accountability. Values and ethics relating to financial administration in the nonprofit sector are emphasized. Gender and race and their interpersonal/social influences on the financial management process are explored.

SWK A661  Marketing in the Social Sector 2 CR
Contact Hours: 2 + 0
Registration Restrictions: Must be admitted to, or possess a degree from, an MSW program accredited by the Council on Social Work Education.
Explores the planning, conducting, and evaluation of fundraising activities, the development of mission-based fundraising, donor identification and relations, spectrum-wide fundraising (in-kind support, private support, private/public grants), social entrepreneurship and fundraising ethics and accountability.

SWK A662  Financial Resource Development for Social Services 2 CR
Contact Hours: 2 + 0
Registration Restrictions: Must be admitted to, or possess a degree from, an MSW program accredited by the Council on Social Work Education.
Explores the planning, conducting, and evaluation of fundraising activities, the development of mission-based fundraising, donor identification and relations, spectrum-wide fundraising (in-kind support, private support, private/public grants), social entrepreneurship and fundraising ethics and accountability.

SWK A663  Clinical Social Work with Children and Adolescents 2 CR
Contact Hours: 2 + 0
Registration Restrictions: Must be admitted to, or possess a degree from, an MSW program accredited by the Council on Social Work Education.
Preparation for clinical work with children, adolescents and their families. Review of fundamental issues in child and adolescent development will provide the groundwork for development of effective assessment and treatment skills. Emphasis will be placed upon understanding the child/adolescent within the family, community, and cultural context, incorporating these factors into treatment approaches and planning.

SWK A664  Clinical Social Work with Adults 2 CR
Contact Hours: 2 + 0
Prerequisites: SWK A651.
Registration Restrictions: Must be admitted to, or possess a degree from, an MSW program accredited by the Council on Social Work Education.
Preparation for advanced clinical social work in a variety of settings with adults suffering from behavioral disorders and problems coping with environmental stressors. Focus upon skills for assessment, application of evidence-based interventions and evaluation.

SWK A665  Comparative Group Work 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Must be admitted to, or possess a degree from, an MSW program accredited by the Council on Social Work Education.
Preparation for clinical work with children, adolescents and their families. Review of fundamental issues in child and adolescent development will provide the groundwork for development of effective assessment and treatment skills. Emphasis will be placed upon understanding the child/adolescent within the family, community, and cultural context, incorporating these factors into treatment approaches and planning.

SWK A667  Clinical Group Therapy 2 CR
Contact Hours: 2 + 0
Prerequisites: SWK A665.
Registration Restrictions: Must be admitted to, or possess a degree from, an MSW program accredited by the Council on Social Work Education.
Preparation for clinical work with children, adolescents and their families. Review of fundamental issues in child and adolescent development will provide the groundwork for development of effective assessment and treatment skills. Emphasis will be placed upon understanding the child/adolescent within the family, community, and cultural context, incorporating these factors into treatment approaches and planning.

Special Fees.
SWK A668  Group Supervision I  1 CR  
Contact Hours: 1 + 0  
Prerequisites: SWK A661.  
Registration Restrictions: Post-graduate MSW, admission to Graduate Certificate in Clinical Social Work Practice, employed in an approved clinical social work position.  
Provides the phase of clinical group supervision of entry-level MSW graduates. Group supervision is a forum for learning values, knowledge, and skills as a disciplined approach to clinical social work practice.

SWK A669  Group Supervision II  1 CR  
Contact Hours: 1 + 0  
Prerequisites: SWK A668 with minimum grade of B.  
Registration Restrictions: Post-graduate MSW; admission to Graduate Certificate in Clinical Social Work Practice; employed in an approved clinical social work position.  
Provides the middle phase of clinical group supervision of entry-level MSW graduates. Group supervision is a forum for learning values, knowledge, and skills as a disciplined approach to clinical social work practice.

SWK A670  Group Supervision III  1 CR  
Contact Hours: 1 + 0  
Prerequisites: SWK A669 with minimum grade of B.  
Registration Restrictions: Post-graduate MSW; admission to Graduate Certificate in Clinical Social Work Practice; employed in an approved clinical social work position.  
Provides the ending phase of clinical group supervision of entry-level MSW graduates. Group supervision is a forum for learning values, knowledge, and skills as a disciplined approach to clinical social work practice.

SWK A672  Social Work with Families and Couples  2 CR  
Contact Hours: 2 + 0  
Prerequisites: SWK A666.  
Registration Restrictions: Must be admitted to, or possess a degree from, an MSW program accredited by the Council on Social Work Education.  
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.  
Focuses on current topics related to social work services, diverse client groups, and fields of practice.

SWK A690  Selected Topics in Social Work  1-3 CR  
Contact Hours: 0 + 0  
Registration Restrictions: Post-baccalaureate standing.  
Special Note: May be repeated for credit with a different subtitle.  
Selects topics on current topics related to social work services, diverse client groups, and fields of practice.

SWK A698  MSW Research Project  3 CR  
Contact Hours: 1 + 9  
Prerequisites: SWK A682.  
Opportunity for student to 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 the research sequence.

TECH A305  Technology Management  3 CR  
Contact Hours: 3 + 0  
Registration Restrictions: Tier 1 basic college-level skills  
Provides 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 A412  Advanced Technical Experiences:  1-9 CR  Discipline Area  
Contact Hours: 0-9 + 0-27  
Registration Restrictions: Faculty approval required.  
Crosslisted with: VE A412.  
Supports a student's opportunity to participate in outside professional development to increase mastery in a specific technical discipline. This may include participation in classes offered by industry, proprietary schools, or other agencies. Each will be evaluated on an individual basis and must support the student's professional objectives.

TECH A415  Accident Investigation  4 CR  
Contact Hours: 3 + 3  
Prerequisites: TECH A402.  
Covers system safety approach to accident investigation. Provides processes and analytical tools for accident investigation and analysis to include: MORT-Management Oversight and Risk Tree, Change Analysis, Barrier Analysis, Events and Causal Factors Charting, Root Cause Analysis, MORt-Based Event Analysis, Operational Readiness Analysis, Step Analysis and Task Performance Analysis.

TECH A416  Safety Appraisal Methodology  3 CR  
Contact Hours: 3 + 0  
Prerequisites: TECH A402.  
Covers systems methodology for safety appraisals, audits and reviews. Provides processes and methodologies for developing comprehensive appraisal programs which can be applied to all work processes and environments.

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.  
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: Junior standing and faculty approval required. Completion of GER Tier 1 (basic college-level skills) courses.  
Course Attributes: UAA GER Integrative Capstone.  
Special Note: This is an independent project which requires at least 135 hours of commitment including bi-weekly meetings with faculty advisor and other Bachelor of Science, Technology students. Integrates technical and general education knowledge to complete a project that demonstrates community involvement related to typical problems or issues in students' career fields.

TECH A495  Technical Internship  1-3 CR  
Contact Hours: 0 + 5-15  
Registration Restrictions: Faculty approval required.  
Crosslisted with: VE A495.  
Special Fees.  
Special Note: Requires at least 75 hours of work internship per credit hour plus additional instructor contact time.  
Supports supervisory and management practices used in business operations through a work experience internship.
THR - THEATRE

COURSE DESCRIPTIONS

THR A243 Scene Design 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 A257 Costume Design and Construction I 3 CR
Contact Hours: 2 + 2
Prerequisites: THR A131.
Continuation of THR A257L.
Basic principles of costume design with emphasis on research and rendering techniques. Overall study of costume and fashion history and its relation to theatre productions and designs.

THR A295 Theatre Practicum: Technical 1-3 CR
Contact Hours: 0 + 3-9
Registration Restrictions: Faculty permission.
May be stacked with: THR A495.
Participation in mainstage productions as member of technical staff. Credit for scene crew, light crew, props, costume crew, make-up crew, stage management, and publicity.

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 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
Study and practice of script development for the stage. Class will involve staged readings of student work.

THR A321 Acting III: Scene Study 3 CR
Contact Hours: 2 + 3
Prerequisites: THR A121.
Advanced studies in acting through which actors explore various approaches to characterization by mounting scenes from actual plays.

THR A324 Voice for the Actor 3 CR
Contact Hours: 3 + 0
Prerequisites: THR A121.
Introduces the acting student to a series of exercises specifically to free and increase the expressive power of their natural vocal instrument. Concentration includes relaxation, breath control, and increased vocal range through the development of the human resonating ladder, with the primary goal being emotional honesty. Also some work in articulation.

THR A325 Theatre Speech 3 CR
Contact Hours: 3 + 0
Prerequisites: THR A324.
Continuation of THR 324 with focus on the articulatory components of speech. Through the manipulation of these elements, and in combination with tempo/rhythm, facial posture, resonance focus, lip patterns, and a knowledge of both history and national character, the acting student will develop an appreciation and systematic approach for the acquisition of foreign dialects.

THR A328 Acting Shakespeare 3 CR
Contact Hours: 2 + 3
Prerequisites: THR A121.
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 I 3 CR
Contact Hours: 2 + 3
Prerequisites: THR A121 and THR A221.
Special Fees.
An introduction to the art of fighting in the theatre. Students are taught basic techniques for unarmed, single rapier, and rapier and dagger combat. Emphasis is placed throughout on safety as well as the effectiveness of the illusion of violence.
### COURSE DESCRIPTIONS

#### 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 A331  Directing I  3 CR
- Contact Hours: 3 + 0
- Prerequisites: THR A221 and [THR A243 or DNCE A185] and THR A257.
- Direction of short plays for drama lab productions.

#### THR A347  Lighting Design  3 CR
- Contact Hours: 3 + 0
- Prerequisites: DNCE A185 or THR A243.
- Special Fees.
- A course in theory and practice of design and execution of lighting and associated electrical effects for the stage. Primary focus will be on theatrical lighting with additional material on related fields.

#### THR A357  Costume Design and Construction II  3 CR
- Contact Hours: 1 + 4
- Prerequisites: THR A257.
- Advanced work in costume design and construction. This course is a continuation of THR A257.

#### THR A395  Advanced Practicum: Performance  1-3 CR
- Contact Hours: 0 + 3-9
- Registration Restrictions: Faculty permission and audition.
- May be stacked with: THR A195.
- Performance practicum for juniors and seniors; advanced participation in mainstage productions as an actor, director, or assistant director.

#### THR A411  History of the Theatre I  3 CR
- Contact Hours: 3 + 0
- Registration Restrictions: Junior or senior standing and the completion of GER Tier 1 Written Communication requirements.
- Course Attributes: UAA GER Fine Arts Requirement, UAA GER Humanities Requirement.
- 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 Fine Arts Requirement, UAA GER Humanities Requirement.
- Continuation of THR A411. Theatre history from 1800 to modern.

#### THR A413  Dramatic Theory and Criticism  3 CR
- Contact Hours: 3 + 0
- Study of theories and criticism of drama and theatrical art from Aristotle to the present.

#### THR A435  Directing II  3 CR
- Contact Hours: 3 + 0
- Prerequisites: THR A331.
- Advanced directional analysis of a dramatic work and public presentation of a play.

#### THR A445  Advanced Theatre Production  3 CR
- Contact Hours: 0 + 6
- Registration Restrictions: Junior level course in area of specialization.
- Advanced technical theatre course with emphasis as selected by student in scenery design, lighting, stagecraft, costume, or directing.

#### THR A480  Theatre Internship  5-15 CR
- Contact Hours: 0 + 24-45
- Registration Restrictions: Junior standing or permission of department chair.
- Special Note: Total of internship activity applicable toward graduation is 15 credits.
- Advanced theatre production course with emphasis as selected by students in direction, acting, scenery and lighting, costume design and construction, or theatre management.

#### THR A490  Selected Topics in Performance  3 CR
- Contact Hours: 2 + 3
- Prerequisites: THR A121.
- Special Note: May be repeated for credit with a change of subtitle.
- Current topics in theatrical performance resulting from special demands of the theatre season or special faculty expertise.

#### THR A491  Selected Topics in Technical Theatre  3 CR
- Contact Hours: 2 + 3
- Prerequisites: THR A257 or THR A243.
- Special Fees.
- Selected Topics in Technical Theatre: The current topics in technical theatre theory and practice. Includes studio work.

#### THR A495  Advanced Practicum: Technical  1-3 CR
- Contact Hours: 0 + 1-3
- Registration Restrictions: Faculty permission.
- May be stacked with: THR A295.
- 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

#### VE A301  Principles of Technology  3 CR
- Contact Hours: 2 + 3
- Special Fees.
- Application of basic physics to the workplace. Emphasis is on principles of applied physics in areas such as force and force transformers, energy and power, waves and vibrations, radiation and light, and their application in technology and the workplace.

#### VE A400  Program Planning: PBTE (Topics Vary)  5-10 CR
- Contact Hours: 0 + 1-20
- Registration Restrictions: Permission of resource person; see module for prerequisites.
- Special Note: Can be applied toward MS degree in Vocational education.
- Competency-based, individualized format. These modules deal with the duties and responsibilities of the vocational teacher in planning for classroom and laboratory instruction. Topics include student needs, performance objectives, developing a unit and lesson plans.

#### VE A410  Instructional Planning: PBTE (Topics Vary)  5-3 CR
- Contact Hours: 0 + 2
- Registration Restrictions: Permission of resource person; see module for prerequisites.
- Special Note: Can be applied toward MS degree in Vocational education.
- Competency-based, individualized format. These modules cover the competencies needed by the vocational teacher in planning for classroom and laboratory instruction. Topics include student needs, performance objectives, developing a unit and lesson plans.

#### VE A411  Philosophical Foundations of Vocational Education  3 CR
- Contact Hours: 3 + 0
- A study of the theory, development, and philosophical foundations of vocational education and the relationship of vocational education to general education. An overview of secondary and postsecondary vocational education in Alaska; proprietary and applied programs; and concepts of career education. Economic and sociological foundations of vocational education; relevant federal legislation; the role of business and industry; and current issues and trends in vocational education are covered. The major objective of the course is greater understanding of the various factors influencing vocational education.
VE A412 Advanced Technical Experiences: 1-9 CR
Discipline Area
Contact Hours: 0-9 + 0.27
Registration Restrictions: Faculty approval required.
Crosslisted with: TECH A412.
Supports a student's opportunity to participate in outside professional development to increase mastery in a specific technical discipline. This may include participation in classes offered by industry, proprietary schools, or other agencies. Each will be evaluated on an individual basis and must support the student's professional objectives.

VE A430 Instructional Evaluation: 5-3 CR
PBTE (Topics Vary)
Contact Hours: 0 + 2
Registration Restrictions: Permission of resource person; see module for prerequisites. Special Fees.
Special Note: Can be applied toward MS degree in Vocational education.
Competency-based, individualized format. Modules in this category are designed to aid the vocational teacher in evaluating student performance and the quality of instruction provided. Topics include establishing criteria, assessment of knowledge, skills and attitudes and instructional effectiveness. See module for specific description.

VE A435 Teaching Adults: PBTE (Topics Vary) 5-3 CR
Contact Hours: 0 + 1-6
Registration Restrictions: Permission of resource person; see module for prerequisites. Special Fees.
Special Note: Can be applied toward MS degree in Vocational education.
Competency-based, individualized format. These modules are designed to aid the vocational teacher and/or administrator in preparing to work with adult learners; marketing adult education programs; determining individual training needs and planning instruction for adults, and managing and evaluating the instructional process and performance of adults. See modules for specific descriptions.

VE A443 Methods of Instruction in Vocational Education 3 CR
Contact Hours: 3 + 0
Prerequisites: ED A321.
May be stacked with: VE A463.
Special Fees.
An introduction to fundamental processes of instruction. Students develop competencies in various methodologies pertinent to vocational education including developing lesson plans, job sheets, and assignment sheets; lecture; simulation; demonstrations; illustrated talks; individualized instruction; laboratory learning; field trips; exhibits; bulletin boards; competency-based education, etc. Students identify, develop and critique appropriate teaching methods for a given teaching area.

VE A450 Guidance: PBTE (Topics Vary) 5-3.5 CR
Contact Hours: 0 + 2
Registration Restrictions: Permission of resource person; see module for prerequisites. Special Fees.
Special Note: Can be applied toward MS degree in Vocational education.
Competency-based, individualized format. Modules address the responsibilities of the vocational teacher in advising, counseling and assisting student with career planning and preparation. See module for specific description.

VE A460 School/Community Relations: 5-5 CR
PBTE (Topics Vary)
Contact Hours: 0 + 2
Registration Restrictions: Permission of resource person; see module for prerequisites. Special Fees.
Special Note: Can be applied toward MS degree in Vocational education.
Competency-based, individualized format. These modules are designed to aid the vocational teacher and/or administrator in planning and maintaining effective school/community relations for the vocational program. See module for specific description.

VE A495 Technical Internship 1-3 CR
Contact Hours: 0 + 5-15
Registration Restrictions: Faculty approval required.
Crosslisted with: TECH A495.
Special Fees.
Special Note: Requires at least 75 hours of work internship per credit hour plus additional instructor contact time.
Supports supervisory and management practices used in business operations through a work experience internship.

VE A622 Organization and Administration of Vocational Education 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing or faculty permission.
Special Note: Can be applied toward MS degree in Vocational Education.
The principles and practices of organizing and administering vocational programs. Topics will include classroom and laboratory organization, budgeting and operating programs on different levels and for different students.

VE A643 Methods of Instruction in Vocational Education 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing or faculty permission. May be stacked with: VE A443.
Special Fees.
Introduction to fundamental processes of instruction. Students develop competencies in various methodologies pertinent to vocational education including developing lesson plans, job sheets, and assignment sheets; lecture; simulation; demonstrations; illustrated talks; individualized instruction; laboratory learning; field trips; exhibits; bulletin boards; competency-based education; etc. Students identify, develop and evaluate appropriate teaching methods for a given teaching area. Students will do graduate level research and write papers describing instructional methodologies pertinent to their vocational/technical program area(s).

VE A644 Improving Instruction in Vocational Education 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing or faculty permission. Special Fees.
Special Note: Can be applied toward MS degree in Vocational Education.
Designed to give practicing teachers advanced instructional techniques. Analysis and evaluation of styles of teaching and learning. Includes conducting group discussions, brainstorming and problem solving techniques, reinforcement, individualizing instruction, competency-based instruction, and self and peer evaluation.

VE A655 Curriculum Development in Vocational Education 3 CR
Contact Hours: 3 + 0
Registration Restrictions: Graduate standing or faculty permission.
Special Note: Can be applied toward MS degree in Vocational Education.
Designed to prepare students to access and/or develop vocational curriculum. Students identify curriculum development terminology and become familiar with competency-based vocational education (CBVE). Develop, adapt and/or adopt curriculum that addresses problem solving, social/economic impacts and accountability in their vocational education arena. Emphasizes those areas unique to vocational education: task analysis, vocational advisory committees, vocational student organizations, CBVE, and vocational curriculum consortiums.

VS - VOCATIONAL SKILLS

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

VS A125 Woodworking I 3 CR
Contact Hours: 1 + 2
Offered only at Kenai Peninsula College Kachemak Bay branch.
Basic course designed to familiarize the student with the safe use of a variety of modern hand and power tools. Completion of the course may result in the construction of items of personal choice.

VS A126 Woodworking II 3 CR
Contact Hours: 1 + 2
Prerequisites: VS A125.
Offered only at Kenai Peninsula College Kachemak Bay branch.
Continuation of VS A125 with emphasis on more advanced projects and greater individual initiative.

VS A131 Construction for the Owner/Builder I 3 CR
Contact Hours: 3 + 0
Familiarizes students with standard practice construction and alternatives to that practice. Includes the terms/systems involved in construction. Concepts and systems covered are foundations, floors, walls, roof, alternative energy in structures, and alternative structures.

VS A152 Machine Woodworking 3 CR
Contact Hours: 2 + 2
Grade Mode: Pass/No Pass.
Offered only at Matanuska-Susitna College.
Special Note: Each student will design and construct a project that is approved by the instructor.
Designed to gain skills and knowledge in the use of woodworking machinery. Emphasis is placed on the safe operation of power equipment. Instruction in relating to the technology of woods, cabinet and furniture construction techniques, wood finishing, purchasing materials and maintenance of tools and equipment.
WELD - WELDING TECHNOLOGY

Course Descriptions

WELD A1101 Gas and Arc Welding 4 CR
Contact Hours: 2 + 6
Special Fees.
Introduces basic principles of welding. Covers oxyacetylene welding, brazing, silver soldering and oxyacetylene flame cutting in the first half of the course. Covers shielded metal arc welding in the second.

WELD A1102 Gas Welding 2 CR
Contact Hours: 1 + 3
Offered only at Kenai Peninsula College.
Covers oxyacetylene welding, brazing, silver solder, and cast iron welding.

WELD A1103 Arc Welding 4 CR
Contact Hours: 2 + 6
Offered only at Kenai Peninsula College.
Emphasizes welder certification on open root welding of plate. Open to beginner as well as experienced welder. Students certify on .375 inch plate, open root or with backing, to ASME or AWS code standards.

WELD A1104 Arc Welding: Low-Hydrogen Electrodes 4 CR
Contact Hours: 2 + 6
Registration Restrictions: WELD A101 or WELD A103 or arc welding experience. Offered only at Kenai Peninsula College.
Emphasis on welder certification with low-hydrogen electrodes. Students certify on .500 inch plate with backing to AWS code standards.

WELD A1105 Pipe Welding 4 CR
Contact Hours: 2 + 6
Registration Restrictions: Current certification of plate, open root, vertically upward, or pre-test given during registration. Offered only at Kenai Peninsula College.
Covers welding of pipe in all positions, open root, uphill and downhill. Pipe sizes of 4-6 inch schedule 40.

WELD A1106 Pipe Certification 4 CR
Contact Hours: 2 + 6
Prerequisites: WELD A105.
Offered only at Kenai Peninsula College.
Basic welding of mild steel, stainless steel and aluminum with wire processes. Students use all wires on the current market in class.

WELD A1108 Wire Welding 4 CR
Contact Hours: 2 + 6
Offered only at Kenai Peninsula College.
Involves welding of pipe in all positions, open root, uphill and downhill. Pipe size: 6 inch schedule 80. Students certify on 6 inch schedule 80 uphill procedure to ANSI B31.3 code standard.

WELD A1109 TIG Welding 4 CR
Contact Hours: 2 + 6
Prerequisites: WELD A101 and WELD A102.
Offered only at Kenai Peninsula College.
Covers welding of aluminum, zinc alloys, copper, magnesium, mild steel and stainless steel.

WELD A1112 Shielded Metal Arc Welding (SMAW) 4 CR
Contact Hours: 2 + 6
Special Fees.
Introduces the welding of mild steels with covered electrodes. Includes welding safety, electrical welding equipment, electrode identification and selection, basic welding joint design, and welding practice on low carbon steel with mild steel electrodes.

WELD A1114 Welding of High Strength Steels 4 CR
Contact Hours: 2 + 6
Prerequisites: WELD A112.
Special Fees.
Introduces the welding of high strength steels with covered electrodes. Includes welding safety, low hydrogen electrodes selection process, high strength welding joint design, and welding practice on alloyed steels with low hydrogen and alloyed electrodes.

WELD A1115 Basic Shielded Metal Arc Welding 2 CR
Contact Hours: 1 + 2
Offered only at Kodiak College.
Beginning course designed to teach basics in welding steel, using the shielded metal arc welding (SMAW) process. TV-tape lessons and demonstrations consist of a series of intensive, highly structured skill building exercises in stick welding. Covers four basic joints in all four positions. Also includes brief exposure to cutting techniques with stick, shear, arc/air and oxyacetylene torch.

WELD A117 Basic Pipefitting 4 CR
Contact Hours: 3 + 2
Special Fees.
Provides relevant topics and skill enhancement in the area of welding and fabrication for manufactured products.

WELD A118 Welding Fabrication and Manufacturing 4 CR
Contact Hours: 1 + 6
Prerequisites: WELD A101.
Special Fees.
Introduces vertical-down shielded metal arc welding (SMAW) techniques on carbon steel pipe using EXX10 electrodes. Includes information on pipe material specifications, pipe fittings and assembly, welder qualification, and API Standard 1104 code requirements.

WELD A121 Pipe Welding Vertical-SMAW 4 CR
Contact Hours: 2 + 6
Prerequisites: WELD A112.
Special Fees.
Introduces vertical-up shielded metal arc welding (SMAW) techniques on carbon and alloy steel pipe using both EXX10 and EXX18 electrodes. Includes information on high strength alloy steel pipe specifications and weld/welder evaluation/qualification defined in ASME IX and ANSI/ASME B31.3.

WELD A122 Pipe Welding Vertical-Up SMAW 4 CR
Contact Hours: 2 + 6
Prerequisites: WELD A112.
Special Fees.
Introduces vertical-up shielded metal arc welding (SMAW) techniques on carbon and alloy steel pipe using both EXX10 and EXX18 electrodes. Includes information on high strength alloy steel pipe specifications and weld/welder evaluation/qualification defined in ASME IX and ANSI/ASME B31.3.

WELD A125 Technical Drawings for Welders 3 CR
Contact Hours: 3 + 0
Provides instruction on interpreting various types of drawings that are commonly used for construction projects that require welded assemblies.

WELD A126 Flux Cored Welding (FCAW) 4 CR
Contact Hours: 2 + 6
Prerequisites: WELD A112 or WELD A161.
Special Fees.

WELD A127 Gas Metal Arc Welding (GMAW) 4 CR
Contact Hours: 2 + 6
Prerequisites: WELD A112.
Special Fees.
Introduces gas metal arc welding 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 A128 Gas Tungsten Arc Welding (GTAW) 4 CR
Contact Hours: 2 + 6
Prerequisites: WELD A112 or WELD A114.
Special Fees.
Introduces tungsten arc welding for joining a number of metals. Includes information on power supplies, torches, inert gases, filler metal selection and electrical characteristics of the arc.

WELD A129 Welding of High Strength Steels 4 CR
Contact Hours: 2 + 6
Prerequisites: WELD A112.
Special Fees.
Introduces the welding of high strength steels with covered electrodes. Includes welding safety, low hydrogen electrodes selection process, high strength welding joint design, and welding practice on alloyed steels with low hydrogen and alloyed electrodes.

WELD A130 Welding of Pipe Joints 4 CR
Contact Hours: 2 + 6
Prerequisites: WELD A112.
Special Fees.
Introduces the welding of pipe joints with covered electrodes. Includes welding safety, low hydrogen electrodes selection process, high strength welding joint design, and welding practice on alloyed steels with low hydrogen and alloyed electrodes.

WELD A131 Welding of High Strength Steels 4 CR
Contact Hours: 2 + 6
Prerequisites: WELD A112.
Special Fees.
Introduces the welding of high strength steels with covered electrodes. Includes welding safety, low hydrogen electrodes selection process, high strength welding joint design, and welding practice on alloyed steels with low hydrogen and alloyed electrodes.

WELD A132 Welding of High Strength Steels 4 CR
Contact Hours: 2 + 6
Prerequisites: WELD A112.
Special Fees.
Introduces the welding of high strength steels with covered electrodes. Includes welding safety, low hydrogen electrodes selection process, high strength welding joint design, and welding practice on alloyed steels with low hydrogen and alloyed electrodes.

WELD A133 Welding of High Strength Steels 4 CR
Contact Hours: 2 + 6
Prerequisites: WELD A112.
Special Fees.
Introduces the welding of high strength steels with covered electrodes. Includes welding safety, low hydrogen electrodes selection process, high strength welding joint design, and welding practice on alloyed steels with low hydrogen and alloyed electrodes.

WELD A134 Welding of High Strength Steels 4 CR
Contact Hours: 2 + 6
Prerequisites: WELD A112.
Special Fees.
Introduces the welding of high strength steels with covered electrodes. Includes welding safety, low hydrogen electrodes selection process, high strength welding joint design, and welding practice on alloyed steels with low hydrogen and alloyed electrodes.

WELD A135 Welding of High Strength Steels 4 CR
Contact Hours: 2 + 6
Prerequisites: WELD A112.
Special Fees.
Introduces the welding of high strength steels with covered electrodes. Includes welding safety, low hydrogen electrodes selection process, high strength welding joint design, and welding practice on alloyed steels with low hydrogen and alloyed electrodes.

WELD A136 Welding of High Strength Steels 4 CR
Contact Hours: 2 + 6
Prerequisites: WELD A112.
Special Fees.
Introduces the welding of high strength steels with covered electrodes. Includes welding safety, low hydrogen electrodes selection process, high strength welding joint design, and welding practice on alloyed steels with low hydrogen and alloyed electrodes.

WELD A137 Welding of High Strength Steels 4 CR
Contact Hours: 2 + 6
Prerequisites: WELD A112.
Special Fees.
Introduces the welding of high strength steels with covered electrodes. Includes welding safety, low hydrogen electrodes selection process, high strength welding joint design, and welding practice on alloyed steels with low hydrogen and alloyed electrodes.

WELD A138 Welding of High Strength Steels 4 CR
Contact Hours: 2 + 6
Prerequisites: WELD A112.
Special Fees.
Introduces the welding of high strength steels with covered electrodes. Includes welding safety, low hydrogen electrodes selection process, high strength welding joint design, and welding practice on alloyed steels with low hydrogen and alloyed electrodes.
WELD A261  Ultrasonic Testing  4 CR
Contact Hours:  2 + 4
Prerequisites: MATH A105.
Special Fees.
Covers the principles of ultrasonic testing methods with zero and shear wave techniques. Examines inspection techniques in accordance with AWS D1.1, API 1104 and ASME codes. Prepares students for the level I ASNT, SNT-TC-1A recommended practice examination.

WELD A262  General Nondestructive Testing  3 CR
Contact Hours:  2 + 2
Prerequisites: MATH A105.
Special Fees.
Presents nondestructive testing methods of dye penetrant, magnetic particle, and eddy current. Includes the applications, advantages, and limitations of these NDT methods. Prepares students for the Level I American Society for Nondestructive Testing, SNT-TC-1, a recommended practice examination.

WELD A263  Radiographic Testing Safety  2 CR
Contact Hours:  2 + 0
Prerequisites: MATH A105.
Registration Restrictions: VE A301 Principles of Technology or similar science coursework is recommended prior to taking this course.
Special Fees.
Presents the safety practices and USNRC regulations for industrial radiography in nondestructive examination. Prepares for both Radioactive Materials (RAM) and the X-ray category Industrial Radiography Radiation Safety Personnel (IRRSP) examination administered by The American Society for Nondestructive Testing (ASNT).

WELD A264  Radiographic Testing  3 CR
Contact Hours:  2 + 3
Prerequisites: WELD A263 and WELD A112.
Special Fees.
Presents theory and application of industrial radiography and meets ASNT initial training hour requirements for level I and level II radiographer. Includes operation of equipment, film exposure and development, radiographic procedure specifications, interpretation of radiographs, and a brief review of radiation safety.

WELD A281  Welding Inspection and Code Review  4 CR
Contact Hours:  4 + 0
Prerequisites: WELD A112 and WELD A157.
Presents numerous welding inspection methods and a study of various welding codes and standards in preparation for the American Welding Society (AWS) Certified Welding Inspector (CWI) Examination.

WELD A287  Welding Metallurgy Applications  5 CR
Contact Hours:  3 + 4
Prerequisites: MATH A055 and WELD A112.
Special Fees.
Presents technical information in welding metallurgy. Includes laboratory practice in metallography, heat-treating, and mechanical properties testing.

WS - WOMEN’S STUDIES
Offered through the College of Arts and Sciences
Social Sciences Building (SSB), Room 372, (907) 786-1714
http://womens.uaa.alaska.edu

WS A200  Introduction to Women’s Studies  3 CR
Contact Hours:  3 + 0
Course Attributes: UAA GER Social Sciences Requirement.
Offered fall semesters.

An interdisciplinary, team-taught course which aims to increase awareness of the experience of women in contemporary society. Issues analyzed include women's work (paid and unpaid), biological definitions of woman, stereotypes of femininity, women and political power, and media images of women.

WS A400  Feminist Theory  3 CR
Contact Hours:  3 + 0
Registration Restrictions: WS A200 or graduate standing.

Interdisciplinary examination of historical and contemporary feminist and gender theories. Students engage in critical analysis, discussion, and research.

WS A401  Seminar in Women’s Studies  1-3 CR
Contact Hours:  1-3 + 0
Prerequisites: WS A200.
Special Note: WS 401 may be repeated once for credit with a change of subtitle.
Discuss issues related to women's studies. Content varies every semester.
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