This online version of the UAS academic catalog is the official catalog of the institution. Instead of a static document, this medium allows UAS to make changes as necessary. This will ensure that users have the most up-to-date information.

Changes to the academic catalog are subject to approval by the Provost and must be routed through the Provost’s Office.

All changes that are made during the course of the year will be posted on this page. **Affected text (located in the body of the document) will be highlighted in yellow.**

Changes can be accessed two ways:

1. By clicking on the highlighted text, users will automatically be brought to the specific location on this page that explains the change, or

2. By clicking on a specific change listed on this page, users will automatically be brought to the page where the affected text is located.

Please report any problems with the online academic catalog to the Provost’s Office, (907) 796-6486.

**CHANGES 2008-2009 EDITION**

<table>
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<tr>
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</table>
Occupational Endorsements

Occupational endorsements are designed to give students occupational training in a specific field. These endorsements are under 30 credit hours and will be posted to student transcripts upon completion as approved by the academic department. The credit hours may be applied (where applicable) to degree programs. Resident credit requirement for Occupational Endorsement Certificates is 30% of the program.


Certificates

Certificates are programs that are designed to give intensive training in specific occupational areas. Skills gained are job-entry-level in nature, and course work completed may apply toward other degree programs. Students interested in a certificate should apply through the Office of Admissions.

Minimum credit requirements: 30 semester credits
Resident credit requirements: 9 semester credits


Associate of Applied Science Degree (A.A.S.)

The Associate of Applied Science degree (A.A.S.) is a two-year degree awarded in a specific career or occupational field of expertise. See individual program requirements listed in the appropriate degree section of the catalog.

Minimum credit requirements: 60 semester credits
Resident credit requirements: 15 semester credits


Associate of Arts (A.A.)

The Associate of Arts degree provides students with a broad general education. It is also designed to be a transfer degree to bachelor degree programs. If a student intends to transfer to a bachelor degree program, he/she should consult the requirements for the advanced degree as some special general education and lower division courses are required in bachelor degrees.

Minimum credit requirements: 60 semester credits
Special credit requirement: 20 semester credits must be at the 200 level OR higher
General Education requirements: 34 semester credits
Resident credit requirement: 15 semester credits

Associate of Business (A.B.)

The Associate of Business (AB) is a residential two-year transfer degree for students intending to complete a bachelor’s degree in a business-related field. The degree prepares students academically for admission to the UAS BBA degree. The Associate of Business (AB) prepares students for transfer to a four-year university and major in Business.

Minimum credit requirements: 65 semester credits
General Education requirements: 35 semester credits
Resident credit requirement: 15 semester credits
Bachelor Degrees

The bachelor degree is awarded upon the successful completion of a prescribed program of requirements.

Minimum credit requirements: 120 semester credits

General Education requirements: 34 semester credits

Upper Division requirement: 42 semester credits for B.B.A., B.L.A. degrees, 42-48 semester credits for B.S. degrees

Resident credit requirement: 30 semester credits, 24 must be upper division

Additional special requirements: Some degrees require completion of a portfolio or other assessment of student achievement. See specific degree information for details.

Bachelor Degrees Available: Bachelor of Business Administration (Accounting, Entrepreneurship, Health Care Management, Human Resources Management, and Marketing); Bachelor of Arts (Biology, Elementary Education, English and Social Science); Bachelor of Liberal Arts (Art, General Studies, Human Communication and Language Arts and Communications); Bachelor of Science (Biology and Marine Biology, Environmental Science, and Mathematics).

Minors

The same discipline may not be used to satisfy the major and the minor (i.e. English major and English minor does not make a degree.) If a course is a requirement of both the major and the minor, a student may use the course to meet both requirements but will not receive double credit.

UAS has minors to complement our bachelor degrees. Please refer to the section on minors in this catalog. Requirements may differ slightly among minors; however, each has a minimum of 15 or more credits.


Additional Degrees

Second Associate Degree: An Associate of Applied Science as a second degree requires completion of a minimum of 12 semester hours of credit beyond the first (or latest) Associate of Applied Science degree. All general University requirements and degree requirements of the major must be met for each degree.

As the Associate of Arts degree is intended to provide a student with a basis of general education in order to undertake bachelor degree work, only one A.A. may be earned by a student.

Second Bachelor Degree: A second bachelor degree requires completion of a minimum of 24 semester hours of credit beyond the first bachelor degree. All general University requirements, degree requirements, and requirements of the major must be met for both degrees. Students who have earned a bachelor degree from a University other than UAS, must apply for admission and comply with all general University and program requirements.

General Education Requirements for Associate of Arts and Bachelor’s Degrees

This requirement was developed to enhance academic advising and to accommodate transferability and applicability of courses to general education requirements for students transferring form one unit to another it encompasses those areas of knowledge common to associate and bachelor degrees and thus represent the minimum standards for general education.

However, courses are not necessarily offered EVERY semester. Students are advised to seek advisor assistance in meeting program degree requirements.

NOTE: Some degree programs REQUIRE specific courses be included in the GER. Students should consult the degree requirements section of this catalog for the degree into which they are admitted to determine which courses should be taken as part of the GER. If required courses are not taken as GERs, they must be taken as requirements or electives. Any given course may be counted as fulfilling more than one requirement in a degree program but the credit hour can only be counted once. History courses may be counted to fulfill the humanities OR the social science requirements, but not both.

Degree Seeking Status for Undeclared Students

UAS offers a variety of bachelor degree options, and incoming students may not know which degree they would like to pursue. Students need time to explore, gather information and identify and examine alternatives. Undecided bachelor degree-seeking students should select the Undeclared option at the time of admission.

Undeclared students are advised in the Student Resource Center. As an undeclared or deciding applicant, students who have not selected a specific degree pro-
gram when they arrive, will choose a degree by working with their advisors and exploring career options. This transition usually takes place within the student’s first year at UAS.

Based on the student’s interests, goals and academic background, an advisor assists the student in the preparation of an individualized program to explore various academic disciplines and at the same time fulfill general education and other course requirements or electives.
Arts and Sciences

Humanities

Humanities at UAS include the disciplines of art, English (composition and literature), languages, linguistics, outdoor studies, physical education, music, philosophy, human communication, and theatre. The humanities focus on the study of human actions, ideals, thoughts, traditions, and values. Students undertaking study in the humanities engage in time-tested methods of inquiry: creative endeavor, critical interpretation, dialogue, historical and logical analysis, and scholarly investigation. Students in the humanities analyze, create, evaluate, engage in group processes, interpret, investigate, and record products of human activity, culture, and imagination.

The BLA degree with an emphasis in art, language arts and communications, general studies, or human communication prepares students for graduate school in various disciplines and employment in the public and private sector wherever a baccalaureate degree is valued and wherever strengths in critical thinking and oral, visual, and written communication are valued.

The B.A. in English is designed to serve the needs of three groups of undergraduate students. First, it is directed toward students preparing to enter the M.A.T. program in secondary education at UAS and thus reflects the requirements for certification in language arts. Second, it is designed to serve students seeking entry-level employment in the fields of editing, writing, public relations and government. Third, it is intended to serve students preparing for graduate study in law, public administration, technical writing, creative writing and English.

The literature and environment specialization within the English B.A. program is designed to capitalize on the unique natural setting of Southeast Alaska and to build upon existing institutional strengths in environmental literature and philosophy. Students pursuing this specialization will be prepared for careers and graduate programs in literature, teaching, environmental education and journalism.
Humanities Degrees
Certificate in Outdoor Skills and Leadership (J)
Associate of Arts (J, K, S)
Bachelor of Liberal Arts (J)
   With emphasis areas in:
   • Art
   • General Studies (also Distance Delivered)
   • Human Communication
   • Language Arts and Communications
Bachelor of Arts (J)
   • Art
   • English
Minors (J)
   • Art
   • Creative Writing
   • English Literature
   • French
   • Human Communication
   • Northwest Coast Art
   • Philosophy
   • Professional Communication
   • Spanish
   • Theater
   • Tlingit Language

Arts and Sciences
Natural Sciences
Education in mathematics and sciences provides students with the scientific and analytical methods of thinking and means of exploration to understand the world in which we live. Course work provides students with a thorough grounding in the natural sciences and mathematics. The goal of the natural sciences programs is to educate citizens to make rational decisions in today’s society. Students not seeking a degree in mathematics and the natural sciences are offered a variety of general-interest courses, including courses that fulfill elective and general education requirements. Course work in mathematics and natural science also supports allied health programs and other transfer programs. Courses in mathematics and natural sciences are listed under the following catalog headings: astronomy, biology, chemistry, geology, environmental sciences, mathematics, oceanography, physics and statistics.

Dean
Patrick W. Brown

Faculty
Deborah Barnett
Assistant Professor of Biology (S)
Brian Blitz
Associate Professor of Mathematics (J)
Marnie Chapman
Assistant Professor of Biology (S)
Cathy Connor
Professor of Geology (J)
Jill Dumesnil
Associate Professor of Mathematics (J)
Ginny L. Eckert
Associate Professor of Biology (J)
Brian Edmonds
Assistant Professor of Biology (J)
Christopher Hay-Jahans
Associate Professor of Mathematics (J)
Matthew Heavner
Associate Professor of Physics (J)
Bryan Hitchcock
Assistant Professor of Math (J)
Lisa Hoferkamp
Associate Professor of Chemistry (J)
Eran Hood
Associate Professor of Environmental Science (J)
Wayne Houtcooper
Assistant Professor of Science (K)
Colleen Ianuzzi
Assistant Professor of Mathematics (K)
Brendan P. Kelly
Associate Professor of Marine Biology (J)
Joe Liddle
Associate Professor of Mathematics (S)
Elizabeth Mathews
Assistant Professor of Marine Biology (J)
Sonia Nagorski
Assistant Research Professor of Environmental Science (J)
Andrzej Piotrowski  
Assistant Professor of Mathematics (J)

Sanjay Pyare  
Assistant Professor of Geographical Information Systems (J)

Michael S. Stekoll  
Professor of Chemistry and Biochemistry (J)

Janice Straley  
Assistant Professor of Marine Biology (S)

David Tallmon  
Assistant Professor of Biology (J)

Sherry Tamone  
Associate Professor of Biology (J)

Rosemary Walling  
Assistant Professor of Science (J)

**Natural Science Degrees**

**Certificate in Pre-Engineering**

with emphasis areas in:
- Computer Systems Engineering
- Electrical Engineering
- Mechanical Engineering

**Bachelor of Arts in Biology (J)**

**Bachelor of Science in Biology (J)**

**Bachelor of Science in Marine Biology (J)**

**Bachelor of Science in Environmental Science (J)**

**Bachelor of Science in Mathematics (J)**

**Minors**
- Biology
- Environmental Science
- Mathematics

**Arts and Sciences**

**Social Sciences**

One of the important goals of a university education is to “liberate the powers of the individual by disciplining them” (William Theodore deBary). The Social Science program at UAS fulfills this aim by stressing the importance of method, concept, and theory in the study of human origins, development, thought, behavior, and institutions.

The Social Sciences at UAS include anthropology, economics, geography, government, history, psychology, and sociology. Each of these disciplines seeks a better understanding of human behavior through research, analysis, and interpretation of social phenomena.

The foundation of the Social Science Department’s approach to undergraduate education assessment is the student senior portfolio plan. Every full-time undergraduate maintains a portfolio of work that reflects the entire student career. Following a well-developed plan, students present their accomplishments and successes in a senior assessment portfolio. The assessment portfolio is formally reviewed the semester prior to graduation.

**Dean**

Patrick W. Brown

**Faculty**

Britteny Cioni  
Assistant Professor of Economics (J)

Erica Hill  
Assistant Professor of Anthropology (J)

Daniel Lord  
Assistant Professor of Psychology (S)

Daniel Monteith  
Assistant Professor of Anthropology (J)

Virginia S. Mulle  
Associate Professor of Sociology (J)

David Noon  
Assistant Professor of History (J)

Wallace M. Olson  
Professor of Anthropology, Emeritus (J)

John Radzilowski  
Assistant Professor of History (K)

Grant Rich  
Assistant Professor of Psychology (J)

Priscilla M. Schulte  
Professor of Anthropology and Sociology (K)

Alexander Simon  
Assistant Professor of Sociology (J)

Clive S. Thomas  
Professor of Political Science (J)

Robin Walz  
Associate Professor of History (J)
Social Science Degrees

Bachelor of Arts in Social Sciences (J)
 with primary and secondary concentrations in:
• Anthropology
• Economics
• Government
• History
• Psychology
• Sociology

Minors
• Alaska Native Studies
• Anthropology
• History
• Women’s and Gender Studies

School of Management

Business Administration

Business programs prepare students to perform effectively in private businesses and public-service organizations. The required courses of study provide the foundation for professional careers in organizations of all sizes. The curriculum is designed to develop critical thinking, communication skills, basic computer knowledge, awareness of ethical issues, and expertise in selected business management discipline.

Undergraduate degrees available include the one-year Accounting Technician Certificate and Small Business Management Certificate, the two-year Associate of Applied Science in Business Administration (A.A.S.), the Associate of Business (A.B.), and the four-year Bachelor’s of Business Administration (B.B.A.) with an emphasis in accounting, health care administration, human resources management, marketing, or entrepreneurship. The BBA is distance delivered via the worldwide web.

Certificate, A.B., and A.A.S. graduates will be qualified for vocationally oriented positions such as accounting clerk with the state or local government, and accounts payable or accounts receivable clerk with private business. Bachelor degree program graduates will generally pursue or strengthen a professional-level accounting, management, health care administration, human resource management, or marketing career. The Bachelor of Business Administration culminates in a capstone course (BA-462) in which students demonstrate competency in solving complex and unstructured problems applying knowledge gained through the range of business courses taken. The BBA Capstone is intended for graduating seniors. Enrollment requires departmental approval and is limited to students that have completed all of the major requirements for the Bachelor of Business Administration.

The Master of Business Administration is designed for working professionals who are managers and leaders in the corporate and for-profit world. This degree is distance delivered through the worldwide web as a cohort model with 25 students per year. In this model, all students begin together, take all courses together, and complete the two-year program together. The content of this program is designed to provide experience in the practical application of and tools required for success in business.

Public Administration

The Master of Public Administration is a professional degree for public and non-profit managers. It is delivered through a variety of distance technologies to students in Alaska and the Yukon. The MPA degree prepares students for leadership at all levels of government and in non-profit organizations. It is designed for working professionals who seek to increase knowledge and credentials in public administration.

Information Systems

Information Systems programs offer a variety of levels of skill training and courses of study in computing including one-year certificates, and a two-year associate of applied science degree (AAS). The coursework teaches computing skills employers are looking for today.

Employer surveys have repeatedly stressed the importance of certain basic skills in obtaining a position with, and advancing in an organization. The faculty of business, public administration, and information systems are committed to student outcomes assessment and preparing students for their careers. As a result, minimum skill levels in written and verbal communication, quantitative analysis, information literacy, computer usage, professional behavior, and critical thinking are required of each student and will be evaluated periodically throughout the individual’s college career.

Dean
Karen R. Schmitt

Faculty
Jonathan F. Anderson
Associate Professor of Public Administration (J)

Mike Boyer
Assistant Professor of Law Science (J)
Kathy DiLorenzo  
Assistant Professor of Public Administration (J)

Janet L. Dye  
Professor of Accounting (J)

Steven L. Hamilton  
Assistant Professor of Business Administration (J)

Ronald Hulstein  
Assistant Professor of Accounting (J)

Yuliya V. Ivanova  
Assistant Professor of Management (J)

Mark W. Speece  
Associate Professor of Marketing (J)

Anselm Staack  
Assistant Professor of Accounting (J)

Robert Starbard  
Assistant Professor of Business Administration (J)

Rick Wolk  
Assistant Professor of Marketing and Entrepreneurship (J)

Business and Public Administration Degrees

Available in Juneau, Ketchikan, Sitka, and via Distance unless otherwise noted

Certificates
- Accounting Technician
- Small Business Management

Associate of Applied Science
- Business Administration
- Computer Information & Office Systems

Associate of Business
- Business Administration

Bachelor of Business Administration
Web-based only. With emphasis areas in:
- Accounting
- Entrepreneurship
- Health Care Administration
- Human Resources Management
- Marketing

Minors
- Business

Master of Business Administration
Web-based only

Master of Public Administration
Available in Juneau and Distance

Faculty

Patricia DeAngelis  
Assistant Professor of Information Systems (K)

H. Eve Dillingham  
Assistant Professor of Information Systems (J)

Susan Feero  
Assistant Professor of Information Systems (S)

Richard McDonald  
Assistant Professor of Information Systems (K)

Colleen McKenna  
Assistant Professor of Information Systems (J)

Tim Powers  
Associate Professor of Information Systems (J)

Computer Information and Office Systems Degrees

Available in Juneau, Ketchikan, Sitka, and via Distance unless otherwise noted

Occupational Endorsements

Computer Information and Office Systems
- Administrative Office Support
- Computer Applications
- Introductory Network Administration
- Medical Office Specialist
- Networking Essentials
- Programming Foundations
- Web Authoring
- Web Foundations

Certificates
- Computer Information and Office Systems

Associate Of Applied Science
- Computer Information and Office Systems

Minors
- Computer Information and Office Systems

Career Education

Career Education provides programs to meet the short-term training needs and long-term vocational, technical, and occupational needs of the residents of Southeast Alaska. These programs provide specific job-related skills for employment, lifelong learning opportunities, and professional advancement that enable graduates to function effectively in a technology-dependent society. Career Education includes programs in automotive,
diesel and hydraulics, construction, drafting/AutoCAD, building science, welding, law enforcement, environmental technology, fisheries technology, health information management, health sciences, marine transportation, pre-nursing qualifications, and pre-radiologic technology qualifications. Certificates and Associate of Applied Science (A.A.S.) degrees are offered in certain fields.

Career Education programs and courses provide students with employment skills for entry into the job market, industry-specific skill upgrade or retraining, occupational certifications, and preparation for license examinations.

Courses are delivered using a variety of teaching methods, including distance delivery through audio, video, Internet and printed materials. Vocational-technical laboratories provide students with state-of-the-art equipment comparable to what would be encountered in industry. To accommodate training needs of business and industry, some courses are compressed from meeting a few hours per week for a semester into day-long classes that may meet for more than a week. This arrangement allows students to complete course offerings in an abbreviated time period that may be more easily accommodated in a non-traditional student schedule.

Dean
Karen R. Schmitt

Faculty
Tim Anderson
Assistant Professor of Environmental Technology (S)

Mike Bell
Assistant Professor of Diesel Technology (J)

Steve Brandow
Assistant Professor of Welding (K)

Chuck Craig
Associate Professor of Diesel/Hydraulics (J)

Marquam George
Associate Professor of Construction Technology (J)

Robin Gilcrist
Assistant Professor of Construction Technology (J)

Leslie Gordon
Assistant Professor of Health Information (S)

Pat Hughes
Assistant Professor of Construction (S)

J.A. (Tony) Martin
Assistant Professor of Automotive Technology (J)

Diane Mille
Assistant Professor of Health Sciences (S)

Dale Miller
Assistant Professor of Marine Transportation (K)

Allen Puckett
Assistant Professor of Welding Technology (S)

Greg Reynolds
Assistant Professor of Construction (S)

Marianne Stillner
Assistant Professor of Nursing Education (J)

Kate Sullivan
Assistant Professor of Fisheries Technology (K)

Career Education Degrees

Occupational Endorsements
Construction Technology
- Residential/Light Construction (J)
- Residential Building Science (J)

Environmental Technology
- Wastewater Operations (S)
- Water Operations (S)

Power Technology
- Automotive Emphasis (J)
- Diesel/Heavy Duty Emphasis (J)
- Diesel/Marine Emphasis (J)
- Marine Engine Room Preparation (J)
- Marine Transportation (J)

Welding
- AWS Welding (K, S)

Certificates
- Automotive Technology (J)
- Community Wellness Advocate (D,S)
- Drafting Technology (J)
- Environmental Technology (D, S)
- Fisheries Technology (K)
- Healthcare Privacy (D,S)
- Health Information Management Coding Specialist (D, S)
- Law Enforcement (S)
- Pre-Engineering (J)
- Pre-Nursing Qualifications (J,K,S)
- Pre-Radiologic Technology Qualifications (J,K,S)
- Residential Building Science (J)
**Associate of Applied Science**

- Apprenticeship Technology (J, K, S)
- Construction Technology (J)
- Environmental Technology (S)
- Fisheries Technology (K)
- Health Information Management (D, S)
- Health Sciences (J, K, S)
- Power Technology with emphases in Automotive, Diesel or Marine Oiler (J)

**Education**

The School of Education (SOE) faculty’s mission is to identify, prepare, and strengthen effective teachers who will make sustained contributions to students and the education profession in rural and urban settings in Alaska and nationally. Our vision is that graduates will become informed, reflective, and responsive teachers within diverse classroom, school and community contexts.

While mastering competencies stated in the Alaska Standards for Teachers, students also demonstrate goals/outcomes that are at the core of SOE’s conceptual framework:

**Goal/Outcome 1:** Teachers articulate, maintain, and develop a philosophy of education that they also demonstrate in practice.

**Goal/Outcome 2:** Teachers understand how human development affects learning and apply that understanding to practice.

**Goal/Outcome 3:** Teachers differentiate instruction with respect for individual and cultural characteristics.

**Goal/Outcome 4:** Teachers possess current academic content knowledge.

**Goal/Outcome 5:** Teachers facilitate learning by using assessment to guide planning, instruction, and modification of teaching practice.

**Goal/Outcome 6:** Teachers create and manage a stimulating, inclusive and safe learning community in which students take intellectual risks and work independently and collaboratively.

**Goal/Outcome 7:** Teachers work as partners with parents, families and the community.

**Goal/Outcome 8:** Teachers develop and maintain professional, moral, and ethical attitudes, behaviors, relationships, and habits of mind.

**Goal/Outcome 9:** Teachers use technology effectively, creatively, and wisely.

**Teacher Education Accreditation**

The School of Education at the University of Alaska Southeast is accredited by the National Council for Accreditation of Teacher Education (NCATE), a performance-based teacher accrediting body for schools, colleges and departments of education (2110 Massachusetts Ave., NW, suite 500, Washington, DC 20036; phone (202) 466-7496). This accreditation covers initial and advanced teacher preparation programs. NCATE is recognized by the Alaska Department of Education and Early Development, the U.S. Department of Education and the Council for Higher Education Accreditation to accredit programs for the preparation of teachers and other professional school personnel.

**Education Programs**

Our programs place special emphasis on diverse needs of students, up-to-date technology and strong field-based experiences. Programs are available on the Juneau campus or are offered in Southeast Alaska and other parts of the state through distance delivery.

The education faculty emphasizes active, engaged learning that will result in reflective and critical thinking as opposed to passive listening, memorizing, and rote learning. Course work requires the application of theory into practice in field settings. UAS education graduates seeking employment have experienced successful placement throughout Alaska and the country. In addition, our advanced degree programs and Professional Education Center (PEC) offer a variety of opportunities for teachers to advance their learning and take leadership roles in their fields.

**Dean**

Larry B. Harris

**Faculty**

- Jill Burkert  
  Assistant Professor of Education (J)
- Thomas S. Duke  
  Associate Professor of Education (J)
- Virgil Fredenberg  
  Assistant Professor of Education (J)
- Marjorie Fields  
  Professor of Education, Emeritus (J)
- Marsha Gladhart  
  Assistant Professor of Education (J)
- Anne Jones  
  Associate Professor of Education (J)
W. Russell Jones J
Professor of Education, Emeritus (J)

Martin Laster
Assistant Professor of Education (J)

Jeffrey Lothrus
Associate Professor of Education (J)

David Marvel
Associate Professor of Education (J)

Kathrin McCarthy
Assistant Professor of Education (J)

Claude McMillan III
Assistant Professor of Education (J)

Jason Ohler
Professor of Education (J)

Lawrence Lee Oldaker
Professor of Education, Emeritus (J)

Katherine Spangler
Professor of Education (J)

Mary-Claire Tarlow
Associate Professor of Education (J)

Education Degrees
Available via distance except as noted.

Occupational Endorsement (National credentialing program)
- Child Development Associate Credential (CDA)

Certificate
- Early Childhood Education

Associate of Applied Science
- Early Childhood Education

Bachelor of Arts
- Elementary Education (J, D)

Master of Arts in Teaching
- Early Childhood Education (J, D)
- Elementary Education (D, J)
- Secondary Education (J, D)

Master of Education
- Early Childhood Education
- Educational Leadership
- Educational Technology Education
- Mathematics Education (K-8)
- Reading Specialist
- Special Education

Graduate Certificates
- Early Childhood Education
- Educational Technology
- Mathematics Elementary (K-8)
- Reading Specialist
- Special Education
- Elementary Education Certification
- Secondary Education Certification
OCCUPATIONAL ENDORSEMENTS

Occupational endorment (O.E.) are under 30 credit hours and will be posted to student transcripts upon completion as approved by the academic department.

Child Development Associate (CDA) O.E.

Occupational Endorsement
Juneau, Distance Delivery

The Child Development Associate (CDA) is the first step in the UAS early childhood education career ladder. The CDA credential is awarded by the Council for Early Childhood Professional Recognition based in Washington, D.C. The Council awards the credential based upon assessment of competency. UAS offers early childhood courses (one credit each) that prepare students to demonstrate the required competencies. These courses apply toward the Early Childhood Certificate and the A.A.S. degree in Early Childhood Education.

MINIMUM CREDIT HOURS 14

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ECE S109</td>
<td>CDA Assessment Preparation</td>
<td>1</td>
</tr>
<tr>
<td>ECE S112</td>
<td>Young Children and Health</td>
<td>1</td>
</tr>
<tr>
<td>ECE S113</td>
<td>Safe Learning Environment</td>
<td>1</td>
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<tr>
<td>ECE S114</td>
<td>Effective Learning Environment</td>
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<tr>
<td>ECE S121</td>
<td>Physical Development of Young Children</td>
<td>1</td>
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<tr>
<td>ECE S122</td>
<td>Young Children and Cognitive Development</td>
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<tr>
<td>ECE S123</td>
<td>Language and Literature Activities for Young Children</td>
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</tr>
<tr>
<td>ECE S124</td>
<td>Young Children and Creative Development</td>
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</tr>
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<td>ECE S125</td>
<td>Young Children and Families</td>
<td>1</td>
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<tr>
<td>ECE S132</td>
<td>Social Development for Young Children</td>
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</tr>
<tr>
<td>ECE S141</td>
<td>Classroom Management for Young Children</td>
<td>1</td>
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<tr>
<td>ECE S142</td>
<td>Counseling for Young Children</td>
<td>1</td>
</tr>
<tr>
<td>ECE S143</td>
<td>Developing Positive Self-Concepts in Young Children</td>
<td>1</td>
</tr>
<tr>
<td>ECE S171</td>
<td>Program Management</td>
<td>1</td>
</tr>
<tr>
<td>ECE S172</td>
<td>Professional Issues</td>
<td>1</td>
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</tbody>
</table>

An admitted UAS student holding a current CDA credential through non-college training will be awarded six semester hours of transfer equivalency credit for the following courses:

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>ECE S112</td>
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</tr>
<tr>
<td>ECE S113</td>
<td>Safe Learning Environment</td>
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Select one from the following (1 credit):

<table>
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<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
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<tr>
<td>ECE S171</td>
<td>Program Management</td>
<td>1</td>
</tr>
<tr>
<td>ECE S172</td>
<td>Professional Issues</td>
<td>1</td>
</tr>
</tbody>
</table>

and 3 other credits of approved ECE electives. These credits are non-transferable.

Computer Information and Office Systems O.E.

Occupational Endorsement
Juneau, Ketchikan, Sitka

The Information Systems department offers options in Administrative Office Support, Computer Applications, Introductory Network Administration, Medical Office Specialist, Networking Essentials, Programming Foundations, Web Authoring, and Web Foundations. These endorsements are intended to indicate competence in technical and professional courses and are articulated with the Certificates in Computer Information and Office Systems, the A.A.S. in Computer Information and Office Systems.

A comprehensive Computer Placement Test is available at the Testing Center to assess your current computer knowledge. A minimum grade of C is required in all CIOS courses. Some courses will be offered only by distance delivery. Due to the rapid change in technology the certificates in Computer Applications, Web Foundations, and Web Authoring must be completed in a maximum of three years.

Administrative Office Support
Juneau, Ketchikan, Sitka, Distance Delivery

Provides students with skills to serve as administrative office assistants.

MINIMUM CREDIT HOURS 20

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIOS S101</td>
<td>Computer Keyboarding and Formatting</td>
<td>3</td>
</tr>
<tr>
<td>CIOS S110A</td>
<td>Microcomputer Operating Systems, Part A</td>
<td>1</td>
</tr>
<tr>
<td>CIOS S125</td>
<td>Messaging and Scheduling Management</td>
<td>1</td>
</tr>
<tr>
<td>CIOS S132</td>
<td>Word Processing Concepts and Applications</td>
<td>3</td>
</tr>
<tr>
<td>CIOS S135</td>
<td>Using Spreadsheets in the Workplace</td>
<td>1</td>
</tr>
<tr>
<td>CIOS S140</td>
<td>Using Databases in the Workplace</td>
<td>1</td>
</tr>
<tr>
<td>CIOS S146A</td>
<td>Internet Concepts and Applications, Part A</td>
<td>1</td>
</tr>
<tr>
<td>CIOS S160</td>
<td>Business English</td>
<td>3</td>
</tr>
<tr>
<td>CIOS S264</td>
<td>Records Management</td>
<td>2</td>
</tr>
<tr>
<td>CIOS S294</td>
<td>Business or Networking Practicum</td>
<td>1</td>
</tr>
</tbody>
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Select one from the following (3 credits):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT S100</td>
<td>Record Keeping for a Small Business</td>
<td>3</td>
</tr>
<tr>
<td>ACCT S121</td>
<td>Introduction to Accounting</td>
<td>3</td>
</tr>
</tbody>
</table>
Computer Applications
Juneau, Ketchikan, Sitka, Distance Delivery
Provides students with skills to perform standard office automation tasks in business and organizations.

**MINIMUM CREDIT HOURS** 20

- CIOS S101A Computer Keyboarding and Formatting, Part A 1
- CIOS S110 Microcomputer Operating Systems 3
- CIOS S125 Messaging and Scheduling Management 1
- CIOS S132 Word Processing Concepts and Applications 3
- CIOS S146 Internet Concepts and Applications 3
- CIOS S151 Presentation Graphics Concepts and Applications 1
- CIOS S235 Spreadsheet Concepts and Applications 3
- CIOS S240 Database Concepts and Applications 3
- CIOS S250 Integrated Applications 1
- CIOS S__ Advisor-approved electives 1

Networking Essentials
Juneau, Ketchikan, Sitka
Provides students with Local Area Network setup and troubleshooting skills for network technician employment. Certificate is designed to offer complete coverage of objectives for CompTIA A+ and Network+, vendor neutral industry certificate exams.

**MINIMUM CREDIT HOURS** 20

- CIOS S110B Microcomputer Operating Systems, Part B 2
- CIOS S111 Microcomputer Concepts 2
- CIOS S118 Information System Mathematics 3
- CIOS S209 Hardware Concepts 3
- CIOS S210 Operating Systems 3
- CIOS S241 Introduction to Network and the OSI Reference Model 4
- CIOS S245 Computer Network Concepts and Administration 3

Introductory Network Administration
Juneau, Ketchikan, Sitka, Distance Delivery
Introduces students to design, implementation, and troubleshooting of Local Area Networks (LANs) and Wide Area Networks (WANs) within a corporation. Prepares students for Cisco Certified Network Associate (CCNA) certification.

**MINIMUM CREDIT HOURS** 22

- CIOS S118 Information System Mathematics 3
- CIOS S170 Programming I 3
- CIOS S241 Introduction to Networking and the OSI Reference Model 4
- CIOS S244 Internetwork Router Configuration and Design 4
- CIOS S247 Local Area Network Configuration and Design 4
- CIOS S248 Wide Area Network Configuration and Design 4

Programming Foundations
Juneau, Ketchikan, Sitka, Distance Delivery
Provides students with minimum skills to serve as entry-level application programmers.

**MINIMUM CREDIT HOURS** 21

- CIOS S118 Information System Mathematics 3
- CIOS S170 Programming I 3
- CIOS S240 Database Concepts and Applications 3
- CIOS S257 Advanced Web Site Design and Development 3
- CIOS S274 Data Structures and Algorithms 3
- CIOS S275 Programming in Java 3
- CIOS S279 Database Theory and SQL 3

Medical Office Specialist
Juneau, Ketchikan, Sitka, Distance Delivery
Provides students with skills to work as office assistant in a medical office.

**MINIMUM CREDIT HOURS** 20

- CIOS S101 Computer Keyboarding and Formatting 3
- CIOS S132 Word Processing Concepts and Applications 3
- CIOS S160 Business English 3
- CIOS S166 Medical Office Procedures 3
- CIOS S264 Records Management 2
- CIOS S294 Business or Networking Practicum 3
- HIM S135 Medical Terminology 3

Web Authoring
Juneau, Ketchikan, Sitka, Distance Delivery
Provides students with comprehensive web publishing skills leading to self-employment or introductory employment in the web publishing field.

**MINIMUM CREDIT HOURS** 20

- CIOS S170 Programming I 3
- CIOS S257 Advanced Web Site Design and Development 3
- CIOS S279 Database Theory and SQL 3
- CIOS S340 Database Driven Websites 3
- CIOS S__ Advisor-approved electives 8

Web Foundations
Juneau, Ketchikan, Sitka, Distance Delivery
Provides students with the knowledge skill and ability to design and build all necessary components of a non-commercial website.
MINIMUM CREDIT HOURS 20
CIOS S108 Graphic Design Fundamentals for Computer Applications 3
CIOS S118 Information System Mathematics 3
CIOS S146B Internet Concepts and Applications, Part B 2
CIOS S152 Digital Image Editing Concepts and Applications 3
CIOS S157 Web Site Graphics, Design and HTML 4
CIOS S240 Database Concepts and Applications 3
CIOS S___ Advisor-approved elective 2

Community Wellness Advocate O.E.

Occupational Endorsement
Sitka
Distance delivered in cooperation with Southeast Alaska Regional Health Consortium (SEARHC). Prepares students to deliver basic community health education in rural communities. Customized to reflect the needs of individual communities. Successful completion of this O.E. will provide students the basic requirements needed to become a Native Health Corporation health education employee, and will allow the student to continue working toward the completion of the Community Wellness Advocate certificate and the AAS in Health Sciences. Completion requires a grade of C or above in all three courses.

Admission Requirements
Students need a GED, high school diploma, or pass the ability to benefit test and faculty interview as part of the admission procedure.

MINIMUM CREDIT HOURS 12
HS S125 Public Health and Health Promotion 4
HS S126 Health Promotion through Behavior Change 4
HS S202 Community Health Promotion 4

Construction Technology O.E.

Occupational Endorsement
Juneau, Sitka

Residential/Light Construction
This endorsement gives a general overview of the industry and provides skill development opportunities. The endorsement is articulated with the A.A.S. degree in Construction Technology.

MINIMUM CREDIT HOURS 12
CT S120 Basic Construction Techniques 3
CT S201 Cold Climate Coastal Construction 3
CT S222 Building Construction I 3
CT S223 Building Construction II 3

Residential Building Science
This endorsement is for individuals interested in the dynamics and systems approach to residential building. The emphasis is teaching the essentials of diagnostic assessment and the issues of building durability, building performance, energy efficiency, and indoor air quality in residential buildings. Upon completion, participants will have the necessary skills for employment opportunities as State energy raters, weatherization assessors, home inspectors, or will have improved skills as building contractors, managers and appraisers.

MINIMUM CREDIT HOURS 24
CT S110 Where Health and Housing Meet 1
CT S165 Residential Building Technology 3
CT S185 Building Diagnostics and Testing 3
CT S201 Cold Climate Coastal Construction 3
CT S210 New Materials in Construction 1
CT S224 Mechanical Systems for Buildings 3
CT S285 Advanced Building Pressure Diagnostics 3
ENGL S111 Methods of Written Communication 3
PHYS S102 Survey of Physics 4

Environmental Technology O.E.

Occupational Endorsement
Sitka, Distance Delivery
The Environmental Technology program offers options in either Water Operations or Wastewater Operations. Both are designed for the entry-level operator and will provide the required knowledge for State of Alaska Level 1 operator certification. Students who complete these endorsements will be well qualified for operator positions. These endorsements articulate with the ENVT Certificate and the A.A.S. in Environmental Technology. All classes are offered via distance education, originating from the Sitka campus.

Wastewater Operations Emphasis

MINIMUM CREDIT HOURS 15
CIOS S135 Using Spreadsheets in the Workplace 1
ENVT S101 Introduction to Environmental Technology 3
ENVT S102 Applied Math for Water/Wastewater Operations 3
ENVT S111 Wastewater Systems 3
ENVT S211 Wastewater Treatment 3
ENVT S___ Advisor-approved elective 2
Water Operations Emphasis

**MINIMUM CREDIT HOURS** 15

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIOS S135</td>
<td>Using Spreadsheets in the Workplace</td>
<td>1</td>
</tr>
<tr>
<td>ENVT S101</td>
<td>Introduction to Environmental Technology</td>
<td>3</td>
</tr>
<tr>
<td>ENVT S102</td>
<td>Applied Math for Water/Wastewater Operations</td>
<td>3</td>
</tr>
<tr>
<td>ENVT S110</td>
<td>Drinking Water Systems</td>
<td>3</td>
</tr>
<tr>
<td>ENVT S210</td>
<td>Water Treatment</td>
<td>3</td>
</tr>
<tr>
<td>ENVT S___</td>
<td>Advisor-approved elective</td>
<td>2</td>
</tr>
</tbody>
</table>

Marine Transportation O.E.

**Occupational Endorsement**

**Ketchikan**

The Marine Transportation Occupational Endorsement provides training for mariners to advance in the wide variety of positions and vessels in the marine industry. The courses and instructor are US Coast Guard approved for testing in class and articulate with the AAS in Marine Transportation.

**MINIMUM CREDIT HOURS** 9

Advisor approved from the following (at least one course must be 200-level):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MT S129</td>
<td>Basic Safety Training**</td>
</tr>
<tr>
<td>MT S131</td>
<td>Seamanship*</td>
</tr>
<tr>
<td>MT S132</td>
<td>Basic Navigation &amp; Pilotage*</td>
</tr>
<tr>
<td>MT S225</td>
<td>Able Seaman*</td>
</tr>
<tr>
<td>MT S226</td>
<td>Ratings Forming Part of a Navigation Watch**</td>
</tr>
<tr>
<td>MT S228</td>
<td>Fast Rescue Boat**</td>
</tr>
<tr>
<td>MT S230</td>
<td>Proficient in Survival Craft**</td>
</tr>
<tr>
<td>MT S232</td>
<td>Radar Observer**</td>
</tr>
<tr>
<td>MT S238</td>
<td>U.S.C.G Regulations*</td>
</tr>
<tr>
<td>MT S240</td>
<td>Upgrade from 100 Ton to 200 Ton*</td>
</tr>
<tr>
<td>MT S242</td>
<td>Advanced Fire Fighting**</td>
</tr>
<tr>
<td>MT S282</td>
<td>Marine Transportation Lab</td>
</tr>
</tbody>
</table>

* USCG Approved for testing in class

** USCG Approved to meet the requirements of the international convention on Standards of Training, Certification and Watchkeeping (STCW) 95 for Seafarers.

Northwest Coast Art O.E.

**Occupational Endorsement**

**Juneau**

Options include weaving, basketry and carving. Please note that only courses taken at the 400 level are repeatable for academic credit. Check the course description in the back of the catalog for more information.

**MINIMUM CREDIT HOURS** 15

Select one emphasis from the following:

**Basketry Emphasis**

**MINIMUM CREDIT HOURS** 15

Select from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART S138</td>
<td>Natural Dye</td>
</tr>
<tr>
<td>ART S183</td>
<td>Northwest Coast Harvesting and Preparation of Basketry Materials</td>
</tr>
<tr>
<td>ART S282</td>
<td>Beginning Northwest Coast Basketry</td>
</tr>
<tr>
<td>ART S284</td>
<td>Northwest Coast Basket Design</td>
</tr>
<tr>
<td>ART S382</td>
<td>Intermediate Northwest Coast Basketry</td>
</tr>
<tr>
<td>ART S482</td>
<td>Advanced Northwest Coast Basketry</td>
</tr>
</tbody>
</table>

And other approved basketry courses

**Carving Emphasis**

**MINIMUM CREDIT HOURS** 15

Select from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART S189</td>
<td>Northwest Coast Toolmaking</td>
</tr>
<tr>
<td>ART S285</td>
<td>Beginning Northwest Coast Carving</td>
</tr>
<tr>
<td>ART S385</td>
<td>Intermediate Northwest Coast Carving</td>
</tr>
<tr>
<td>ART S485</td>
<td>Advanced Northwest Coast Carving</td>
</tr>
</tbody>
</table>

And other approved carving courses

**Weaving Emphasis**

**MINIMUM CREDIT HOURS** 15

Select from the following (15 credits total):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART S116</td>
<td>Fiber Arts-Spinning</td>
</tr>
<tr>
<td>ART S138</td>
<td>Natural Dye</td>
</tr>
<tr>
<td>ART S286</td>
<td>Beginning Northwest Coast Woolen Weaving</td>
</tr>
<tr>
<td>ART S386</td>
<td>Intermediate NW Coast Woolen Weaving</td>
</tr>
</tbody>
</table>

And other approved weaving courses

Power Technology O.E.

**Occupational Endorsements**

**Juneau**

Options include Automotive, Diesel/Heavy Duty, and Diesel/Marine with an option for engine room preparation. Each provides technical courses in the appropriate specialty. Students must earn a 2.0 GPA in the overall program. These occupational endorsements articulate with the A.A.S. in Power Technology.
## Automotive Emphasis

**MINIMUM CREDIT HOURS**: 23

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO S102</td>
<td>Introduction to Automotive Technology</td>
<td>3</td>
</tr>
<tr>
<td>AUTO S121</td>
<td>Auto Electrical I</td>
<td>3</td>
</tr>
<tr>
<td>AUTO S122</td>
<td>Engine Performance I</td>
<td>3</td>
</tr>
<tr>
<td>AUTO S131</td>
<td>Auto Electrical II</td>
<td>3</td>
</tr>
<tr>
<td>AUTO S152</td>
<td>Brake Systems</td>
<td>4</td>
</tr>
<tr>
<td>AUTO S160</td>
<td>Manual Drive Train and Axles</td>
<td>3</td>
</tr>
<tr>
<td>AUTO S162</td>
<td>Suspension and Alignment</td>
<td>4</td>
</tr>
</tbody>
</table>

## Diesel/Heavy Duty Emphasis

**MINIMUM CREDIT HOURS**: 27

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DESL S110</td>
<td>Diesel Engines</td>
<td>6</td>
</tr>
<tr>
<td>DESL S125</td>
<td>Hydraulics</td>
<td>3</td>
</tr>
<tr>
<td>DESL S130</td>
<td>Refrigeration and Air Conditioning</td>
<td>2</td>
</tr>
<tr>
<td>DESL S171</td>
<td>Heavy Duty Electrical Systems</td>
<td>3</td>
</tr>
<tr>
<td>DESL S180</td>
<td>AC Power Generation</td>
<td>3</td>
</tr>
<tr>
<td>DESL S250</td>
<td>Heavy Duty Brakes and CDL Preparation</td>
<td>2</td>
</tr>
<tr>
<td>DESL S255</td>
<td>Heavy Duty Suspension and Alignment</td>
<td>2</td>
</tr>
<tr>
<td>DESL S260</td>
<td>Heavy Duty Power Trains</td>
<td>3</td>
</tr>
<tr>
<td>WELD S120</td>
<td>Basic Welding I</td>
<td>3</td>
</tr>
</tbody>
</table>

## Diesel/Marine Emphasis

**MINIMUM CREDIT HOURS**: 28

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DESL S110</td>
<td>Diesel Engines</td>
<td>6</td>
</tr>
<tr>
<td>DESL S125</td>
<td>Hydraulics</td>
<td>3</td>
</tr>
<tr>
<td>DESL S130</td>
<td>Refrigeration and Air Conditioning</td>
<td>2</td>
</tr>
<tr>
<td>DESL S171</td>
<td>Heavy Duty Electrical Systems</td>
<td>3</td>
</tr>
<tr>
<td>DESL S180</td>
<td>AC Power Generation</td>
<td>3</td>
</tr>
<tr>
<td>DESL S261</td>
<td>Marine Auxiliary Systems</td>
<td>3</td>
</tr>
<tr>
<td>DESL S262</td>
<td>Marine Auxiliary Systems Lab</td>
<td>2</td>
</tr>
<tr>
<td>DESL S263</td>
<td>Marine Transmissions</td>
<td>3</td>
</tr>
<tr>
<td>WELD S120</td>
<td>Basic Welding I</td>
<td>3</td>
</tr>
</tbody>
</table>

## Marine Engine Room Preparation Emphasis

**MINIMUM CREDIT HOURS**: 28

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>DESL S110</td>
<td>Diesel Engines</td>
<td>6</td>
</tr>
<tr>
<td>DESL S130</td>
<td>Refrigeration and Air Conditioning</td>
<td>2</td>
</tr>
<tr>
<td>DESL S161</td>
<td>Applied Marine Hydraulics</td>
<td>1</td>
</tr>
<tr>
<td>DESL S171</td>
<td>Heavy Duty Electrical Systems</td>
<td>3</td>
</tr>
<tr>
<td>DESL S180</td>
<td>AC Power Generation</td>
<td>3</td>
</tr>
<tr>
<td>DESL S261</td>
<td>Marine Auxiliary Systems</td>
<td>3</td>
</tr>
<tr>
<td>DESL S262</td>
<td>Marine Auxiliary Systems Lab</td>
<td>2</td>
</tr>
<tr>
<td>DESL S263</td>
<td>Marine Transmissions</td>
<td>3</td>
</tr>
<tr>
<td>MT S129</td>
<td>Basic Safety Training</td>
<td>2</td>
</tr>
<tr>
<td>WELD S120</td>
<td>Basic Welding I</td>
<td>3</td>
</tr>
</tbody>
</table>

## AWS Welding O.E.

### Occupational Endorsement

**Ketchikan, Sitka**

These occupational endorsements (O.E.) are based upon the American Welding Society Endorsed National Center for Construction Education and Research (NC-CER). The mission of the AWS Welding O.E. is to prepare students to meet the need for industrial applications and welding in the workplace.

### AWS Entry Level Welder

**MINIMUM CREDIT HOURS**: 18

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD S160</td>
<td>Welding Orientations Lab</td>
<td>3</td>
</tr>
<tr>
<td>WELD S161</td>
<td>Welding Preparations, Quality, and Oxyfuel Cutting</td>
<td>3</td>
</tr>
<tr>
<td>WELD S162</td>
<td>Shielded Metal Arc Welding Basics</td>
<td>3</td>
</tr>
<tr>
<td>WELD S163</td>
<td>Shielded Metal Arc Welding Groove Welds</td>
<td>3</td>
</tr>
<tr>
<td>WELD S164</td>
<td>Shielded Metal Arc Welding Open V-Groove</td>
<td>3</td>
</tr>
<tr>
<td>WELD S165</td>
<td>Shielded Metal Arc Welding Open-Root Pipe</td>
<td>3</td>
</tr>
</tbody>
</table>

### AWS Advanced Welder

**MINIMUM CREDIT HOURS**: 12

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD S260</td>
<td>Introduction to Advanced Welding Techniques</td>
<td>3</td>
</tr>
<tr>
<td>WELD S261</td>
<td>Gas Metal Arc Welding</td>
<td>3</td>
</tr>
<tr>
<td>WELD S262</td>
<td>Flux Cored Arc Welding</td>
<td>3</td>
</tr>
<tr>
<td>WELD S263</td>
<td>Gas Tungsten Arc Welding</td>
<td>3</td>
</tr>
</tbody>
</table>

#### ELECTIVES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD S264</td>
<td>Gas Tungsten Arc Welding Aluminum</td>
<td>3</td>
</tr>
<tr>
<td>WELD S265</td>
<td>Shielded Metal Arc Welding Stainless Steel</td>
<td>3</td>
</tr>
</tbody>
</table>
CERTIFICATES

Certificates are programs of one year length for full-time students. Certificates require 9 credits of general requirements be completed as well as major requirements for a minimum of 30 credits. Requirements for the certificates may be articulated with the associate of applied science degrees. Contact an advisor for assistance in planning a program of study and choosing appropriate courses.

Accounting Technician Certificate

Juneau, Ketchikan, Sitka, Distance Delivery

The accounting certificate program is designed to provide intensive training for accounting occupations. Skills gained are job-entry in nature.

MINIMUM CREDIT HOURS 30

GENERAL REQUIREMENTS

Written and Oral Communication Skills

Select one from the following (3 credits):

ENGL S111 Methods of Written Communication 3
CIOS S160 Business English 3
COMM S111 Fundamentals of Oral Communication* 3

*Grade C or better

Computational Skills

Select one from the following (3-4 credits):

CIOS S116 Business Mathematics 3
MATH S105 Intermediate Algebra (or higher MATH course) 3-4

Other Skills

Select one from the following (3 credits):

BA S201 Introduction to Management and Supervision 3
CIOS S262 Professional Development 3
PSY S101 Introduction to Psychology 3
PSY S153 Human Relations 3

PROGRAM REQUIREMENTS 21

ACCT S222 Computer Automated Accounting 3
BA S151 Introduction to Business (or advisor-approved business course) 3
CIOS S235 Spreadsheet Concepts and Applications 3
CIOS ___ Advisor-approved CIOS elective 3
___ S___ Advisor-approved elective 3

Select two from the following (6 credits):

ACCT S121 Introduction to Accounting I 3
ACCT S122 Introduction to Accounting II 3
ACCT S201 Principles of Financial Accounting 3
ACCT S202 Principles of Managerial Accounting 3

Automotive Technology Certificate

Juneau

The Automotive Technology Certificate program is designed to prepare individuals to secure entry level employment in positions requiring basic technical skills. Successful completion can lead to employment in automobile dealerships, fleet service operations, national chain automotive service stores, or franchise and independent repair shops. Students expecting to gain employment in this industry will need a valid driver's license with a good driving record, and a personal tool box meeting industry standards (contact department for details).

Admission Requirements

Students will be admitted to the Automotive Technology Certificate program when they have met the following requirements:

1. Submission of a resume of work experiences and a letter stating why the individual wants to become an automotive technician.
2. Completion of a pre-admission interview.

MINIMUM CREDIT HOURS 33

GENERAL REQUIREMENTS

Written Communication Skills

ENGL S111 Methods of Written Communication 3

Oral Communication Skills

Select one from the following (3 credits):

COMM S111 Fundamentals of Oral Communications* 3
COMM S235 Small Group Communication and Team Building* 3
COMM S237 Interpersonal Communication* 3
COMM S241 Public Speaking* 3

*Grade C or better

Computational Skills

MATH S105 Intermediate Algebra (or higher) 4
Community Wellness Advocate Certificate

**Sitka, Distance Delivery**

The Community Wellness Advocate (CWA) Certificate is an innovative distance-delivered program offered in cooperation with the Southeast Alaska Regional Health Consortium. The CWA certificate prepares students to provide community-based health promotion and disease prevention services that reflect the needs of their community. Students who successfully complete this program are prepared to work as part of an overall health promotion team in tribal health and wellness programs or non-profit agencies and are especially well-suited to deliver responsive nutrition education to meet growing health issues in Alaska (diabetes, heart disease and cancer). Specialty tracks include: Nutrition, Injury Prevention.

**Admission Requirements**

Students need a GED and or high school diploma or pass the ability to benefit test and must complete English and Computer placement exams as part of the admission procedure.

| MINIMUM CREDIT HOURS | 32 |

**GENERAL REQUIREMENTS**

<table>
<thead>
<tr>
<th>Written Communication Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL S110 Introduction to College Writing</td>
</tr>
<tr>
<td>Oral Communication Skills</td>
</tr>
<tr>
<td>Select one from the following (3 credits):</td>
</tr>
<tr>
<td>COMM S111 Fundamentals of Oral Communication*</td>
</tr>
<tr>
<td>COMM S235 Small Group Communication and Team Building*</td>
</tr>
<tr>
<td>COMM S237 Interpersonal Communication*</td>
</tr>
<tr>
<td>COMM S241 Public Speaking*</td>
</tr>
<tr>
<td>*Grade C or better</td>
</tr>
</tbody>
</table>

**Computer Skills**

| CIOS S105 Computer Literacy | 3 |

**PROGRAM REQUIREMENTS**

| HS S125 Public Health and Health Promotion | 4 |
| HS S126 Health Promotion through Behavior Change | 4 |
| HS S202 Community Health Promotion | 4 |

Computer Information and Office Systems Certificate

**Juneau, Ketchikan, Sitka, Distance Delivery**

This certificate prepares individuals to secure entry-level employment in positions requiring information technology and administrative support skills. Basic computing skills are required to begin coursework. A comprehensive Computer Placement Test is available at the Testing Center to assess your current computer knowledge. A minimum grade of C is required in all CIOS courses.

| MINIMUM CREDIT HOURS | 30 |

**GENERAL REQUIREMENTS**

<table>
<thead>
<tr>
<th>Written Communication Skills</th>
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<tbody>
<tr>
<td>ENGL S111 Methods of Written Communication</td>
</tr>
<tr>
<td>Select one from the following (3 credits):</td>
</tr>
<tr>
<td>ENGL S211 Intermediate Composition: Writing About Literature</td>
</tr>
<tr>
<td>ENGL S212 Technical Report Writing</td>
</tr>
<tr>
<td>or both</td>
</tr>
<tr>
<td>CIOS S160 Business English</td>
</tr>
<tr>
<td>CIOS S260 Business Communications</td>
</tr>
</tbody>
</table>

**Computational Skills**

| CIOS S118 Information System Mathematics | 3 |

**Other Skills**

| CIOS S262 Professional Development | 3 |

**PROGRAM REQUIREMENTS**

| Select one from the following Occupational Endorsements: |
| Administrative Office Support |
| Computer Applications |
| Introductory Network Administration |
| Medical Office Specialist |
| Networking Essentials |
| Programming Foundations |
| Web Authoring |
| Web Foundations | 20-22 |
Drafting Technology Certificate

Juneau

Courses combine the technical information and hands-on experience necessary for work in a variety of drafting fields. Students gain hands-on training in construction, and develop job ready skills with conventional drawing techniques and computer-aided drafting. Development of skills in mathematics, drawing and lettering, architectural concepts, design and construction techniques.

**MINIMUM CREDIT HOURS** 34

**GENERAL EDUCATION REQUIREMENTS** 10

Written Communication Skills
ENGL S111 Methods of Written Communication 3

Oral Communication Skills
Select one from the following (3 credits):
COMM S111 Fundamentals of Oral Communication* 3
COMM S235 Small Group Communication and Team Building* 3
COMM S237 Interpersonal Communication* 3

*Grade C or better

Computational Skills
MATH S105 Intermediate Algebra (or higher) 4

**PROGRAM REQUIREMENTS** 24

CT S120 Basic Construction Techniques 3
CT S150 Basic Drafting 3
CT S160 House Planning and Architectural Design 3
CT S175 Introduction to AutoCAD 3
CT S181 Intermediate AutoCAD 3
CT S201 Cold Climate Coastal Construction 3
CT S250 Building Codes and Standards 3
CT S252 Construction Documentation 3

<table>
<thead>
<tr>
<th>MINIMUM CREDIT HOURS</th>
<th>31</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE S101</td>
<td>Introduction to the Early Childhood Profession 3</td>
</tr>
<tr>
<td>ECE S105</td>
<td>Developmentally Appropriate Practices 1</td>
</tr>
<tr>
<td>ECE S111</td>
<td>Nutrition for Young Children 1</td>
</tr>
<tr>
<td>ECE S112</td>
<td>Young Children and Health 1</td>
</tr>
<tr>
<td>ECE S113</td>
<td>Safe Learning Environment 1</td>
</tr>
<tr>
<td>ECE S114</td>
<td>Effective Learning Environment 1</td>
</tr>
<tr>
<td>ECE S121</td>
<td>Physical Development of Young Children 1</td>
</tr>
<tr>
<td>ECE S122</td>
<td>Young Children and Cognitive Development 1</td>
</tr>
<tr>
<td>ECE S123</td>
<td>Language and Literature Activities for Young Children 1</td>
</tr>
<tr>
<td>ECE S124</td>
<td>Young Children and Creative Development 1</td>
</tr>
<tr>
<td>ECE S125</td>
<td>Math Activities for Young Children 1</td>
</tr>
<tr>
<td>ECE S130</td>
<td>Culture, Learning and the Young Child 2</td>
</tr>
<tr>
<td>ECE S132</td>
<td>Young Children and Families 1</td>
</tr>
<tr>
<td>ECE S141</td>
<td>Classroom Management for Young Children 1</td>
</tr>
<tr>
<td>ECE S142</td>
<td>Social Development for Young Children 1</td>
</tr>
<tr>
<td>ECE S143</td>
<td>Developing Positive Self–Concepts in Young Children 1</td>
</tr>
<tr>
<td>ECE S171</td>
<td>Program Management 1</td>
</tr>
<tr>
<td>ECE S172</td>
<td>Professional Issues 1</td>
</tr>
<tr>
<td>ECE S173</td>
<td>Reflective Teaching 1</td>
</tr>
<tr>
<td>ECE S220</td>
<td>Infant and Toddler Care 3</td>
</tr>
<tr>
<td>ECE S230</td>
<td>Introduction to the Children with Special Needs 3</td>
</tr>
<tr>
<td>ECE S245</td>
<td>Early Childhood Development 3</td>
</tr>
</tbody>
</table>

Environmental Technology Certificate

**Sitka, Distance Delivery**

This certificate program emphasizes technical operations. Students successfully completing this program qualify for the State of Alaska Level 1 operator certification and meet educational requirements for Level 1 certification in Water Treatment, Water Distribution, Wastewater Collection, and Wastewater Treatment. Students may also qualify for entry-level employment in water/wastewater utilities or as environmental technicians. The certificate also contains the first year of course work required for the Associate of Applied Science Degree in Environmental Technology.

**MINIMUM CREDIT HOURS** 31

**GENERAL REQUIREMENTS** 9–10

Written Communication Skills
ENGL S111 Methods of Written Communication 3

Computational Skills
Select one from the following (3-4 credits):
ENV T S102 Applied Mathematics for Water/Wastewater Operations 3
MATH S105 Intermediate Algebra 4

Social Science Skills
SOC S102 Science, Technology and Society 3

*ENVT S102 meets Certificate requirements only. MATH S105 is required for the Associate Degree and is recommended for students who wish to proceed to degree completion.*
### Fishery Technology Certificate

**Ketchikan, Distance Delivery**

This program is articulated with the A.A.S. in Fisheries Technology and is intended to offer students practical skills and knowledge to enter careers in fisheries technology. Students may elect a certificate with a fish culture or fisheries management emphasis. The Certificate requires 3 credit hours of internship.

#### Fish Culture Emphasis

<table>
<thead>
<tr>
<th>MINIMUM CREDIT HOURS</th>
<th>32</th>
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</thead>
<tbody>
<tr>
<td><strong>GENERAL REQUIREMENTS</strong></td>
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</tr>
<tr>
<td>Written and Oral Communication Skills</td>
<td></td>
</tr>
<tr>
<td>Select one from the following (3 credits):</td>
<td></td>
</tr>
<tr>
<td><strong>ENGL S111</strong> Methods of Written Communication</td>
<td>3</td>
</tr>
<tr>
<td><strong>ENGL S212</strong> Technical Report Writing</td>
<td>3</td>
</tr>
<tr>
<td><strong>COMM S111</strong> Fundamentals of Oral Communication*</td>
<td>3</td>
</tr>
<tr>
<td><strong>COMM S235</strong> Small Group Communication and Team Building*</td>
<td>3</td>
</tr>
<tr>
<td>*Grade C or better</td>
<td></td>
</tr>
<tr>
<td>Computational Skills</td>
<td></td>
</tr>
<tr>
<td>Select one from the following (4 credits):</td>
<td></td>
</tr>
<tr>
<td><strong>MATH S105</strong> Intermediate Algebra</td>
<td>4</td>
</tr>
<tr>
<td><strong>MATH S107</strong> College Algebra</td>
<td>4</td>
</tr>
<tr>
<td><strong>STAT S107</strong> Survey of Statistics</td>
<td>4</td>
</tr>
<tr>
<td>Science Skills</td>
<td></td>
</tr>
<tr>
<td>Select one from the following (4 credits):</td>
<td></td>
</tr>
<tr>
<td><strong>BIOL S103</strong> Biology and Society</td>
<td>4</td>
</tr>
<tr>
<td><strong>BIOL S104</strong> Natural History of Alaska</td>
<td>4</td>
</tr>
<tr>
<td><strong>BIOL S105</strong> Fundamentals of Biology I</td>
<td>4</td>
</tr>
<tr>
<td><strong>BIOL S106</strong> Fundamentals of Biology II</td>
<td>4</td>
</tr>
<tr>
<td><strong>CHEM S103</strong> Introduction to General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td><strong>ENVS S101</strong> Introduction to Environmental Science</td>
<td>4</td>
</tr>
<tr>
<td><strong>PROGRAM REQUIREMENTS</strong></td>
<td>21</td>
</tr>
<tr>
<td><strong>FT S120</strong> Fisheries of Southeast Alaska</td>
<td>3</td>
</tr>
<tr>
<td><strong>FT S122</strong> Fin Fish Culture I</td>
<td>3</td>
</tr>
<tr>
<td><strong>FT S222</strong> Fin Fish Culture II</td>
<td>3</td>
</tr>
<tr>
<td><strong>FT S273</strong> Fundamentals of Fisheries Biology</td>
<td>4</td>
</tr>
<tr>
<td><strong>FT S291</strong> Fisheries Technology Internship</td>
<td>3</td>
</tr>
<tr>
<td>Select one from the following (1 credit):</td>
<td></td>
</tr>
<tr>
<td><strong>CIOS S135</strong> Using Spreadsheets in the Workplace</td>
<td>1</td>
</tr>
<tr>
<td><strong>CIOS S140</strong> Using Databases in the Workplace</td>
<td>1</td>
</tr>
</tbody>
</table>

### Fisheries Management Emphasis

<table>
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</tr>
</tbody>
</table>

## Health Information Management Coding Specialist Certificate

**Sitka, Distance Delivery**

An area of HIM specifically focused on coding/classifications systems at both the inpatient and outpatient level. The certificate will allow students to obtain entry-level skills in healthcare coding and the opportunity to continue to earn an associate of applied science degree. National credentialing exams are available at both the entry and advanced level.
MINIMUM CREDIT HOURS 30

GENERAL REQUIREMENTS 13

Written Communication Skills
ENGL S111 Methods of Written Communication 3

Science Skills
BIOL S111 Anatomy and Physiology I 4
BIOL S112 Anatomy and Physiology II 4

Computer Skills
CIOS S105 Computer Literacy 3

PROGRAM REQUIREMENTS 17

HIM S135 Medical Terminology 3
HIM S190 CPT Coding 3
HIM S210 ICD-9-CM Coding 3
HIM S215 Billing and Reimbursement 2
HIM S260 Data Quality and Reimbursement 2
HIM S270 Pathology 3
HIM S271 Pharmacology 1

Healthcare Privacy Certificate

Sitka, Distance Delivery

This distance-delivered Healthcare Privacy Certificate prepares students for employment in data access and disclosure. Students who complete this program are prepared to work in a variety of employment settings, particularly in healthcare related facilities. This certificate contains coursework that will apply toward the Associate of Applied Science degree in Health Information Management (HIM).

Admission Requirements

High school diploma or GED, and must complete English placement exam as part of the admissions process.

MINIMUM CREDIT HOURS 30

GENERAL REQUIREMENTS 9

Written Communication Skills
ENGL S111 Methods of Written Communication 3

Oral Communication Skills
COMM S235 Small Group Communication and Team Building* 3
*Grade C or better

Other Skills
ODS S193 Wilderness First Responder 4
ODS S206 Outdoor Leadership 3
PHIL S271 Perspectives on the Natural World 3

Additional courses may be needed to prepare students to complete required courses.

PROGRAM REQUIREMENTS 21

Select from the following (21 credits total):
ODS S114 Backpacking in SE Alaska 1
ODS S115 Winter Backpacking in SE Alaska 1
ODS S116 Introduction to Rock Climbing 1
ODS S117 Introduction to Ice Climbing 1
ODS S118 Avalanche Evaluation and Theory-Level I 2
ODS S133 Introduction to Sea Kayaking 1
ODS S148 Backcountry Skiing and Snowboarding 1

[80]
Pre-Engineering Certificate

Juneau

This certificate will start the student toward a Bachelor of Science in Engineering (BSE) and will facilitate transfer to an engineering program of their choice in their second year of a four year curriculum in engineering. The certificate coursework concentration is on mathematics, science and general education requirements. Three pre-engineering certificate pathways are available with basic requirements that span the foundations of engineering disciplines. Pre-engineering certificate students select courses for a specialization track that best suits their needs.

Computer Systems Engineering Emphasis

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.

MINIMUM CREDIT HOURS 30

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL S111</td>
<td>Methods of Written Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENGL S212</td>
<td>Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>COMM S111</td>
<td>Fundamentals of Oral Communication</td>
<td>3</td>
</tr>
<tr>
<td>MATH S200</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH S201</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM S105</td>
<td>General Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CIOS S170</td>
<td>Programming Fundamentals</td>
<td>4</td>
</tr>
<tr>
<td>ENGR S151</td>
<td>Engineering Practices I</td>
<td>3</td>
</tr>
<tr>
<td>ENGR S161</td>
<td>Engineering Practices II</td>
<td>3</td>
</tr>
</tbody>
</table>

Electrical Engineering Emphasis

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.

MINIMUM CREDIT HOURS 30

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>ENGL S111</td>
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<td>ENGL S212</td>
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<td>MATH S201</td>
<td>Calculus II</td>
<td>4</td>
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<tr>
<td>CHEM S105</td>
<td>General Chemistry I</td>
<td>4</td>
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<tr>
<td>CHEM S106</td>
<td>General Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>ENGR S151</td>
<td>Engineering Practices I</td>
<td>3</td>
</tr>
<tr>
<td>ENGR S161</td>
<td>Engineering Practices II</td>
<td>3</td>
</tr>
</tbody>
</table>

Pre-Nursing Qualifications Certificate

Juneau, Ketchikan, Sitka

The Certificate in Pre-Nursing Qualifications (CPNQ) prepares students to enter most professional nursing programs. It includes GER options in communication, computation and human relations. The certificate includes pre and co-requisite courses needed for successful application to most AAS and BSN nursing programs. Completion of this certificate is not a guarantee of entry into any particular professional nursing program. Students interested in nursing are urged to consult with a Health Sciences advisor early-on in order to ensure efficient sequencing of the courses.

Admission Requirements

Students can be admitted to the CPNQ program after successfully completing or testing out of MATH S055 and ENG S110 and submitting an application for program admission. At the time of admission students are assigned a Health Sciences Advisor.

Degree Requirements

The CPNQ includes 14 courses, yielding a minimum of 49 credits. At least 9 credits must be taken at UAS. A minimum grade of C is required in all courses.
MINIMUM CREDIT HOURS  49
GENERAL REQUIREMENTS  19
Written Communication Skills
ENG S111 Methods of Written Communication  3
Select one from the following (3 credits):
ENG S211 Intermediate Composition: Writing About Literature  3
ENG S212 Technical Report Writing  3
Oral Communication Skills
Select one from the following (3 credits):
COMM S111 Fundamentals of Oral Communication  3
COMM S235 Small Group Communication & Team Building  3
COMM S237 Interpersonal Communication  3
Computational Skills
MATH S105 Intermediate Algebra (or higher)  4
Social Sciences
Select two from the following (6 credits):
ANTH S101 Introduction to Anthropology  3
ANTH S202 Cultural Anthropology  3
PSY S101 Introduction to Psychology  3
SOC S101 Introduction to Sociology  3
PROGRAM REQUIREMENTS  30-35
BIOL S111 Human Anatomy & Physiology I  4
BIOL S112 Human Anatomy & Physiology II  4
BIOL S240 Introduction to Microbiology  4
CHEM S103 Introduction to General Chemistry  4
CHEM S104 Survey of Organic and Biochemistry  4
HS S203 Science of Nutrition  3
PSY S250 Lifespan Development  3
Select one from the following (4-9 credits):
HS S103 Personal Care Attendant Training  4
HS S104 PCA to CNA Bridge  4
HS S105 Certified Nurse Aide Training  9
HS S119 Emergency Medical Technician I  6

Pre-Radiologic Technology Qualifications Certificate
Juneau, Ketchikan, Sitka
Prepares students to enter professional medical imaging programs and to sit for the national radiologic technology exam. Includes a base in the university GER options and includes all pre-requisites needed for completion of most Associate of Applied Science (A.A.S.) degrees in Radiologic Technology programs. Designed to fit into the UAS A.A.S. in Health Sciences. Exceeds minimum requirements for the UAA A.A.S. in Radiologic Technology degree program. Completion of the certificate does not guarantee acceptance into a medical imaging program. Students are urged to consult a Health Sciences advisor before beginning this certificate program.
Admission Requirements
Completed application for admission to the Health Sciences program with CPRTQ declaration.

Program Requirements
Requires at least 11 classes, yielding a minimum of 35 credits of which 16 are GERs. At least 9 credits must be taken at UAS. A minimum grade of C is required in all courses.
MINIMUM CREDIT HOURS  35
GENERAL REQUIREMENTS  15
Written Communication Skills
ENGL S111 Methods of Written Communication  3
Select one from the following (3 credits):
ENGL S211 Intermediate Composition: Writing About Literature  3
ENGL S212 Technical Report Writing  3
Oral Communication Skills
Select one from the following (3 credits):* 
COMM S111 Fundamentals of Oral Communication  3
COMM S235 Small Group Communication and Team Building  3
COMM S237 Interpersonal Communication  3
*Grade C or better
Computational Skills
MATH S105 Intermediate Algebra (or higher)  4
Social Sciences
Select one from the following (3 credits):
PSY S101 Introduction to Psychology  3
PSY S250 Lifespan Development  3
PROGRAM REQUIREMENTS  20-23
BIOL S111 Human Anatomy and Physiology I  4
BIOL S112 Human Anatomy and Physiology II  4
HS S135 Medical Terminology  3
HS S141 Introduction to Radiologic Technology and Patient Care*  3
HS S150 Radiation Protection for Non-imaging Professionals*  3
HS S151 Medical Imaging Physics*  3
Optional:
PHYS S102 Survey of Physics  3
*See advisor before registering

Residential Building Science Certificate
Juneau
This certificate is for individuals interested in the dynamics and systems approach to residential building. The program emphasis is teaching the essentials of diagnostic assessment and the issues of building durability, building performance, energy efficiency, and indoor air quality in residential buildings. Upon completion of this program, participants will have the necessary skills for employment opportunities as State energy raters, weatherization assessors, home inspectors or will have improved skills as building contractors, managers and appraisers.
### Small Business Management Certificate

**Juneau, Ketchikan, Sitka**

The one-year Small Business Management certificate enables the student to explore business career options and gives entry-level job or upgrade skills for employment advancement. It may also be the first year of training towards the two-year Associate of Applied Science in Business Administration. The Small Business Management curriculum is designed to provide education in business theory and practical applications necessary for owners, managers, and employees of small business firms. Students develop both the technical and human relations skills necessary to succeed in today’s competitive business environment.

#### MINIMUM CREDIT HOURS

<table>
<thead>
<tr>
<th>Category</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MINIMUM CREDIT HOURS</strong></td>
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<tr>
<td><strong>GENERAL REQUIREMENTS</strong></td>
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<tr>
<td>Written Communication Skills</td>
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</tr>
<tr>
<td>Select one from the following (3 credits):</td>
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</tr>
<tr>
<td>ENGL S111 Methods of Written Communication</td>
<td>3</td>
</tr>
<tr>
<td>CIOS S260 Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>Oral Communication Skills</td>
<td></td>
</tr>
<tr>
<td>Select one from the following (3 credits):</td>
<td></td>
</tr>
<tr>
<td>COMM S111 Fundamentals of Oral Communication*</td>
<td>3</td>
</tr>
<tr>
<td>COMM S237 Small Group Communication and Team Building*</td>
<td>3</td>
</tr>
<tr>
<td>COMM S237 Interpersonal Communication*</td>
<td>3</td>
</tr>
<tr>
<td>COMM S241 Public Speaking*</td>
<td>3</td>
</tr>
<tr>
<td>*Grade C or better</td>
<td></td>
</tr>
<tr>
<td>Computational Skills</td>
<td></td>
</tr>
<tr>
<td>Select one from the following (3 credits):</td>
<td></td>
</tr>
<tr>
<td>CIOS S116 Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MATH S105 Intermediate Algebra or higher MATH course</td>
<td>3</td>
</tr>
<tr>
<td><strong>PROGRAM REQUIREMENTS</strong></td>
<td>21</td>
</tr>
<tr>
<td>BA S166 Small Business Management</td>
<td>3</td>
</tr>
<tr>
<td>BA S201 Introduction to Management and Supervision**</td>
<td>3</td>
</tr>
<tr>
<td>CIOS S___ Advisor-approved electives</td>
<td>3</td>
</tr>
<tr>
<td>___ S___ Advisor-approved electives*</td>
<td>6</td>
</tr>
<tr>
<td>___ S___ Advisor-approved elective</td>
<td>3</td>
</tr>
<tr>
<td>*Business administration, economics, law science or accounting</td>
<td></td>
</tr>
<tr>
<td><strong>ACCT S121 and ACCT S122 will meet ACCT S201 requirement</strong></td>
<td></td>
</tr>
<tr>
<td>Select one from the following (3 credits):</td>
<td></td>
</tr>
<tr>
<td>ACCT S100 Recordkeeping for Small Business</td>
<td>3</td>
</tr>
<tr>
<td>ACCT S201 Principles for Financial Accounting</td>
<td>3</td>
</tr>
</tbody>
</table>
ASSOCIATE DEGREES

Associate of Arts Degree

The associate of arts degree is available on Juneau, Sitka and Ketchikan campuses, and distance delivery. The A.A. provides students with a broad academic education. It is designed to be a transfer degree to baccalaureate degree programs. Students intending to transfer to a baccalaureate degree program should check the requirements for that program as some special general education and lower-division classes are required. A minimum of 60 semester credits at the 100 level or above, including 20 credits at the 200 level or higher, must be completed to earn the A.A. degree. Of the 60 credits, 34 must be completed in the appropriate areas of the General Education Requirements.

Associate of Applied Science Degrees

The associate of applied science degree is a two-year degree awarded in a specific career or occupational field of experience.

Associate of Business

The Associate of Business A.B. is a residential two-year transfer degree for students intending to complete a bachelor’s degree in a business-related field. The degree prepares students academically for admission to the UAS BBA degree. The Associate of Business A.B. prepares students for transfer to a four-year university and major in Business.

Apprenticeship Technology, A.A.S.

Associate of Applied Science
Juneau, Ketchikan, Sitka

The Apprenticeship Technology program is available to individuals who have completed a formal apprenticeship program and hold journeyman-level status in trades recognized by the U.S. Department of Labor, Bureau of Apprenticeship and Training. This degree is available through campuses of the University of Alaska that offer the required academic credit courses. Upon completion of all the academic credit courses, the apprenticeship program will be evaluated and appropriate credit awarded. Fees may be involved. No more than 38 credit hours may be awarded for the formal apprenticeship program. Contact Career Education for further information.

MINIMUM CREDIT HOURS 60

GENERAL EDUCATION REQUIREMENTS (PG. 58) 21–22

Written Communication Skills
ENGL S111 Methods of Written Communication 3
ENGL S212 Technical Report Writing 3

Oral Communication Skills
COMM S111 Fundamentals of Oral Communications* 3

*Grade C or better

Computational Skills
Select one from the following (3-4 credits):
MATH S107 College Algebra 4
STAT S___ Advisor-approved STAT course 3–4

Other Skills
CIOS S262 Professional Development 3
HS S118 Emergency Trauma Technician-First Responder 3
CIOS S___ Advisor-approved CIOS course 3

TECHNICAL CREDITS 38-39

Technical credits from approved apprenticeship.

Business, A.B.

Associate of Business
Juneau

The Associate of Business A.B. is a residential two-year transfer degree for students intending to complete a bachelor’s degree in a business-related field. The degree prepares students academically for admission to the UAS Bachelor of Business Administration degree. The Associate of Business A.B. prepares students for transfer to a four-year university and major in Business.

The AB degree requires a minimum of 65 credit hours. A minimum of 35 of these credit hours must be completed in the University of Alaska General Education
Requirements. The remaining degree requirements are comprised of 30 credit hours or more in the business program of study. The A.B. degree includes composition, math, and other general education requirements in addition to specific business prerequisite coursework.

MINIMUM CREDIT HOURS  65

GENERAL EDUCATION REQUIREMENTS (PG. 58)  35

Written Communication Skills
ENGL S111 Methods of Written Communication  3
ENGL S212 Technical Report Writing  3

Oral Communication Skills
Select one from the following (3 credits):
COMM S111 Fundamentals of Oral Communication*  3
COMM S235 Small Group Communication and Team Building*  3
COMM S237 Interpersonal Communication*  3
COMM S241 Public Speaking*  3
*Grade C or better

Computational Skills
MATH S107 College Algebra  4
ECON S201 Principles of Economics I: Macroeconomics  3
ECON S202 Principles of Economics II: Microeconomics  3

Other Skills
ACCT S201 Financial Accounting  3
ACCT S202 Managerial Accounting  3
BA S151 Introduction to Business  3
BA S152 Business Foundation Simulation  3
BA S201 Introduction to Management  3
BA S241 Introduction to Business Law  3
BA S260 Marketing Practices  3
BA S232 Fundamentals of Organizational Management  3
CIOS S105 Computer Literacy  3
CIOS S260 Business Communications  3

ELECTIVES  19-20

Must include GER electives in fine arts (3 credits), humanities (3 credits), lab science (4 credits), non-lab science (3 credits), social science (3 credits). May not be in economics.

Business Administration, A.A.S.

Associate of Applied Science

Juneau, Ketchikan, Sitka, Distance Delivery

The Business Administration program provides a course of study in various aspects of business management that prepares students for entry into the job market. The A.A.S. degree in business administration requires a minimum of 60 credit hours.

MINIMUM CREDIT HOURS  60

GENERAL EDUCATION REQUIREMENTS (PG. 58)  15-18

Written Communication Skills
ENGL S111 Methods of Written Communication  3

ECON S201 Principles of Economics I: Macroeconomics*  3
ECON S202 Principles of Economics II: Microeconomics  3

*Note: MATH S105 is a corequisite

**ACCT S121 and ACCT S122 will meet ACCT S201 requirement

ELECTIVES  15

Electives can be used toward a concentration in Accounting, Computer Information and Office Systems, or Management

Computer Information and Office Systems, A.A.S.

Associate of Applied Science

Computer Information and Office Systems is a program designed for people interested in securing employment in positions requiring information technology and administrative support skills. Successful completion of
the CIOS computer placement test is required to begin coursework for this degree.

Degree Requirements

The Associate of Applied Science degree in Computer Information and Office Systems requires a minimum of 60 credit hours with 20 hours at the 200 level or above. A minimum grade of C is required in all CIOS courses.

MINIMUM CREDIT HOURS 60

GENERAL EDUCATION REQUIREMENTS (PG. 58) 19

Written Communication Skills

select

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL S111</td>
<td>Methods of Written Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENGL S212</td>
<td>Technical Report Writing</td>
<td>3</td>
</tr>
</tbody>
</table>

or

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIOS S160</td>
<td>Business English</td>
<td>3</td>
</tr>
<tr>
<td>CIOS S260</td>
<td>Business Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

Oral Communication Skills

Select one from the following (3 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM S111</td>
<td>Fundamentals of Oral Communications*</td>
<td>3</td>
</tr>
<tr>
<td>COMM S235</td>
<td>Small Group Communication and Team Building*</td>
<td>3</td>
</tr>
<tr>
<td>COMM S237</td>
<td>Interpersonal Communication*</td>
<td>3</td>
</tr>
<tr>
<td>COMM S241</td>
<td>Public Speaking*</td>
<td>3</td>
</tr>
</tbody>
</table>

* Grade C or better

Computational Skills

MATH S105 Intermediate Algebra (or higher) 4

Other Skills

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIOS S105</td>
<td>Computer Literacy</td>
<td>3</td>
</tr>
<tr>
<td>CIOS S262</td>
<td>Professional Development</td>
<td>3</td>
</tr>
</tbody>
</table>

**Advisor-approved GERs** (pg 58) 6

**Humanities, social sciences, natural sciences or mathematics

MAJOR REQUIREMENTS 32-35

Completion of one of the following emphasis areas:

Network Technician Emphasis

MINIMUM CREDIT HOURS 35

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIOS S110B</td>
<td>Microcomputer OS</td>
<td>2</td>
</tr>
<tr>
<td>CIOS S118</td>
<td>Information System Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>CIOS S170</td>
<td>Programming Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CIOS S209</td>
<td>Maintaining and Upgrading Your PC I</td>
<td>3</td>
</tr>
<tr>
<td>CIOS S210</td>
<td>Maintaining and Upgrading Your PC II</td>
<td>3</td>
</tr>
<tr>
<td>CIOS S241</td>
<td>Introduction to Networking and the OSI Reference Model</td>
<td>4</td>
</tr>
<tr>
<td>CIOS S244</td>
<td>Internetwork Router Configuration and Design</td>
<td>4</td>
</tr>
<tr>
<td>CIOS S245</td>
<td>Computer Network Concepts and Administration</td>
<td>3</td>
</tr>
<tr>
<td>CIOS S247</td>
<td>LAN Configuration and Design</td>
<td>4</td>
</tr>
<tr>
<td>CIOS S248</td>
<td>WAN Configuration and Design</td>
<td>4</td>
</tr>
<tr>
<td>CIOS S294</td>
<td>Networking Practicum</td>
<td>2</td>
</tr>
</tbody>
</table>

ELECTIVES 3

Where there is duplication in courses between general requirements and major requirements or within the major requirements, additional electives will be required.

Office Administration Emphasis

MINIMUM CREDIT HOURS 32

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIOS S101</td>
<td>Computer Keyboarding and Formatting</td>
<td>3</td>
</tr>
<tr>
<td>CIOS S132</td>
<td>Word Processing Concepts and Applications</td>
<td>3</td>
</tr>
<tr>
<td>CIOS S151</td>
<td>Presentation Graphics Concepts and Applications</td>
<td>1</td>
</tr>
<tr>
<td>CIOS S235</td>
<td>Spreadsheets Concepts and Applications</td>
<td>3</td>
</tr>
<tr>
<td>CIOS S240</td>
<td>Database Concepts and Applications</td>
<td>3</td>
</tr>
<tr>
<td>CIOS S246</td>
<td>Advanced Internet Concepts and Applications</td>
<td>3</td>
</tr>
<tr>
<td>CIOS S250</td>
<td>Integrated Applications</td>
<td>3</td>
</tr>
<tr>
<td>CIOS S260</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>CIOS S261</td>
<td>Digital Documents</td>
<td>2</td>
</tr>
<tr>
<td>CIOS S264</td>
<td>Records Management</td>
<td>2</td>
</tr>
<tr>
<td>CIOS S294</td>
<td>Business Practicum</td>
<td>2</td>
</tr>
</tbody>
</table>

Select one from the following (3 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT S100</td>
<td>Record Keeping for Small Business</td>
<td>3</td>
</tr>
<tr>
<td>ACCT S121</td>
<td>Introduction to Accounting I</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one from the following (3 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA S151</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BA S166</td>
<td>Small Business Management</td>
<td>3</td>
</tr>
<tr>
<td>BA S201</td>
<td>Introduction to Management and Supervision</td>
<td>3</td>
</tr>
</tbody>
</table>

ELECTIVES 3-6

Where there is duplication in courses between general requirements and major requirements or within the major requirements, additional electives will be required.

Publications Specialist Emphasis

MINIMUM CREDIT HOURS 35

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA S343</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>CIOS S108</td>
<td>Graphic Design for Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>CIOS S132</td>
<td>Word Processing Concepts and Applications</td>
<td>3</td>
</tr>
<tr>
<td>CIOS S152</td>
<td>Digital Image Editing Concepts and Applications</td>
<td>3</td>
</tr>
<tr>
<td>CIOS S157</td>
<td>Web Site Design and HTML</td>
<td>4</td>
</tr>
<tr>
<td>CIOS S201</td>
<td>Exploring Digital Media</td>
<td>3</td>
</tr>
<tr>
<td>CIOS S246</td>
<td>Advanced Internet Concepts</td>
<td>3</td>
</tr>
<tr>
<td>CIOS S251</td>
<td>Desktop Publication Concepts and Application</td>
<td>3</td>
</tr>
<tr>
<td>CIOS S261</td>
<td>Digital Documents</td>
<td>2</td>
</tr>
<tr>
<td>CIOS S294</td>
<td>Practicum</td>
<td>2</td>
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</table>

Select one from the following (3 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIOS S160</td>
<td>Business English</td>
<td>3</td>
</tr>
<tr>
<td>CIOS S235</td>
<td>Spreadsheets Concepts and Applications</td>
<td>3</td>
</tr>
<tr>
<td>CIOS S240</td>
<td>Database Concepts and Applications</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one from the following (3 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART S105</td>
<td>Beginning Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART S160</td>
<td>Art Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>ART S222</td>
<td>Digital Camera Photography</td>
<td>3</td>
</tr>
<tr>
<td>ART S224</td>
<td>Intermediate Photography</td>
<td>3</td>
</tr>
<tr>
<td>ENGL S261</td>
<td>Introduction to Creative Writing</td>
<td>3</td>
</tr>
</tbody>
</table>
ELECTIVES  3
Where there is duplication in courses between general requirements and major requirements or within the major requirements, additional electives will be required.

Construction Technology, A.A.S.

Associate of Applied Science
Juneau

This program will benefit those interested in working in the construction trades and in mid-management positions in the industry. Graduates of this program may enter the construction industry in construction, supervision, estimating, scheduling, safety, and the allied fields of materials and equipment sales and service.

MINIMUM CREDIT HOURS  61

GENERAL EDUCATION REQUIREMENTS (PG. 58) 16
Written Communication Skills
ENGL S111 Methods of Written Communication 3
Select one from the following (3 credits):
ENGL S211 Intermediate Composition: Writing About Literature 3
ENGL S212 Technical Report Writing 3
Oral Communication Skills
Select one from the following (3 credits):
COMM S111 Fundamentals of Oral Communication* 3
COMM S235 Small Group Communication and Team Building* 3
COMM S237 Interpersonal Communication* 3
COMM S241 Public Speaking* 3
*Grade C or better
Computational Skills
MATH S105 Intermediate Algebra (or higher) 4
Other Skills
___ S___ Advisor-approved GERs* (pg. 58) 3
*Humanities, social sciences, mathematics, or natural sciences

MAJOR REQUIREMENTS  45
ACCT S100 Recordkeeping for Small Business 3
BA S166 Small Business Management 3
CIOS S110 Microcomputer Operating Systems 3
CT S100 Woodworking I 3
CT S120 Basic Construction Techniques 3
CT S150 Basic Drafting 3
CT S135 Residential Wiring 3
CT S175 Introduction to AutoCAD 3
CT S201 Cold Climate Coastal Construction 3
CT S222 Building Construction I 3
CT S223 Building Construction II 3
CT S224 Mechanical Systems for Buildings 3
CT S225 Construction Planning and Scheduling 3
CT S226 Construction Estimating 3
___ S___ Advisor-approved elective 3

Early Childhood Education, A.A.S.

Associate of Applied Science
Juneau, Distance Delivery

Early Childhood Education courses are designed to prepare students for work in preschools, child care programs, Head Start schools, and as assistants in public school primary grades. The credits earned in the CDA and the certificate program can be part of the A.A.S. degree. Students are advised to take general education courses early in their program of study.

The associate degree is offered as a statewide program with an emphasis in Early Childhood through the Juneau campus and the College of Rural Alaska by distance delivery.

Degree Requirements
All program courses must be passed with a C or higher, and an overall minimum GPA of 2.0.

MINIMUM CREDIT HOURS  60

GENERAL EDUCATION REQUIREMENTS (PG. 58) 15
Written Communication Skills
ENGL S111 Methods of Written Communication 3
Select one from the following (3 credits):
ENGL S211 Intermediate Composition: Writing About Literature 3
ENGL S212 Technical Report Writing 3
CIOS S260 Business Communications 3
Oral Communication Skills
Select one from the following (3 credits):
COMM S111 Fundamentals of Oral Communication* 3
COMM S235 Small Group Communication and Team Building* 3
COMM S237 Interpersonal Communication* 3
COMM S241 Public Speaking* 3
*Grade C or better
Other Skills
___ S___ Advisor-approved GERs* (pg. 58) 6
*Humanities, social sciences, mathematics, or natural sciences

MAJOR REQUIREMENTS  36
ECE S101 Introduction to the Early Childhood Profession 3
ECE S105 Developmentally Appropriate Practices 1
ECE S110 Healthy Environment for Young Children 3
ECE S111 Nutrition for Young Children 1
ECE S115 Responsive and Reflective Teaching 3
ECE S121 Physical Development of Young Children 1
ECE S122 Young Children and Cognitive Development 1
ECE S123 Language and Literacy Activities for Young Children 1
ECE S124 Young Children and Creative Development 1
ECE S125 Math Activities for Young Children 1
ECE S130 Culture, Learning and the Young Child 2
ECE S140 Social and Emotional Competence 3
Environmental Technology, A.A.S.

Associate of Applied Science
Sitka, Distance Delivery

The Associate of Applied Science degree offers a fundamental background in environmental technology with an emphasis in the water and wastewater career field. Students successfully completing the degree are qualified for the State of Alaska operator certification examinations. Completion of this degree provides the education necessary to meet the postsecondary education requirements for Level 3 water treatment and wastewater treatment certification. Students may also qualify for entry-level employment in water/wastewater utilities or as environmental technicians.

MINIMUM CREDIT HOURS  60

GENERAL EDUCATION REQUIREMENTS (PG. 58)  16

Written Communication Skills
ENGL $111 Methods of Written Communication 3

Select one from the following (3 credits):
ENGL $212 Technical Report Writing 3
CIOS $260 Business Communication 3

Oral Communication Skills
Select 1 from the following (3 credits):
COMM $111 Fundamentals of Oral Communication* 3
COMM $235 Small Group Communication and Team Building* 3
COMM $237 Interpersonal Communication* 3
COMM $241 Public Speaking* 3
*Grade C or better

Computational Skills
MATH $105 Intermediate Algebra 4

Social Science
SOC $102 Science, Technology and Society 3

MAJOR REQUIREMENTS  44

CIOS $135 Using Spreadsheets in the Workplace 1
ENVT $101 Introduction to Environmental Technology 3
ENVT $103 Applied Environmental Regulation 2
ENVT $110 Drinking Water Systems 3
ENVT $111 Wastewater Systems 3
ENVT $120 Utility Management 3
ENVT $130 Basic Sanitary Chemistry/Microbiology 2
ENVT $132 Basic Sanitary Chemistry/Microbiology Lab 2
ENVT $203 Solid and Hazardous Waste Management 3

ENVT $204 Instrumentation 3
ENVT $210 Water Treatment 3
ENVT $211 Wastewater Treatment 3
ENVT $212 Hydraulics 3
ENVT $230 Intermediate Sanitary Chemistry/Microbiology 2
ENVT $232 Intermediate Sanitary Chemistry/Microbiology Lab 2
ENVT $240 Practicum 3
ENVT $250 Sanitary Survey Training 3

Fisheries Technology, A.A.S.

Associate of Applied Science
Ketchikan, Distance Delivery

The Associate of Applied Science provides students with a broad educational and practical foundation in the field of fisheries technology. Students will be prepared for entry level employment in federal and state agencies, hatcheries, and the private sector.

Degree Requirements

The A.A.S. in Fisheries Technology requires a minimum of sixty credit hours and a GPA of 2.5. Of the 60 credits, students must complete 20 credits at the 200 level or above. Students must earn 6 credit hours of internship.

MINIMUM CREDIT HOURS  60

GENERAL EDUCATION REQUIREMENTS (PG. 58)  17

Written Communication Skills
ENGL $111 Methods of Written Communication 3
ENGL $212 Technical Report Writing 3

Oral Communication Skills
Select one from the following (3 credits):
COMM $111 Fundamentals of Oral Communication* 3
COMM $235 Small Group Communication and Team Building* 3
*Grade C or better

Computational Skills
Select one from the following (4 credits):
MATH $105 Intermediate Algebra 4
MATH $107 College Algebra 4

Science
Select one from the following (4 credits):
ENVS $101 Introduction to Environmental Sciences 4
BIOL $103 Biology and Society 4
BIOL $104 Natural History of Alaska 4
CHEM $103 Introduction to General Chemistry 4

Students interested in pursuing a bachelor’s degree should take MATH $107. BIOL $105 and BIOL $106 is an allowable substitution for BIOL $103 and BIOL $104.
Health Information Management, A.A.S.

Associate of Applied Science
Sitka, Distance Delivery

The Health Information Management (HIM) program provides a course of study, using primarily distance delivery methodology, that prepares entry-level health information professionals. This program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education. Graduates are eligible to write the national examination; successful completion of the examination leads to the professional credential of Registered Health Information Technician (R.H.I.T.).

Degree Requirements

The Health Information Management (HIM) A.A.S. degree program requires a minimum of sixty (60) semester credit hours. Graduation should occur within five (5) years from the date of enrollment or HIM professional courses may have to be repeated.

MINIMUM CREDIT HOURS 60

GENERAL EDUCATION REQUIREMENTS (PG. 58) 20

Written Communication Skills
ENGL S111 Methods of Written Communication 3

Select one from the following (3 credits):
ENGL S211 Intermediate Composition: Writing about Literature 3
ENGL S212 Technical Report Writing 3

Oral Communication Skills
Select one from the following (3 credits):
COMM S111 Fundamentals of Oral Communication* 3
COMM S235 Small Group Communication and Team Building* 3
COMM S237 Interpersonal Communication* 3
COMM S241 Public Speaking* 3

Other Skills
BIOL S111 Anatomy and Physiology I 4
BIOL S112 Anatomy and Physiology II 4
___ S___ GER Elective* 3

*Grade C or better

Health Sciences, A.A.S.

Associate of Applied Science
Juneau, Ketchikan, Sitka

The Associate of Applied Science in Health Sciences prepares students to enter direct care careers and to apply (transfer) to programs in nursing and other allied health professions. The degree provides the foundation needed to understand modern health care delivery, and includes a base in GER options as well as a science core. Students complete pre and co-requisites for a variety of professional health care programs, including nursing, radiological technology, health education, social services and emergency services. Students need to consult with a Health Sciences advisor before registering for courses.

Degree Requirements

The AAS in Health Sciences requires 60-70 credits, depending upon specialty track. Of these, 16 credits are in GERs, 20 credits are in biology and chemistry, and 9 credits make up the core Health Science courses. A minimum of 15 credits are in a specialty area. 25 credits must be at the 200 level or above. At least 15 credits must be taken at UAS. A minimum grade of C is required in all courses.
# UAS Academic Catalog 2008–2009

## Undergraduate Studies

### Associate Degrees

<table>
<thead>
<tr>
<th>MINIMUM CREDIT HOURS</th>
<th>60–70</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GENERAL EDUCATION REQUIREMENTS (PG. 58)</strong></td>
<td>16</td>
</tr>
</tbody>
</table>

#### Written Communication Skills

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL S111</td>
<td>Methods of Written Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one from the following (3 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL S211</td>
<td>Intermediate Composition: Writing about Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL S212</td>
<td>Technical Report Writing</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Oral Communication Skills

Select one from the following (3 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM S111</td>
<td>Fundamentals of Oral Communication*</td>
<td>3</td>
</tr>
<tr>
<td>COMM S235</td>
<td>Small Group Communication and Team Building*</td>
<td>3</td>
</tr>
<tr>
<td>COMM S237</td>
<td>Interpersonal Communication*</td>
<td>3</td>
</tr>
<tr>
<td>COMM S241</td>
<td>Public Speaking*</td>
<td>3</td>
</tr>
</tbody>
</table>

* *Grade C or better

#### Computational Skills

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH S105</td>
<td>Intermediate Algebra (or higher)</td>
<td>4</td>
</tr>
</tbody>
</table>

#### Social Science

Select one from the following (3 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH S101</td>
<td>Introduction to Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH S202</td>
<td>Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>PSY S101</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOC S101</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
</tbody>
</table>

### MAJOR REQUIREMENTS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL S111</td>
<td>Human Anatomy and Physiology-I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL S112</td>
<td>Human Anatomy and Physiology-II</td>
<td>4</td>
</tr>
<tr>
<td>BIOL S240</td>
<td>Introductory Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>CHEM S103</td>
<td>Introduction to General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM S104</td>
<td>A Survey of Organic and Biochemistry</td>
<td>4</td>
</tr>
<tr>
<td>HS S101</td>
<td>Introduction to Health Sciences</td>
<td>3</td>
</tr>
<tr>
<td>HS S135</td>
<td>Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>HS S203</td>
<td>Science of Nutrition</td>
<td>3</td>
</tr>
</tbody>
</table>

### HEALTH SCIENCES SPECIALTY OPTIONS*

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS S125</td>
<td>Public Health and Health Promotion</td>
<td>4</td>
</tr>
<tr>
<td>HS S126</td>
<td>Health Promotion Through Behavior Change</td>
<td>4</td>
</tr>
<tr>
<td>HS S202</td>
<td>Community Health Promotion</td>
<td>4</td>
</tr>
<tr>
<td>HS S206</td>
<td>Environmental Health</td>
<td>3</td>
</tr>
<tr>
<td>HS S270</td>
<td>Pathophysiology</td>
<td>3</td>
</tr>
<tr>
<td>HS S274</td>
<td>Introduction to Behavioral Health</td>
<td>3</td>
</tr>
<tr>
<td>HS S291</td>
<td>Health Sciences Internship</td>
<td>3-6</td>
</tr>
<tr>
<td>PHYS S102</td>
<td>Survey of Physics</td>
<td>4</td>
</tr>
<tr>
<td>PSY S250</td>
<td>Lifespan Development</td>
<td>3</td>
</tr>
<tr>
<td>SWK F220</td>
<td>Ethics, Values and Social Work Practice</td>
<td>3</td>
</tr>
</tbody>
</table>

* *see advisor for other course options

<table>
<thead>
<tr>
<th>SKILLS OPTIONS</th>
<th>1-9</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS S102</td>
<td>Fundamentals of CPR and First Aid</td>
</tr>
<tr>
<td>HS S103</td>
<td>Personal Care Attendant</td>
</tr>
<tr>
<td>HS S104</td>
<td>PCA to CNA Bridge</td>
</tr>
<tr>
<td>HS S105</td>
<td>Certified Nurse Aide Training</td>
</tr>
<tr>
<td>HS S118</td>
<td>ETT-First Responder</td>
</tr>
<tr>
<td>HS S119</td>
<td>Emergency Medical Technician I</td>
</tr>
</tbody>
</table>

### Radiology*

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS S141</td>
<td>Intro. to Radiologic Technology and Patient Care</td>
<td>3</td>
</tr>
<tr>
<td>HS S150</td>
<td>Radiation Protection for Non-Imaging Professionals</td>
<td>3</td>
</tr>
<tr>
<td>HS S151</td>
<td>Medical Imaging Physics</td>
<td>2</td>
</tr>
</tbody>
</table>

* *select after advisement

## Nursing through UAA, A.A.S.

### Associate of Applied Science

**University of Alaska Anchorage**

**Juneau, Ketchikan, Sitka**

Cohorts of nursing students will be admitted into the University of Alaska Anchorage (UAA) A.A.S. degree in Nursing every two years at all three UAS campuses. Non-nursing pre-requisite and co-requisite courses can be obtained at any of the three UAS campuses while the nursing courses themselves will be distance delivered by UAA to UAA-admitted students at these same locations. Most of the nursing clinicals can be completed locally. Students will need to travel to Anchorage at their own expense for additional clinical experience. Some of the relevant details are listed below, but more important information can be obtained from local advisors listed below or can be found at: www.uas.alaska.edu/academics/undergrad/assoc/aas/nursing_uaa.html.

### Admission Requirements

In addition to a Nurse Entrance Test and other requirements, applicants to the Associate of Applied Science (A.A.S.) in Nursing must have completed, with grades of C or above, high school algebra, biology with a lab and chemistry with a lab. Equivalent college-level courses can be used in lieu of these high school requirements and are available at the Juneau, Ketchikan, or Sitka campuses of UAS. They are:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM S103</td>
<td>Introduction to General Chemistry</td>
<td>4</td>
</tr>
</tbody>
</table>

Select one from the following (4 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL S111</td>
<td>Human Anatomy and Physiology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL S103</td>
<td>Biology and Society</td>
<td>4</td>
</tr>
</tbody>
</table>

Select one from the following (4 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH S055</td>
<td>Fundamentals of Algebra</td>
<td>4</td>
</tr>
<tr>
<td>MATH S105</td>
<td>Intermediate Algebra</td>
<td>4</td>
</tr>
</tbody>
</table>

### Degree Requirements

A minimum of 70 credits is required for the A.A.S. in Nursing. The General Education Requirement coursework (a minimum of 15 credits) is offered at all three UAS campuses as are the non-nursing co-requisite Major Requirements (a minimum of 18 credits). Nursing courses (NURS) in the Major Requirements (totaling 37 credits) are delivered by UAA through the use of Internet-based technologies and group conferences via
distance with faculty. The clinical instruction portion of these courses is offered primarily on site in Juneau, Ketchikan, or Sitka. Additional clinical instruction opportunities will be provided in Anchorage.

**MINIMUM CREDIT HOURS** 70

**GENERAL EDUCATION REQUIREMENTS (PG. 58)** 15

**Written Communication Skills**
- ENGL S111 Methods of Written Communication 3
- ENGL S211 Intermediate Composition: Writing About Literature 3

**Oral Communication Skills**
*Select one from the following (3 credits):*
- COMM S111 Fundamental Oral Communication* 3
- COMM S237 Interpersonal Communication* 3
*Grade C or better

**Social Science**
- ___ S___ Advisor-approved GER* (pg. 58) 3
*PSY S101 is advisable

**Other Skills**
- ___ S___ Advisor-approved GER (pg. 58) 3

**NON-NURSING MAJOR REQUIREMENTS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL S111</td>
<td>Human Anatomy and Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL S112</td>
<td>Human Anatomy and Physiology II</td>
<td>4</td>
</tr>
<tr>
<td>BIOL S240</td>
<td>Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>HS S203</td>
<td>Science of Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>PSY S250</td>
<td>Lifespan Development</td>
<td>3</td>
</tr>
</tbody>
</table>

Nursing Major Requirements from UAA at a distance with the clinical portion (lab = L) on site in Juneau, Ketchikan, or Sitka. Trips to Anchorage will be required for additional training in obstetric, pediatric, psychiatric, and advanced medical/surgical nursing topics. These experiences are only offered to cohorts in predetermined semesters.

**MAJOR REQUIREMENTS** 37

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS A120</td>
<td>Nursing Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>NURS A120L</td>
<td>Nursing Fundamentals Lab</td>
<td>4</td>
</tr>
<tr>
<td>NURS A125</td>
<td>Adult Nursing I</td>
<td>3</td>
</tr>
<tr>
<td>NURS A125L</td>
<td>Adult Nursing I Lab</td>
<td>4</td>
</tr>
<tr>
<td>NURS A180</td>
<td>Basic Nursing Pharmacology</td>
<td>3</td>
</tr>
<tr>
<td>NURS A220</td>
<td>Perinatal Nursing</td>
<td>2</td>
</tr>
<tr>
<td>NURS A220L</td>
<td>Perinatal Nursing Lab</td>
<td>2</td>
</tr>
<tr>
<td>NURS A221</td>
<td>Advanced Perinatal Therapy Lab</td>
<td>1</td>
</tr>
<tr>
<td>NURS A222</td>
<td>Pediatric Nursing</td>
<td>2</td>
</tr>
<tr>
<td>NURS A222L</td>
<td>Pediatric Nursing Lab</td>
<td>2</td>
</tr>
<tr>
<td>NURS A225</td>
<td>Adult Nursing II</td>
<td>3</td>
</tr>
<tr>
<td>NURS A225L</td>
<td>Adult Nursing II Lab</td>
<td>3</td>
</tr>
<tr>
<td>NURS A250</td>
<td>Psychiatric Nursing</td>
<td>2</td>
</tr>
<tr>
<td>NURS A250L</td>
<td>Psychiatric Nursing Lab</td>
<td>2</td>
</tr>
<tr>
<td>NURS A255</td>
<td>Staff Nurse: Legal, Ethical, and Organizational Issues</td>
<td>1</td>
</tr>
</tbody>
</table>

If you are interested in the A.A.S. degree in Nursing, obtainable from UAA while remaining on a UAS campus, you must contact a local advisor:

Marianne Stillner, Assistant Professor of Nursing
UAS, Juneau Campus
(907) 796-6125
marianne.stillner@uas.alaska.edu

Gail Klein, Student Resource Center
UAS, Ketchikan Campus
(907) 228-4508
gail.klein@uas.alaska.edu

Cheryl Stromme, Health Science Administrative Assistant
UAS, Sitka Campus
(907) 747-9473
cheryle.stromme@uas.alaska.edu

Sarah Harvey, Program Coordinator
UAS, Juneau Campus
(907) 796-6128
sarah.harvey@uas.alaska.edu

**Power Technology, A.A.S.**

**Associate of Applied Science**

**Juneau**

**MINIMUM CREDIT HOURS** 60-64

**GENERAL EDUCATION REQUIREMENTS (PG. 58)** 16

**Written Communication Skills**
- ENGL S111 Methods of Written Communication 3

**Oral Communication Skills**
*Select one from the following (3 credits):*
- ENGL S211 Intermediate Composition: Writing About Literature 3
- ENGL S212 Technical Report Writing 3

**Computational Skills**
- MATH S105 Intermediate Algebra (or higher) 4

**Other Skills**
- ___ S___ Advisor-approved GER* 3-4
*Humanities, mathematics, natural sciences or social sciences course. Course must be at the 100-level or above.

**Automotive Emphasis**

This degree is a vocational training program for men and women interested in securing employment in automotive technician positions. Graduation can lead to employment in automobile dealerships, fleet service operations, national chain automotive service stores,
franchise repair shops, and independent repair shops. Students expecting to gain employment in this industry will need a valid driver's license with a good driving record, and a personal tool box meeting industry standards (contact department for details).

**Admission Requirements**

Students will be admitted to the Automotive Emphasis program when they have met all UAS admissions requirements in addition to the following requirements:

1. Submission of a resume of work experiences and a letter stating why the individual wants to become an automotive technician.
2. Completion of a pre-admission interview.

**MINIMUM CREDIT HOURS** 64

**MAJOR REQUIREMENTS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO S102</td>
<td>Introduction to Automotive Technology</td>
<td>3</td>
</tr>
<tr>
<td>AUTO S121</td>
<td>Auto Electrical I</td>
<td>3</td>
</tr>
<tr>
<td>AUTO S122</td>
<td>Engine Performance I</td>
<td>3</td>
</tr>
<tr>
<td>AUTO S131</td>
<td>Auto Electrical II</td>
<td>3</td>
</tr>
<tr>
<td>AUTO S140</td>
<td>Auto Engine Repair</td>
<td>3</td>
</tr>
<tr>
<td>AUTO S152</td>
<td>Brake Systems</td>
<td>4</td>
</tr>
<tr>
<td>AUTO S160</td>
<td>Manual Drive Train and Axles</td>
<td>3</td>
</tr>
<tr>
<td>AUTO S162</td>
<td>Suspension and Alignment</td>
<td>4</td>
</tr>
<tr>
<td>AUTO S194</td>
<td>Auto Practicum I (1-6 credits variable)*</td>
<td>6</td>
</tr>
<tr>
<td>AUTO S202</td>
<td>Fuel and Emission Systems</td>
<td>4</td>
</tr>
<tr>
<td>AUTO S222</td>
<td>Engine Performance II</td>
<td>3</td>
</tr>
<tr>
<td>AUTO S225</td>
<td>Auto Heating and A/C</td>
<td>3</td>
</tr>
<tr>
<td>AUTO S227</td>
<td>Auto Electrical III</td>
<td>3</td>
</tr>
<tr>
<td>AUTO S260</td>
<td>Electronic and Automatic Transmissions</td>
<td>3</td>
</tr>
</tbody>
</table>

*6 credits needed to graduate

**Diesel Emphasis**

This degree is a vocational training program for men and women interested in securing employment working with various diesel engine applications such as (but not limited to):

- Logging equipment
- Charter boats
- Trucking
- AC generators/switch gear
- Tour buses
- Construction equipment
- Earth moving machines
- Cold storage systems
- Rock crushers
- Marine main propulsion
- Sawmills
- Tour vessels
- Marine auxiliary systems
- Hydraulic systems
- Mining machines

**MINIMUM CREDIT HOURS** 60

**MAJOR REQUIREMENTS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DESL S105</td>
<td>Diesel Fuel Systems</td>
<td>3</td>
</tr>
<tr>
<td>DESL S110</td>
<td>Diesel Engines</td>
<td>6</td>
</tr>
<tr>
<td>DESL S125</td>
<td>Basic Hydraulics</td>
<td>3</td>
</tr>
<tr>
<td>DESL S130</td>
<td>Refrigeration and Air Conditioning</td>
<td>2</td>
</tr>
<tr>
<td>DESL S171</td>
<td>Heavy Duty Electrical Systems</td>
<td>3</td>
</tr>
<tr>
<td>DESL S180</td>
<td>AC Power Generation</td>
<td>3</td>
</tr>
<tr>
<td>DESL S250</td>
<td>Heavy Duty Brakes and CDL Preparation</td>
<td>2</td>
</tr>
<tr>
<td>DESL S255</td>
<td>Heavy Duty Suspension and Alignment</td>
<td>2</td>
</tr>
<tr>
<td>DESL S260</td>
<td>Heavy Duty Power Trains</td>
<td>3</td>
</tr>
<tr>
<td>WELD S120</td>
<td>Basic Welding</td>
<td>3</td>
</tr>
<tr>
<td>___ S___ Advisor-approved electives</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**USCG Documented Marine Oiler Emphasis**

This USCG Documented Marine Oiler A.A.S. degree is for both men and women who want to get the training needed to begin a career in marine transportation (engine room). With successful completion of this program and a written USCG examination, students receive a USCG Merchant Marine Document (MMD Z-card) with an Oiler endorsement, which qualifies them for employment in the engine rooms of large U.S. flagged vessels anywhere in the world. Oiler is the “qualified” entry level position in the engine room which has a career path that culminates in the chief engineer’s position. Program graduates can expect to find employment with the state ferry system, private ferries, cruise ships, seafood processors, tug boats, or any other large sea going vessels. This degree incorporates a 120 day (1440 hour) internship at sea as part of the requirements.

Incoming students will have to pass a USCG background check, drug screen, and physical agility exam during the first semester. They will also have to pass a complete physical exam prior to getting the Oiler Z-card. English and mathematics placement exams are also required in the first semester.

**MINIMUM CREDIT HOURS** 61

**MAJOR REQUIREMENTS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DESL S105</td>
<td>Diesel Fuel Systems</td>
<td>3</td>
</tr>
<tr>
<td>DESL S110</td>
<td>Diesel Engines</td>
<td>6</td>
</tr>
<tr>
<td>DESL S125</td>
<td>Basic Hydraulics</td>
<td>3</td>
</tr>
<tr>
<td>DESL S130</td>
<td>Air Conditioning and Refrigeration</td>
<td>2</td>
</tr>
<tr>
<td>DESL S171</td>
<td>Heavy Duty Electrical Systems</td>
<td>3</td>
</tr>
<tr>
<td>DESL S180</td>
<td>AC Power Generation</td>
<td>3</td>
</tr>
<tr>
<td>DESL S261</td>
<td>Marine Auxiliary Systems</td>
<td>3</td>
</tr>
<tr>
<td>DESL S262</td>
<td>Marine Auxiliary Systems Lab</td>
<td>2</td>
</tr>
<tr>
<td>DESL S263</td>
<td>Marine Transmissions</td>
<td>3</td>
</tr>
<tr>
<td>DESL S291A</td>
<td>Alaska Marine Highway Oiler Internship (1440 hours)</td>
<td>12</td>
</tr>
<tr>
<td>MT S129</td>
<td>Basic Safety Training</td>
<td>2</td>
</tr>
<tr>
<td>WELD S120</td>
<td>Basic Welding</td>
<td>3</td>
</tr>
<tr>
<td>___ S___ Advisor-approved electives</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
BACHELOR’S DEGREES

Art, B.A.

Bachelor of Arts

Candidates must complete general education requirements as well as the specific program requirements listed below. Courses may not be used to fulfill more than one requirement in the B.A. program. Students must earn a C or higher in all ART classes, and complete 42 credits of upper-division courses (24 of these must be UAS credits). A maximum of 12 credits of independent study may be applied toward the B.A. in Art.

MINIMUM CREDIT HOURS 120

GENERAL EDUCATION REQUIREMENTS (PG. 58)* 37

Written Communication Skills
ENGL S111 Methods of Written Communication 3
ENGL S211 Intermediate Composition 3

Humanities
ART 261 History of World Art I 3
ART 262 History of World Art II 3

*Must include 6 credits in two separate disciplines within the social sciences (see page 58.)

MAJOR REQUIREMENTS 48

ART S162 Color and Design 3
ART S205 Intermediate Drawing* 3
ART S211 Beginning Sculpture 3
ART S213 Beginning Painting 3
ART S363 History of Modern Art 3
ENGL S311 Advanced Composition** 3
HUM S499 Humanities Capstone 3

Select two from the following (6 credits):
ART S201 Beginning Ceramics 3
ART S207 Beginning Screen Printing 3
ART S208 Beginning Relief Printing 3
ART S210 Beginning Intaglio (Etching) 3
ART S222 Digital Photography 3
ART S240 Introductory Batik 3

* ART S105 must be taken as a prerequisite to ART S205.

** Grade C or higher

EMPHASIS 18

Select two different emphasis areas from the following (9 credits each):

Batik
ART S340 Intermediate Batik 3
ART S440 Advanced Batik* 3

BA in Art without a Minor

BREADTH REQUIREMENTS WITHOUT A MINOR 30

Minimum 15 credits must be upper division.

Humanities 15
Must include ART S105 (ART S105 is a prerequisite for ART S205) and a world or Alaska language (Select 8 credits in a one-year sequence of a single world or Alaska Native language.)

Social Science: 15

ELECTIVES 5

BA in Art with a Minor

BREADTH REQUIREMENTS WITH A MINOR 18

Minimum 15 credits must be upper division.

Humanities 9
Must include ART S105 (ART S105 is a prerequisite for ART S205) and a world or Alaska language (Select 8 credits in a one-year sequence of a single world or Alaska Native language.)

Social Science: 9

[93]
MINOR REQUIREMENTS

Electives* 15-18

*as needed to equal 120 credits.

Biology, B.A.

Bachelor of Arts

Juneau

The B.A. degree in Biology provides students with the opportunity to learn biological principles and skills in lecture, laboratory and field courses with a breadth in liberal arts and sciences.

Admission Requirements

Applicants enter as pre-majors and will be considered for full admission to the B.A. in Biology after completion of the following:

1. MATH S107 (may be met by placement examination)
2. ENGL S111.
3. BIOL S105 and BIOL S106
4. High school chemistry, or a C or higher in either CHEM S103 or CHEM S105.

When a student becomes a major in Biology, he or she is assigned a faculty advisor. The student and faculty advisor plan the student’s curriculum, and the advisor’s signature is required on registration documents.

Degree Requirements

Candidates must complete the General Education Requirements (GERs) as well as the specific program requirements listed below for a minimum of 120 credit hours. Courses in a degree program may be counted only once. Courses used to fulfill the major requirements cannot be used to fulfill the GERs. Specific requirements for GERs are listed below. The degree must include 48 credits of upper-division (300 or above) courses. To satisfy the residency requirement, 30 credits must be completed at UAS, including 24 upper division credits.

MINIMUM CREDIT HOURS 120

GENERAL EDUCATION REQUIREMENTS (PG. 58) 36

The following courses must be included in the GERs for a B.A. in Biology:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL S105</td>
<td>Fundamentals of Biology I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL S106</td>
<td>Fundamentals of Biology II</td>
<td>4</td>
</tr>
<tr>
<td>MATH S107</td>
<td>College Algebra</td>
<td>4</td>
</tr>
</tbody>
</table>

MAJOR REQUIREMENTS 36

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL S271</td>
<td>Ecology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL S362</td>
<td>Genetics</td>
<td>4</td>
</tr>
<tr>
<td>BIOL S482</td>
<td>Evolution</td>
<td>4</td>
</tr>
<tr>
<td>CHEM S105</td>
<td>General Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM S106</td>
<td>General Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>MATH S108 or higher</td>
<td>Elementary Statistics</td>
<td>3-4</td>
</tr>
<tr>
<td>STAT S273</td>
<td>Elementary Statistics</td>
<td>3</td>
</tr>
</tbody>
</table>

select

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL S310</td>
<td>Animal Physiology</td>
<td>4</td>
</tr>
</tbody>
</table>

or

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM S___ Any Upper Division Course</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

Select two from the following (6 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR S225</td>
<td>General Astronomy</td>
<td>3</td>
</tr>
<tr>
<td>ENVS S101 or higher</td>
<td>1-4</td>
<td></td>
</tr>
<tr>
<td>GEOL S104 or higher</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>PHYS S102 or higher</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>STAT S373 or higher</td>
<td>3-4</td>
<td></td>
</tr>
</tbody>
</table>

BIOL ELECVTIVES 10

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL S215</td>
<td>Intro to Marine Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL S239</td>
<td>Intro to Plant Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL S300</td>
<td>Vertebrate Zoology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL S305</td>
<td>Invertebrate Zoology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL S375</td>
<td>Current Topics in Biology I</td>
<td>3</td>
</tr>
<tr>
<td>BIOL S382</td>
<td>Wetlands Ecology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL S384</td>
<td>Marine Mammalogy</td>
<td>4</td>
</tr>
<tr>
<td>BIOL S401</td>
<td>Phycology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL S415</td>
<td>Physiology of Marine Animals</td>
<td>4</td>
</tr>
<tr>
<td>BIOL S426</td>
<td>Ornithology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL S427</td>
<td>Introduction to Ichthyology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL S441</td>
<td>Animal Behavior</td>
<td>4</td>
</tr>
<tr>
<td>BIOL S445</td>
<td>Vascular Plants of Southeast Alaska</td>
<td>3</td>
</tr>
<tr>
<td>BIOL S480</td>
<td>Aquatic Pollution</td>
<td>3</td>
</tr>
<tr>
<td>BIOL S481</td>
<td>Marine Ecology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL S492</td>
<td>Biology Seminar</td>
<td>1</td>
</tr>
<tr>
<td>BIOL S495</td>
<td>Behavioral Ecology</td>
<td>3</td>
</tr>
</tbody>
</table>

BREADTH ELECVTIVES 38

To include upper-division courses as needed. Students are encouraged to include a minor or double major.
### Biology, B.S.

**Bachelor of Science**  
**Juneau**

The Bachelor of Science degree in Biology provides students the opportunity to learn biological principles and skills in lecture, laboratory, and field courses. Student research is also emphasized throughout the program. Program faculty are actively involved in a wide range of disciplines, including marine ecology, behavioral ecology, marine mammalogy, crustacean physiology, and marine algology. The location of the University provides students with a “natural laboratory” that includes extensive marine habitat, rainforest, wetlands, and ice fields all within walking distance of the classrooms. A small student-to-professor ratio ensures a more personal approach to learning than is possible at larger universities. The Bachelor of Science program in biology comprises a core curriculum generally found nationwide in bachelor of science biology programs.

Additional information about the biology program can be found at www.uas.alaska.edu/biology.

#### Admission Requirements

Applicants enter as premajors and will be considered for full admission into the Bachelor of Science in Biology program after completion of the following:

1. MATH S107 (May be met by placement examination)
2. ENGL S111
3. BIOL S105 and BIOL S106
4. High School Chemistry or CHEM S103 with a C or higher

When a student enters the major in Biology he or she is assigned a faculty advisor. The student and faculty advisor plan the student’s curriculum, and the advisor’s signature is required on registration documents.

#### Degree Requirements

Candidates must complete the General Education Requirements (GERs) as well as the specific program requirements listed below for a minimum of 120 credit hours. Courses in a degree program may be counted only once. Courses used to fulfill the major requirements cannot be used to fulfill the GERs. Specific recommendations for the GERs in Biology are listed below. Degree must include 48 credit hours of upper-division (300 or above) courses, 24 of which must be completed at UAS.

<table>
<thead>
<tr>
<th>MINIMUM CREDIT HOURS</th>
<th>120</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GENERAL EDUCATION REQUIREMENTS (PG. 58)</strong></td>
<td>36</td>
</tr>
<tr>
<td>Must include:</td>
<td></td>
</tr>
<tr>
<td>MATH S200 Calculus I*</td>
<td>4</td>
</tr>
<tr>
<td>BIOL S105 Fundamentals of Biology I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL S106 Fundamentals of Biology II</td>
<td>4</td>
</tr>
<tr>
<td>*Prerequisites include MATH S107 and MATH S108</td>
<td></td>
</tr>
<tr>
<td><strong>MAJOR REQUIREMENTS</strong></td>
<td>43</td>
</tr>
<tr>
<td>BIOL S271 Ecology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL S310 Animal Physiology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL S362 Genetics</td>
<td>4</td>
</tr>
<tr>
<td>BIOL S482 Evolution</td>
<td>4</td>
</tr>
<tr>
<td>CHEM S105 General Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM S106 General Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM S341 Organic and Biological Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM S342 Organic and Biological Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>STAT S273 Elementary Statistics</td>
<td>3</td>
</tr>
<tr>
<td><strong>select both</strong></td>
<td></td>
</tr>
<tr>
<td>PHYS S103 College Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS S104 College Physics II</td>
<td>4</td>
</tr>
<tr>
<td>or both</td>
<td></td>
</tr>
<tr>
<td>PHYS S211 General Physics I</td>
<td>4</td>
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<tr>
<td>PHYS S212 General Physics II</td>
<td>4</td>
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<tr>
<td><strong>BIOLOGY ELECTIVES</strong></td>
<td>20</td>
</tr>
<tr>
<td>Select four from the following (20 credits):</td>
<td></td>
</tr>
<tr>
<td>BIOL S215 Introduction to Marine Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL S239 Introduction to Plant Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL S300 Vertebrate Zoology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL S305 Invertebrate Zoology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL S373 Conservation Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL S375 Current Topics in Biology*</td>
<td>4</td>
</tr>
<tr>
<td>BIOL S382 Wetlands Ecology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL S384 Marine Mammalogy</td>
<td>4</td>
</tr>
<tr>
<td>BIOL S396 Field Studies in Behavior and Ecology**</td>
<td>1-6</td>
</tr>
<tr>
<td>BIOL S398/5498 Research**</td>
<td>1-6</td>
</tr>
<tr>
<td>BIOL S401 Phycology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL S415 Physiology of Marine Animals</td>
<td>4</td>
</tr>
<tr>
<td>BIOL S426 Ornithology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL S427 Introduction to Ichthyology</td>
<td>4</td>
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<tr>
<td>BIOL S441 Animal Behavior</td>
<td>4</td>
</tr>
<tr>
<td>BIOL S445 Vascular Plants of Southeast Alaska</td>
<td>3</td>
</tr>
<tr>
<td>BIOL S480 Aquatic Pollution</td>
<td>3</td>
</tr>
<tr>
<td>BIOL S481 Marine Ecology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL S492 Biology Seminar*</td>
<td>2</td>
</tr>
<tr>
<td>BIOL S495 Behavioral Ecology</td>
<td>3</td>
</tr>
<tr>
<td>ENVS S415 Biogeography &amp; Landscape</td>
<td>3</td>
</tr>
<tr>
<td>*Only 4 credits from BIOL S375 and 2 credits from BIOL S492 may be applied toward the Biology electives. Additional credits may be applied toward Electives.</td>
<td></td>
</tr>
<tr>
<td><strong>ELECTIVES</strong></td>
<td>21</td>
</tr>
<tr>
<td>Must include a minimum of 12 credits of upper division courses.</td>
<td></td>
</tr>
</tbody>
</table>
Business Administration, B.B.A.

Bachelor of Business Administration
Juneau, Distance Delivery

The B.B.A. program provides a course of study that (1) prepares students for professional positions in private or public business fields, (2) prepares them to evaluate and exploit viable business opportunities, and (3) prepares them for graduate study in business and related disciplines.

Admission Requirements
To be formally admitted to the B.B.A. program, a student must be in good standing at the University.

Degree Requirements
Candidates must complete the general education requirements (GERs) as well as the specific program requirements listed in this section for a minimum of 120 credit hours. Any given course may be counted as fulfilling more than one requirement in a degree program, but the credit hours can only be counted once. Degrees must include 42 credits of upper-division (300 or above) courses, 24 of which must be completed at UAS. Courses used as major requirements cannot be used as GERs.

A minimum grade of C must be earned in math (through MATH S107) and communication classes taken in the general education requirements. In addition, all students in the Bachelor of Business Administration (B.B.A.) program must either test out of or earn a C or better in 3 hours of CIOS electives, 3 hours of CIOS spreadsheet or database courses, STAT S273, major and emphasis courses, and BA 462, Capstone. Students should complete the computer courses within their first sixty (60) credit hours.

Students in any of the business programs who are deemed deficient in any of the competency areas may be required to take additional courses to strengthen their skills before graduation. Any such additional courses can usually be counted as a program elective. Requiring supplementary course work will be considered if two different faculty members indicate a student has a weakness in the same outcome area.

MINIMUM CREDIT HOURS

<table>
<thead>
<tr>
<th>MINIMUM CREDIT HOURS</th>
<th>120</th>
</tr>
</thead>
</table>

GENERAL EDUCATION REQUIREMENTS (PG. 58) 35

Must include:
- MATH S107 College Algebra (or higher) 4
- ECON S201 Macroeconomics 3
- ECON S202 Microeconomics 3
- __ S __ Electives 16

MAJOR REQUIREMENTS 57–72

LOWER DIVISION 1
- BA S151 Introduction to Management 3
- BA S152 Business Foundation Simulation * 3

*Not required for accounting emphasis

LOWER DIVISION 2
- ACCT S201 Principles Financial Acct 3
- ACCT S202 Principles Managerial Acct 3
- CIOS S260 Business Communications 3

Select one from the following (3 credits):
- CIOS S235 Spreadsheet Concepts & App 3
- CIOS S240 Database Concepts & App 3

Select one from the following (3 credits):
- BA S374 Intro to Quantitative Methods 3
- STAT S273 Elementary Statistics 3
- __ S __ Electives 6

Note: Lower division courses must be substantially completed before admission to upper division courses. In cases where some lower division courses have not yet been completed, permission is required to take upper division core or emphasis classes.

UPPER DIVISION 1
- BA S301 Principles of Management 3
- BA S325 Financial Management 3
- BA S330 Legal Environment of Business 3
- BA S343 Principles of Marketing 3

Select one from the following (3 credits):
- ACCT S316 Accounting Information Systems 3
- BA S310 Management Information Systems* 3

Select one from the following (3 credits):
- BA S375 Project Management 3
- BA S412 Operations Management 3

UPPER DIVISION 2
- BA S462 Capstone: Strategic Management 3
- BA S490 Political & Social Environment 3
- BA S498 Applied Business Research* 3
- __ S __ Advisor-approved electives** 6-9
- __ S __ Electives 12

*Not required for accounting emphasis

**School of Management electives (BA, ACCT, LAWS)

EMPHASIS AREAS 15–21

Business Administration Emphasis Areas

Select one from the following emphasis areas:

Accounting

EMPHASIS REQUIREMENTS 21
- ACCT S310 Income Tax for Individuals 3
- ACCT S311 Intermediate Accounting I 3
- ACCT S312 Intermediate Accounting II 3
- ACCT S342 Advanced Managerial Cost Accounting 3
- ACCT S452 Auditing 3
Select two from the following (6 credits):
ACCT S222 Computer Automated Accounting 3
ACCT S379 Governmental Accounting 3
ACCT S454 Fraud & Forensic Examination 3
BA S315 Personal Finance 3

Entrepreneurship

EMPHASIS REQUIREMENTS 15
BA S363 Marketing Communications 3
BA S427 Marketing & Entrepreneurial Financial Management 3
BA S485 New Business Ventures 3
Select one from the following (3 credits):
BA S351 Organizational Behavior 3
BA S361 Human Resource Management 3
Select one from the following (3 credits):
BA S332 Contracts 3
BA S360 Business Organizations 3

Health Care Administration

EMPHASIS REQUIREMENTS 15
BA S305 U.S. Healthcare Systems 3
BA S362 Healthcare Human Resource Mgmt 3
BA S410 Healthcare Information Systems 3
BA S425 Financial Management for Healthcare Orgs 3
BA S435 Healthcare Law and Ethics 3

Human Resources Management

EMPHASIS REQUIREMENTS 15
BA S351 Organizational Behavior 3
BA S361 Human Resource Management 3
BA S426 Human Resource Financial Management 3
BA S461 Labor-Management Relations 3
BA S466 Strategic Human Resource Management 3

Marketing

EMPHASIS REQUIREMENTS 15
BA S311 Buyer Behavior 3
BA S363 Marketing Communications 3
BA S427 Marketing & Entrepreneurial Financial Management 3
BA S446 Service Marketing 3
Select one from the following (3 credits)
BA S441 Retail Management 3
BA S465 Strategic Marketing & Management for Non-profits 3

Elementary Education, B.A.

Bachelor of Arts
Juneau, Distance Delivered

The Bachelor of Arts in Elementary Education prepares students for recommendation in the state of Alaska for initial teaching certification in grades K-8. This program is for students in rural Alaskan communities and others who desire the flexibility of a distance program. Students in this program must be self-directed learners, have access to high speed internet connections, and prepare for a 9-month intensive student teaching experience in their senior year. Students are assessed relative to national and state standards, including National Council for Accreditation of Teacher Education (NCATE) standards, the Alaska Teacher Standards, the Alaska Student Content Standards, the Alaska Standards for Culturally Responsive Schools, and the Association for Childhood Education International (ACEI) Standards.

The degree requirements are interdisciplinary and provide breadth in the content areas necessary for successful teaching at an elementary level and depth in the opportunities to connect theory and practice in a variety of real classroom, school, and community contexts. The main components of this program include: (1) subject area coursework in UAS General Education Requirements (GERs); (2) additional subject area coursework in those areas important for successful teaching at an elementary level; (3) foundation courses in education with practical experiences in the schools; and (4) a capstone year-long experience where the professional education courses are integrated with field experiences and student teaching.

Contact: Dr. Jeffrey Lofthus
(907) 796-6404
jeffrey.lofthus@uas.alaska.edu

Admission Requirements

Applicants will be considered for full admission into the Bachelor of Arts in Elementary Education program after completing admission requirements as follows:
1. Completion of GERs
2. Minimum GPA of 2.75
3. Completion of 60 credits (all courses C or higher)
4. Praxis I exam taken
5. Mathematics competency (MATH S205 and MATH S206)
6. Successful completion of writing competency

Admission to Methods and Internship (Capstone Year)

In addition to the requirements for admission to major status all students entering the senior capstone year are required to have successfully completed the following:
1. GPA of 2.75
2. Successful interview with advisor
3. Satisfactory review of Professional Dispositions Progress Report completed by instructors
4. Successful completion of all courses with grades of C or better
5. Fingerprinting and criminal background check
6. A current resume and letter of introduction to future host teacher and principal
7. Praxis I exam scores meeting Alaska cut scores
8. Passing CBEST scores in reading, writing, mathematics may be submitted in lieu of passing Praxis I scores. CBEST qualifying test score 123 or higher total score; no individual score less than 37
9. One letter of recommendation from someone other than an education professor, who can speak to the student’s professional dispositions and potential as a future elementary teacher

**Exit Criteria**

2.75 GPA, approved portfolio based on the SOE vision and conceptual framework, Alaska State Standards, and national standards to be completed in the senior capstone year as part of methods courses and student teaching, and successful completion of Praxis II exam—Elementary Content Knowledge 0014 meeting Alaska certification cut scores.

**Degree Requirements**

Students must complete the GERs as well as the specific program requirements as listed for a minimum of 128 credit hours. Courses in a degree program may be counted only once. Courses used to fulfill the major requirements cannot be used to fulfill the GERs. Specific recommendations for the GERs in Elementary Education are listed below. Degree must include 48 credit hours of upper-division (300 or above) courses, 24 of which must be completed at UAS.

### MINIMUM CREDIT HOURS

**128**

**GENERAL EDUCATION REQUIREMENTS (PG. 58)**

**43**

#### Written Communication Skills

- **ENGL S111** Methods of Written Communication 3
- **ENGL S211** Intermediate Composition: Writing About Literature 3

#### Oral Communication Skills

**Select one from the following (3 credits):**

- **COMM S111** Fundamentals of Oral Communication* 3
- **COMM S235** Small Group Communication and Team Building* 3
- **COMM S237** Interpersonal Communication* 3
- **COMM S241** Public Speaking* 3

*Grade C or better

#### Computational Skills

**Select one from the following (4 credits):**

- **MATH S107** College Algebra 4
- **STAT S107** Survey of Statistics 4

#### Humanities

**Select two from the following (6 credits):**

- **ART S160** Art Appreciation 3
- **MUS S123** Music Appreciation 3
- **THR S111** Theatre Appreciation 3

#### Social Science

**Select one from the following (3 credits):**

- **GEOG S101** Introduction to Geography 3
- **GOVT S101** Introduction to American Government 3
- **PSY S101** Introduction to Psychology 3

**Select one from the following (3 credits):**

- **HIST S105** World History I 3
- **HIST S106** World History II 3

#### Science

**Select one from the following (4-8 credits):**

- **BIOL S103** Biology and Society 4
- **BIOL S105** Fundamentals of Biology I 4
- **BIOL S106** Fundamentals of Biology II 4

**Select one from each of the groups below (7-8 credits):**

#### Physical Sciences

- **PHYS S102** Survey of Physics I* 4
- **CHEM S103** Introduction to General Chemistry 4

#### Earth/Space Sciences

- **ASTR S225** General Astronomy 3
- **ENVS S101** Introduction to Environmental Science 4
- **GEOL S104** Physical Geology 4
- **GEOL S105** Geological History of Life 3

*MATH S107 or equivalent is prerequisite for PHYS S102

### BREADTH REQUIREMENTS

**29**

This area is designed to provide breadth necessary for elementary classroom teaching and depth necessary to respond to NCATE Standards and Alaska Student Content Standards.

#### Computational Skills

- **MATH S205** Mathematics for Elem School Teachers I 3
- **MATH S206** Mathematics for Elem School Teachers II 3

#### Humanities

**Select one from the following (3 credits):**

- **PSY S302** Social Psychology 3
- **HIST S131** US History I 3
- **HIST S132** US History II 3
- **PSY S245** Child Development 3
- **PSY S250** Lifespan Development 3
- **ALST S300** Alaska Studies 3
- **GEOG S302** Geography of Alaska: People, Places and Potential 3
- **HIST S341** History of Alaska 3
- **S__ S__** Advisor-approved elective* 3

*Must be Alaska Department of Education approved course for Alaska Studies.

#### Social Science

**Select one from the following (3 credits):**

- **ANTH S200** Alaska Native Cultures 3
- **ANTH S202** Cultural Anthropology 3
- **ANTH S225** Art and Narratives of Alaska Natives 3
English, B.A.

Bachelor of Arts
Juneau

Admission Requirements

Students are admitted to the program after admission to UAS and declaring an English major. At the time of admission, they will be assigned to an academic advisor in the humanities department. Students must maintain a cumulative GPA of 2.75 and successfully complete ENGL S311 with a C or higher by their 62nd credit.

Degree Requirements

Candidates must complete general education requirements as well as the specific program requirements listed below. Courses may not be used to fulfill more than one requirement in the B.A. program. Students must maintain a minimum cumulative GPA of 2.75 and complete 42 credits of upper-division courses (24 of these must be UAS credits). A maximum of 12 credits of independent study may be applied toward the B.A. in English.

The B.A. in English provides a broad foundation in the liberal arts as well as specialized training in language and literature. The program is designed to provide students with (1) knowledge of English and American literature and culture and their multicultural contexts, (2) advanced skills in critical reading, research, writing, speaking, and problem solving, and (3) practical experience in a professional setting.

Master of Arts in Teaching in secondary English education: ENGL S305, ENGL S340, and COMM S340 are required for English B.A. students who plan to enter the UAS Master of Arts in Teaching program in secondary English education.

MINIMUM CREDIT HOURS 120

GENERAL EDUCATION REQUIREMENTS (PG. 58) 34

WORLD LANGUAGE REQUIREMENT 8

___ S___ Language courses*

*Students must take a minimum of 8 credits in the study of a single world or Alaska Native language.

MAJOR REQUIREMENTS 18

ENGL S215 Introduction to Literary Study 3
ENGL S223 Survey of British Lit I 3
ENGL S224 Survey of British Lit II 3
ENGL S226 Survey of American Lit II 3
ENGL S491 Internship 3

Select one from the following (3 credits):
ENGL S304 Literature for Children and Young Adults 3
ENGL S305 Children’s Literature 3

EMPHASIS REQUIREMENT 30

Choose one from the following emphasis areas

Creative Writing Emphasis

EMPHASIS REQUIREMENTS 30

ENGL S261 Introduction to Creative Writing 3
ENGL S311 Advanced Composition 3
ENGL S362 Memoir Writing 3
ENGL S363 Nature Writing 3
ENGL S461 Advanced Creative Writing* 6

Select 4 from the following (12 credits):
COMM S340 Media Studies 3
COMM S346 From Page to Stage: Oral Interpretation 3
ENGL S302 Masterpieces of World Literature 3
ENGL S303 Literature of the Environment 3
ENGL S305 Children’s Literature 3
ENGL S340 English Language Studies 3
ENGL S365 Literature of Alaska: Native and Non-Native Perspectives 3
ENGL S370 Native American Literature 3
ENGL S414 Research Writing 3
ENGL S418 Advanced Themes in Literature: ST 3
ENGL S419 Major Authors: ST 3
ENGL S420 Genre Studies: ST 3
ENGL S421 Women and Literature: ST 3
ENGL S422 Literary Periods: ST 3
ENGL S423 Ecocriticism 3

*Must be repeated for a total of 6 credits
Bachelor's Degrees

Bachelor's Degrees

Literature Emphasis

The Literature emphasis area requires at least 12 credits of literature courses focusing on literature before 1900. See the course schedule for information on which courses have been designated as pre-1900 each semester. No more than 12 credits of literature courses may be in writing or communication (ENGL S311, S362, S363, S461 or COMM S340, S446).

EMPHASIS REQUIREMENTS 30

Selected four from the following (12 credits):
Comm S340 Media Studies 3
Comm S346 From Page to Stage: Oral Interpretation 3
Engr S302 Masterpieces of World Literature 3
Engr S303 Literature and the Environment 3
Engr S305 Children's Literature 3
Engr S340 English Language Studies 3
Engr S362 Memoir Writing 3
Engr S363 Nature Writing 3
Engr S365 Literature of Alaska 3
Engr S370 Native American Literature 3

Select five from the following (15 credits):
Engr S414 Research Writing 3
Engr S418 Advanced Themes in Literature: ST 3
Engr S419 Major Authors: ST 3
Engr S420 Genre Studies: ST 3
Engr S421 Women and Literature: ST 3
Engr S422 Literary Periods: ST 3
Engr S423 Ecocriticism 3
Engr S461 Advanced Creative Writing 3

Literature and the Environment Emphasis

The Literature and the Environment emphasis area requires at least 12 credits of literature courses focusing on literature before 1900. See the course schedule for information on which courses have been designated as pre-1900 each semester.

EMPHASIS REQUIREMENTS 30

Engr S303 Literature and the Environment 3
Engr S311 Advanced Composition 3
Engr S423 Ecocriticism 3

Select three from the following (9 credits):
Engr S363 Nature Writing 3
Engr S365 Literature of Alaska 3
Engr S370 Native American Literature 3
Phil S271 Perspectives on the Natural World 3

Select four from the following (12 credits):
Engr S414 Research Writing 3
Engr S418 Advanced Themes in Literature: ST 3
Engr S419 Major Authors: ST 3
Engr S420 Genre Studies: ST 3
Engr S421 Women and Literature: ST 3
Engr S422 Literary Periods: ST 3
Engr S461 Advanced Creative Writing 3

Environmental Science, B.S.

Bachelor of Science

Juneau

The main objective of the Environmental Science (ENVS) degree program is to produce graduates who are well educated in the processes and interactions that occur in and between the atmosphere, biosphere, lithosphere, and hydrosphere. To achieve this, the curriculum draws from a number of disciplines. Students have the opportunity to be trained in basic mathematical and scientific methods and the application of these methods in examining the relationships between natural processes and human endeavors. Please visit www.uas.alaska.edu/envs for the most current information about the program.

Disciplinary emphasis areas are listed in the breadth courses section. ENVS students can also earn a minor in Biology or Mathematics. This is especially desirable for students interested in becoming secondary science teachers or considering graduate school.

Admission Requirements

Admission to the ENVS degree program requires the completion of four years of high-school math and science courses or the equivalent UAS courses (PHYS S102, CHEM S103, MATH S107 and MATH S108).

When a student declares Environmental Science as a major they will be matched with an ENVS faculty advisor. Students should consult with their advisor for course selection and sequencing.

Degree Requirements

UAS students must fulfill all UAS General Education Requirements (GERs), and ENVS major requirements, breadth requirements, and upper-division electives for a minimum of 120 credit hours. Courses in a degree program may be applied to only one type of degree requirement. For instance, courses used to fulfill the major requirements cannot be used to fulfill the GERs. Specific recommendations for the GERs in Environmental Science are listed below. 48 of the 120 credit hours must be at the upper-division level (300 or above). 24 of the upper-division courses must be completed at UAS.

MINIMUM CREDIT HOURS 120

GENERAL EDUCATION REQUIREMENTS (PG. 58) 36

Students should consult with an advisor and select courses that satisfy prerequisites required in this degree program.

Must include:
Envs S101 Introduction to Environmental Science 4
Geol S104 Physical Geology 4
Math S200 Calculus I 4
MAJOR REQUIREMENTS 48

BIOL S105 Fundamentals of Biology I 4
CHEM S105 General Chemistry I 4
CHEM S106 General Chemistry II 4
ENVS S310 Geographic Info Systems 3
ENVS S420 Atmospheric Science 3
GEOL S301 Geomorphology 4
GEOL S302 Hydrology 4
MATH S201 Calculus II 4

Select one from the following (4 credits):
CHEM S341 Organic and Biological Chemistry I 4
CHEM S350 Environmental Chemistry 4

Select one from the following (4 credits):
BIOL S271 Ecology 4
GEOL S271 Earth Materials 4

Select both
PHYS S103 College Physics I 4
PHYS S104 College Physics II 4

or both
PHYS S211 General Physics I 4
PHYS S212 General Physics II 4

Select from the following (2 credits minimum):
ENVS S491 Environmental Science Internship 1-4
ENVS S492 Environmental Science Seminar* 1
ENVS S498 Directed Research 1-6

BREADTH REQUIREMENTS 20

Select from the following (20 credits total):
ENVS S110 Introduction to Geographic Information Systems 1
ENVS S111 Introduction to Differential Global Positioning Systems 1
ENVS S200 Hazardous Materials Management 3
ENVS S301 Soil Sciences 4
ENVS S311 Technical Writing for Science Majors 3
ENVS S402 Limnology 4
ENVS S403 Remote Sensing 3
ENVS S404 Snow Hydrology 4
ENVS S408 Biogeochemistry 3
ENVS S410 Advanced Geographic Information Systems 3
ENVS S491 Internship in ENVS Field 1-4
ENVS S492 Environmental Science Seminar* 1
ENVS S498 Research in Environmental Science 1-6
GEOL S300 Geology of Alaska 3
GEOL S310 Glaciation and Climate Change 3
GEOL S315 Glacier Surveying* 3

**Juneau Icefield Program courses** 3-9

*May be repeated once
**Juneau Icefield Research Program courses are offered in the summer only

Studies in Mountain and Arctic Earth Systems Sciences can be arranged with concentration on selected topics.

Additional Natural Sciences Department Breadth courses for ENVS Majors:

BIOL S271 Ecology 4
BIOL S382 Wetland Ecology 4
BIOL S480 Aquatic Pollution 3
BIOL S481 Marine Ecology 4
MATH S202 Calculus III 4
MATH S302 Differential Equations 3
MATH S305 Geometry 3
MATH S311 Modern Algebra 3
MATH S314 Linear Algebra 3
MATH S460 Mathematical Modeling 3
STAT S273 Elementary Statistics 3
STAT S373 Probability and Statistics 3
STAT S401 Regression and Analysis of Variance 4

ELECTIVES 16

Must include a minimum of 12 credits at the upper division level.

Liberal Arts, B.L.A.

Bachelor of Liberal Arts
Juneau

With emphases in: Art, General Studies, Human Communication, and Language Arts and Communications. General Studies is available via distance delivery.

The Bachelor of Liberal Arts degree is designed for students seeking a broad-based education that can lead to graduate school or jobs in which critical thinking and communication skills are valued. Students engage in time-honored methods of inquiry: creative endeavor, critical interpretation, dialogue, historical and logical analysis, and scholarly investigation. BLA graduates who are interested in teaching may also apply to the one-year Master of Arts in Teaching program at UAS. Students should consult with faculty in their areas of interest to design an individualized course of study.

BLA degrees must include:
1. 120 credits minimum at the 100 level or above
2. 30 credits, including 24 upper-division credits, completed at UAS
3. 42 upper-division (300-400 level) credits
4. No more than 12 credits of independent study and no more than 12 credits of internship

Admission Requirements

Students need to go through formal application process. See UAS admission requirements. Distance Students: E-mail: distance.ed@uas.alaska.edu or call 1-800-478-9069.

Icefield Courses and Academic Credit:
www.juneauicefield.org/FieldCourses.html

Students are generally registered for a minimum of 3 credits through the University of Idaho. Six credits comprise a full load. Additional credits (up to 9 per summer session) are available with cost borne by the participant.

Courses are in Earth Systems Field Science, emphasizing geological, glacial, periglacial, geophysical, arctic ecological, and glacio-atmospheric systems. Directed
## Degree Requirements

Courses in a degree program may be counted only once—courses used as major requirements cannot also be used to fulfill requirements in other parts of the program. History courses may fulfill humanities or social science requirement, but may not be used for both.

BLA-required GERs may fulfill requirements in the GERs or elsewhere in the program.

### MINIMUM CREDIT HOURS

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### GENERAL EDUCATION REQUIREMENTS (PG. 58)

#### Must include:
- ART S261 History of World Art I* 3
- PHIL S201 Introduction to Philosophy 3
- Language courses** 8

#### select both
- HIST S105 World History I 3
- HIST S106 World History II 3

#### or both
- HIST S131 History of the U.S. I 3
- HIST S132 History of the U.S. II 3

*Art emphasis only

**8 credits in a 1-year sequence of a single world or Alaska Native language. Students who study a world language (other than English) for a semester in a study abroad program where they are being taught the language of study and in the country where the language is spoken will be considered to have met their B.L.A. language requirement.

## Liberal Arts with Minor

### BREADTH REQUIREMENTS WITH A MINOR

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#### Humanities

Minimum of 9 credits in at least 2 disciplines with a maximum of 6 credits in 1 discipline.

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#### Social Science

Minimum of 9 credits in at least 2 disciplines with a maximum of 6 credits in 1 discipline.

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#### Mathematics or Natural Sciences

Select from MATH S108 or higher; STAT S107 or higher; all natural science courses; ANTH S205, GEOG S205, PHIL S204, and STAT S273.

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#### Communications

Completion of ENGL S311 with a C or higher and 3 additional upper division credits in literature, creative writing, communication, or other English composition.

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#### ELECTIVES

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## Liberal Arts without Minor

### BREADTH REQUIREMENTS WITHOUT A MINOR

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#### Humanities

Minimum 15 credits in at least 2 disciplines with a maximum of 9 credits in 1 discipline.

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#### Social Science

Minimum 15 credits in at least 2 disciplines with a maximum of 9 credits in 1 discipline.

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#### Mathematics or Natural Sciences

Select from MATH S108 or higher mathematics course; all natural science courses; or ANTH S205, GEOG S205, PHIL S204, and STAT S273.

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#### Communications

Completion of ENGL S311 with a C or higher and 3 additional upper division credits in literature, creative writing, communication, or other English composition.

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#### ELECTIVES

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## Liberal Arts Emphasis Areas

### Grades lower than a C will not be accepted for the depth or emphasis area. A senior research thesis or project of up to 6 credits is optional. Law Science (LAWS) courses can only be used in the General Studies emphasis.

### Art Emphasis

ART S261 must be taken as the required fine art GER for this program.

### EMPHASIS REQUIREMENTS

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#### ART S162 Color and Design 3
#### ART S205 Intermediate Drawing* 3
#### ART S213 Beginning Painting I (Oil or Acrylic) 3
#### ART S262 History of World Art II 3
#### ART S363 History of Modern Art 3
#### HUM S499 Humanities Capstone 3
#### ART S____ Advisor-approved upper division courses 6

### Select one from the following (3 credits):

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#### ART S201 Beginning Ceramics
#### ART S211 Sculpture

### Select one from the following (3 credits):**

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#### ART S307 Intermediate Printmaking Serigraphy
#### ART S308 Intermediate Printmaking: Relief
#### ART S310 Intermediate Printmaking: Intaglio

*ART S105 must be taken as a prerequisite to ART S205 and can count as either a humanities breadth or elective in this program.

**ART S207, S208 and S210 are required prerequisites for these courses. They can count as either humanities breadth or electives in this program.
General Studies Emphasis
(Available by distance delivery)

EMPHASIS REQUIREMENTS 30
1. At least 2 disciplines from the following course classifications: humanities, mathematics and logic, natural sciences, or social sciences (including law science) must be represented with at least 12 credits each
2. 18 of the 30 credits required for a general studies emphasis must be upper division.

Human Communication Emphasis

EMPHASIS REQUIREMENTS 30
1. Select 12 credits from the following:
   - COMM S250 Introduction to Human Communication 3
   - COMM S380 Communication Theory 3
   - COMM S491 Advanced Communication Internship 1-9
   - COMM S494 Advanced Communication Practicum 1-9
   - HUM S499 Humanities Capstone 3
2. At least 18 credits from one category A, B or C
3. A total of 30 credits is required. 15 credits must be upper division.

Select 18 credits from one category A, B, or C:

A. Cultural/Relational Communication
Category explores the dynamics of culture and interpersonal relationships from a communication perspective with emphasis on the analysis of intercultural and relational challenges.

Select 9 credits from the following:
- COMM S218 Studies in Human Communication 1-3
- COMM S237 Interpersonal Communication 3
- COMM S330 Intercultural Communication 3
- COMM S418 Advanced Studies in Human Communication 1-3
- COMM S451 Gendered Interpersonal Communication 3
- COMM S452 Family Communication 3
- COMM S475 Communication in Education and Training 3

Select one from the following (3 credits):
- COMM S320 Argumentation and Debate 3
- COMM S335 Organizational Communication 3
- COMM S346 From Page to Stage: Oral Interpretation 3
- COMM S420 Leadership II 3
- COMM S460 Rhetorical Criticism 3

Select two from the following (6 credits):
- ANTH S225 Artistic Expressions and Oral Narratives of Alaska Natives 3
- ENGL S223 Survey of British Literature I 3
- ENGL S224 Survey of British Literature II 3
- ENGL S225 Survey of American Literature I 3
- ENGL S226 Survey of American Literature II 3
- ENGL S302 Masterpieces of World Literature 3
- ENGL S418 Advanced Themes in Literature: ST 3
- HIST S300 Historiography and Historical Method 3
- HIST S365 History of Rock ‘n’ Roll 3
- PHIL S390 Selected Topics in Philosophy 3
- SSCI S300 Research Methods in Social Science 3
- THR S211 Theatre History and Literature I 3
- THR S212 Theatre History and Literature II 3
- THR S221 Acting I 3
- THR S222 Acting II 3
- THR S331 Directing 3
- THR S418 Advanced Studies in Theatre 3

Additional courses as approved by advisor.

B. Performance/Rhetorical Studies
Category explores the analysis of contemporary events through the application of critical theory and performance with emphasis on the components of performer, text, audience and context as well as historical and social influences.

Select 9 credits from the following:
- COMM S218 Studies in Human Communication 1-3
- COMM S241 Public Speaking 3
- COMM S320 Argumentation and Debate 3
- COMM S346 From Page to Stage: Oral Interpretation 3
- COMM S418 Advanced Studies in Human Communication 1-3
- COMM S460 Rhetorical Criticism 3

Select one from the following (3 credits):
- COMM S320 Argumentation and Debate 3
- COMM S335 Organizational Communication 3
- COMM S420 Leadership II 3
- COMM S451 Gendered Interpersonal Communication 3
- COMM S452 Family Communication 3
- COMM S475 Communication in Education and Training 3

Select two from the following (6 credits):
- ANTH S225 Artistic Expressions and Oral Narratives of Alaska Natives 3
- ENGL S223 Survey of British Literature I 3
- ENGL S224 Survey of British Literature II 3
- ENGL S225 Survey of American Literature I 3
- ENGL S226 Survey of American Literature II 3
- ENGL S302 Masterpieces of World Literature 3
- ENGL S418 Advanced Themes in Literature: ST 3
- HIST S300 Historiography and Historical Method 3
- HIST S365 History of Rock ‘n’ Roll 3
- PHIL S390 Selected Topics in Philosophy 3
- SSCI S300 Research Methods in Social Science 3
- THR S211 Theatre History and Literature I 3
- THR S212 Theatre History and Literature II 3
- THR S221 Acting I 3
- THR S222 Acting II 3
- THR S331 Directing 3
- THR S418 Advanced Studies in Theatre 3

Additional courses as approved by advisor.

C. Professional / Organizational Communication
Category explores those communication processes that constitute and change organizational culture and structure, with special emphasis on social interaction and communicative practices found within organizations.
Select 9 credits from the following:

- COMM S218 Studies in Human Communication 1-3
- COMM S235 Small Group Communication and Team Building 3
- COMM S241 Public Speaking 3
- COMM S335 Organizational Communication 3
- COMM S418 Advanced Studies in Human Communication 1-3
- COMM S420 Leadership II 3
- COMM S475 Communication in Education and Training 3

Select one from the following (3 credits):

- COMM S320 Argumentation and Debate 3
- COMM S330 Media Studies 3
- COMM S340 Intercultural Communication 3
- COMM S346 From Page to Stage: Oral Interpretation 3
- COMM S418 Advanced Studies in Human Communication 1-3
- COMM S420 Leadership II 3
- COMM S451 Gendered Interpersonal Communication 3
- COMM S452 Family Communication 3
- COMM S460 Rhetorical Criticism 3
- COMM S475 Communication in Education and Training 3
- COMM S291/S491 Communication Internship 1-9
- COMM S294/S494 Communication Practicum 1-3

Select two from the following (6 credits):

- BA S166 Small Business Management 3
- BA S201 Intro to Management and Supervision 3
- BA S301 Principles of Management 3
- BA S351 Organizational Behavior 3
- BA S361 H R Management 3
- BA S487 International Business 3
- CIOS S262 Professional Development 3
- GOVT S211 State and Local Government 3
- GOVT S313 Alaska Politics and Government 3
- PHIL S301 Ethics 3
- PHIL S390 Selected Topics in Philosophy 3
- PSY S375 Current Issues in Psychology 3
- SOC S302 Social Psychology 3
- SSCI S300 Research Methods in Social Science 3
- THR S418 Advanced Study: Arts Administration 3

Additional courses as approved by advisor.

Language Arts and Communications Emphasis

**EMPHASIS REQUIREMENTS 30**

1. At least 18 credits from one category A, B, or C
2. At least 3 credits from each of the categories below
3. HUM 499 Humanities Capstone course (3 credits)
4. A total of 30 credits is required. 15 credits must be upper division

**A. Composition and Creative Writing**

- ENGL S261 Introduction to Creative Writing 3
- ENGL S362 Memoir Writing 3
- ENGL S363 Nature Writing 3
- ENGL S393/493 Special Topics 3
- ENGL S397/497 Independent Study 3
- ENGL S414 Research Writing 3
- ENGL S461 Advanced Creative Writing: ST 3
- HUM S499 Humanities Capstone 3

**B. Human Communication**

- COMM S218 Studies in Human Communication 1-3
- COMM S220 Leadership I 3
- COMM S235 Small Group Communication/Teambuilding 3
- COMM S237 Interpersonal Communications 3
- COMM S241 Public Speaking 3
- COMM S250 Introduction to Human Communication 3
- COMM S320 Argumentation and Debate 3
- COMM S330 Intercultural Communication 3

- COMM S335 Organizational Communication 3
- COMM S340 Media Studies 3
- COMM S346 From Page to Stage: Oral Interpretation 3
- COMM S380 Communication Theory 3
- COMM S418 Advanced Studies in Human Communication 1-3
- COMM S420 Leadership II 3
- COMM S451 Gendered Interpersonal Communication 3
- COMM S452 Family Communication 3
- COMM S460 Rhetorical Criticism 3
- COMM S475 Communication in Education and Training 3
- COMM S291/S491 Communication Internship 1-9
- COMM S294/S494 Communication Practicum 1-3

**C. Literature**

- ENGL S215 Intro to Literary Study 3
- ENGL S218 Themes in Literature 3
- ENGL S223-224 Survey of British Literature I, II 3
- ENGL S225-226 Survey of American Literature I, II 3
- ENGL S302 Masterpieces of World Literature 3
- ENGL S303 Literature and the Environment 3
- ENGL S305 Children’s Literature 3
- ENGL S330 Shakespeare 3
- ENGL S340 English Language Studies 3
- ENGL S365 Literature of Alaska 3
- ENGL S370 Native American Literature 3
- ENGL S393/493 Special Topics 3
- ENGL S397/497 Independent Study 3
- ENGL S418 Advanced Themes in Literature: ST 3
- ENGL S419 Major Authors: ST 3
- ENGL S420 Genre Studies: ST 3
- ENGL S421 Women and Literature: ST 3
- ENGL S422 Literary Periods: ST 3
- ENGL S423 Ecocriticism 3
- HUM S499 Liberal Arts Thesis 1-6

**D. Other Elective:** Select one course from languages, communication, journalism or theatre (3 credits)

Marine Biology, B.S.

Bachelor of Science

Juneau

The B.S. degree in Marine Biology provides students with the opportunity to learn biological principles and skills in lecture, laboratory and field courses with a core curriculum in Marine Biology. Student research is emphasized throughout the program. The program has faculty actively involved in a wide range of disciplines, including marine ecology, behavioral ecology, marine mammalogy, marine pollution, crustacean physiology, marine phycology. The location of the University provides students with a “natural laboratory” that includes extensive marine habitat, rainforest, wetlands, and ice fields all within walking distance of the classrooms. A small student-to-professor ratio ensures a more personal approach to learning than is possible at larger universities. Additional information about the marine biology program can be found at www.uas.alaska.edu/biology.
Admission Requirements
Applicants enter as pre-majors and will be considered for full admission to the B.S. in Marine Biology after completion of the following:

1. MATH S107 (may be met by placement examination)
2. ENGL S111
3. BIOL S105 and BIOL S106
4. High school chemistry or CHEM S103 with a C or higher.

When a student becomes a major in Marine Biology, he or she is assigned a faculty advisor. The student and faculty advisor plan the student's curriculum, and the advisor's signature is required on registration documents.

Degree Requirements
Candidates must complete the General Education Requirements (GERs) as well as the specific program requirements listed below for a minimum of 120 credit hours.

Courses in a degree program may be counted only once. Courses used to fulfill the major requirements cannot be used to fulfill the GERs. Specific requirements for GERs in Marine Biology are listed below. The degree must include 48 credits of upper-division (300 or above) courses, 24 of which must be completed at UAS.

MINIMUM CREDIT HOURS 120

GENERAL EDUCATION REQUIREMENTS (PG. 58) 36

Must include:
MATH S200 Calculus I 4
BIOL S105 Fundamentals of Biology I 4
BIOL S106 Fundamentals of Biology II 4

MAJOR REQUIREMENTS 46
BIOL S215 Introduction to Marine Biology 3
BIOL S271 Ecology 4
BIOL S310 Animal Physiology 4
BIOL S362 Genetics 4
BIOL S482 Evolution 4
CHEM S105 General Chemistry I 4
CHEM S106 General Chemistry II 4
CHEM S341 Organic and Biological Chemistry I 4
CHEM S342 Organic and Biological Chemistry II 4
STAT S273 Elementary Statistics 3

select both
PHYS S103 College Physics I 4
PHYS S104 College Physics II 4

or both
PHYS S211 General Physics I 4
PHYS S212 General Physics II 4

MARINE BIOLOGY CORE CLASSES 11

Select three from the following courses (11-12 credits total):
BIOL S305 Invertebrate Zoology 4
BIOL S373 Conservation Biology 3

BIOL S384 Marine Mammalogy 4
BIOL S401 Phycology 4
BIOL S415 Physiology of Marine Animals 4
BIOL S427 Introduction to Ichthyology 4
BIOL S481 Marine Ecology 4

BIOLOGY ELECTIVES 6
Select from the following (6 credits total):
BIOL S239 Intro to Plant Biology 4
BIOL S300 Vertebrate Zoology 4
BIOL S375 Current Topics in Biology** 2
BIOL S382 Wetlands Ecology 4
BIOL S396 Field Studies* 1-6
BIOL S398 Research* 1-3
BIOL S498 Research* 1-6
BIOL S426 Ornithology 4
BIOL S441 Animal Behavior 4
BIOL S445 Vascular Plants of Southeast Alaska 3
BIOL S480 Aquatic Pollution 3
BIOL S492 Biology Seminar** 1
BIOL S495 Behavioral Ecology 3
ENVS S415 Biogeography & Landscape 3

* up to 6 credits total from BIOL 396/398/498 may be applied
** only 4 credits from BIOL S375 and 2 credits from BIOL S492 may be applied toward the Biology electives. Others may be applied toward general electives.

GENERAL ELECTIVES 21
Minimum of 12 credits from upper division courses.

Mathematics, B.S.
Bachelor of Science
Juneau
The Bachelor of Science in Mathematics provides a solid foundation in mathematics. In addition to taking the core and interdisciplinary courses, students will also take part in a seminar dedicated to undergraduate research during their last two years. After obtaining the degree, students will have opportunities in secondary education, graduate studies and direct entry into the job market. Each student will be advised by faculty to achieve a specific program tailored for the student's goals. Additional information may be found at www.uas.alaska.edu/math.

Admission Requirements
Applicants will be considered for full admission to the BS program with a GPA of 2.0 or better and after completion of the following with a grade of C or better:

1. ENGL S111
2. MATH S107 or higher

Degree Requirements
Candidates must complete the General Education Requirements (GER) as well as the specific program requirements listed below for a minimum of 120 credit hours. Courses in a degree program may be counted only once. Courses used to fulfill the major require-
Bachelor’s Degrees

MINIMUM CREDIT HOURS 120

GENERAL EDUCATION REQUIREMENTS (PG. 58) 35

SCIENCE REQUIREMENTS* 7

Select from the following:

- BIOL S105 Fundamentals of Biology I 4
- BIOL S106 Fundamentals of Biology II 4
- BIOL S111 Human Anatomy and Physiology I 4
- BIOL S112 Human Anatomy and Physiology II 4
- CHEM S105 General Chemistry I 4
- CHEM S106 General Chemistry II 4
- ENVS S101 Introduction to Environmental Science 4
- GEOL S104 Physical Geology 4
- PHIL S206 Symbolic Logic 3

* Other science courses may be substituted with the approval of the advisor.

PHYSICS REQUIREMENTS 8

select both

- PHYS S103 College Physics I 4
- PHYS S104 College Physics II 4

or both

- PHYS S211 General Physics I 4
- PHYS S212 General Physics II 4

MAJOR REQUIREMENTS 43

- MATH S200 Calculus I 4
- MATH S201 Calculus II 4
- MATH S202 Calculus III 4
- MATH S215 Introduction to Proofs 3
- MATH S302 Differential Equations 3
- MATH S311 Modern Algebra 3
- MATH S314 Linear Algebra 3
- MATH S324 Advanced Calculus 3
- MATH S392 Junior Seminar 2
- STAT S273 Elementary Statistics 3

Select from the following (9 credits total):

- FISH F421 Fish Population Dynamics (UAF) 4
- MATH S305 Geometry 3
- MATH S410 Complex Variables 3
- MATH S411 History of Mathematics and Science 3
- MATH S460 Mathematical Modeling 3
- STAT S373 Probability and Statistics 3
- STAT S401 Regression and Analysis of Variance 4

ELECTIVES/MINOR: 27

Must include upper division courses as needed.

Social Science, B.A.

Bachelor of Arts

Juneau

With concentration areas in:

- Anthropology
- Economics
- Government/Political Science
- History
- Psychology
- Sociology

The B.A. degree in Social Science with an emphasis in a social science discipline enables students to engage in advanced course work in at least three social science disciplines as well as experience a rich interdisciplinary focus pursuing their degree.

Degree Requirements

Candidates must complete General Education Requirements (GERs) as well as specific program requirements listed below for a minimum of 120 credit hours. Specific requirements for GERs in Social Science are listed below. Students must select one primary and two secondary concentration areas. The degree must include 42 credits of upper-division (300 or above) courses, 24 of which must be completed at UAS.

The Student Assessment Portfolio Plan (SAP): The (SAP) in Social Science is a portfolio assessment requirement for degree completion. The following related course is taken in the freshman or sophomore year with presentation of the completed portfolio in the fall semester of the student’s senior year:

- SSCI S210, Portfolio Review

Specific requirements of the portfolio are available from the Assessment Coordinator for the Social Sciences SAP.

MINIMUM CREDIT HOURS 120

GENERAL EDUCATION REQUIREMENTS (PG. 58) 35

Computational Skills

Select one from the following (4 credits):

- STAT S107 Survey of Statistics 4
- MATH S107 College Algebra 4

Social Science Skills

- SSCI S101 Self, Culture and Society 3
- SSCI S102 Reading/Writing in Social Sciences 2
- SSCI S210 First Portfolio Review Class 1
WORLD LANGUAGE RECOMMENDATION 8
___ S ___ Language courses* 8
*8 credits in a 1-year sequence of a single world or Alaska Native language

ELECTIVES 23-25
___ S ___ Advisor-approved electives

PRIMARY CONCENTRATION REQUIREMENTS 24-25

SECONDARY CONCENTRATION REQUIREMENTS 30-31

Social Science
Primary Concentrations

Choose one. If a course is taken as a GER, substitution of an equal or higher course level and number of credits in same discipline must be taken to fulfill the primary concentration requirement.

Anthropology

PRIMAR Y CONCENTRATION REQUIREMENTS 24
ANTH S202 Cultural Anthropology 3
ANTH S205 Biological Anthropology 3
ANTH S ___ Electives* 18
*At least 12 credits must be upper division

Economics

PRIMAR Y CONCENTRATION REQUIREMENTS 24-25
ECON S201 Principles Econ I: Macroeconomics 3
ECON S202 Principles Econ II: Microeconomics 3
SSCI S300 Research Methods in Social Science 3
ECON S ___ Electives* 12-13
*At least 9 credits must be upper division.

Select one from the following (3 credits):
ECON S321 Intermediate Microeconomic Theory 3
ECON S324 Intermediate Macroeconomic Theory 3

Government/Political Science

PRIMAR Y CONCENTRATION REQUIREMENTS 24
GOVT S230 Introduction to Political Philosophy 3
GOVT S491 Legislative Internship 9
GOVT S492A Legislative Internship Seminar 3
SSCI S300 Research Methods in Social Science 3
Select one from the following (3 credits):
GOVT S101 Introduction to American Govt 3
GOVT S102 Introduction to Political Science 3
Select one from the following (3 credits):
GOVT S313 Alaska Politics and Government 3
GOVT S359 European Politics 3
GOVT S393 ST: Latin American Politics 3

History

PRIMARY CONCENTRATION REQUIREMENTS 24
HIST S300 Historiography and Historical Methods 3
HIST S492 Seminar in History: Selected Topics 3
HIST S ___ Any two 100/200 level history courses except HIST 133 6
HIST S ___ Any two 300/400 level history courses* 6
*Courses selected must not be taken as GERs

Select both**
HIST S131 History of the U.S. I 3
HIST S132 History of the U.S. II 3
or both
HIST S105 World History I 3
HIST S106 World History II 3
or both
HIST S227 Early Modern Europe 1400-1815 3
HIST S228 Modern Europe 1815-2000 3
**Courses selected must not be taken as GERs

Psychology

PRIMARY CONCENTRATION REQUIREMENTS 24
PSY S101 Introduction to Psychology 3
PSY S ___ Any one 200 level psychology course 3
PSY S340 Abnormal Psychology 3
SSCI S300 Research Methods in Social Science 3
PSY S ___ Electives* 9
*6 credits must be upper division.

Select one of the following (3 credits):
PSY S302 Social Psychology 3
PSY S430 Clinical and Counseling Psychology 3

Sociology

PRIMARY CONCENTRATION REQUIREMENTS 24
SOC S101 Introduction to Sociology 3
SSCI S300 Research Methods in Social Science 3
SOC S ___ Electives* 18
*At least 15 credits must be upper division.
Social Science Secondary Concentrations

Choose two of the following disciplines different from your primary concentration area and complete 15-16 credit course sequencing for both. If course taken as a GER, substitution of an equal or higher course level and number of credits in the same discipline must be taken to fulfill the secondary concentration requirement.

Anthropology

SECONDARY CONCENTRATION REQUIREMENTS 15
ANTH S202 Cultural Anthropology 3
ANTH S___ Electives* 12

*At least 9 credits must be upper division.

Economics

SECONDARY CONCENTRATION REQUIREMENTS 15-16
ECON S201 Principles Econ I: Macroeconomics 3
ECON S202 Principles Econ II: Microeconomics 3
ECON S___ Electives* 9-10

*At least 6 credits must be upper division.

Government/Political Science

SECONDARY CONCENTRATION REQUIREMENTS 15
GOVT S230 Introduction to Political Philosophy 3
GOVT S313 Alaska Politics and Government 3
GOVT S359 European Politics 3
LAWS S434 Constitutional Law 3

Select one from the following (3 credits):
GOVT S101 Introduction to American Government 3
GOVT S102 Introduction to Political Science 3

History

SECONDARY CONCENTRATION REQUIREMENTS 15
select both*
HIST S131 History of the U.S. I 3
HIST S132 History of the U.S. II 3

or both*
HIST S105 World History I 3
HIST S106 World History II 3

or both
HIST S227 Early Modern Europe 1400-1815 3
HIST S228 Modern Europe 1815-2000 3

HIST S___ Electives** 9

*Courses selected must not be taken as GERs.

**Minimum of 6 credits must be upper-division. HIST S133 will not be counted toward this degree.

Psychology

SECONDARY CONCENTRATION REQUIREMENTS 15
PSY S101 Introduction to Psychology 3
PSY S___ Electives* 12

*6 credits must be upper division.

Sociology

SECONDARY CONCENTRATION REQUIREMENTS 15
SOC S101 Introduction to Sociology 3
SOC S___ Electives 12

Social Work through UAF, B.S.W.

Bachelor of Arts in Social Work
University of Alaska Fairbanks

Graduates in social work qualify for beginning practice positions in child welfare, mental health, services for the aged, family agencies, youth programs, health services, Native corporations and other social agencies. Social work applies knowledge in the behavioral sciences to deal with the emotional and social problems of individuals, families and communities.

The curriculum includes a liberal arts base, foundation requirements in the behavioral sciences, and sequences in social policy and services, practical methods and field instruction. A major emphasis is the preparation of the student for beginning social work practice with rural and Alaska Native populations. Qualified students will complete a 400 hour practicum in a community social service agency in their senior year.

Delivery Courses are accessible throughout the state using a variety of distance delivery techniques including audio conferences and face-to-face seminars. This means students in rural regions of the state may be able to acquire the BA Social Work degree without relocating to a major campus of the university.

Complete general and core requirements for the B.A. degree in Communication Skills, Humanities and the Social Sciences; Perspectives on the Human Condition; Mathematics or Computer Science and Natural Science.

MINIMUM CREDIT HOURS 120

MAJOR REQUIREMENTS* 42
SWK F103 Introduction to Social Work 3
SWK F220 Values, Ethics and Social Work Practice 3
SOC/PSY F250 Statistics for the Behavioral Sciences 3
SWK F305 Social Welfare History 3
SWK F306 Social Welfare: Policies and Issues 3
SWK F320 Rural Social Work 3
SWK F341 Human Behavior in the Social Environment I 3
SWK F342 Human Behavior in the Social Environment II 3
SWK F375 Research Methods in Social Work 3
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>SWK F460</td>
<td>Social Work Practice I</td>
<td>3</td>
</tr>
<tr>
<td>SWK F461</td>
<td>Practicum in Social Work I (6 credits total)</td>
<td>3</td>
</tr>
<tr>
<td>SWK F463</td>
<td>Social Work Practice II</td>
<td>3</td>
</tr>
<tr>
<td>SWK F464</td>
<td>Practicum in Social Work II (6 credits total)</td>
<td>3</td>
</tr>
</tbody>
</table>

*Grade C or better

**REQUIRED COURSES:**

<table>
<thead>
<tr>
<th>Department</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY</td>
<td>S101 or F101</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOC</td>
<td>S101 or F100X</td>
<td>Self, Culture and Society</td>
<td>3</td>
</tr>
<tr>
<td>ANTH</td>
<td>S200 or F242</td>
<td>Alaska Native Cultures</td>
<td>3</td>
</tr>
</tbody>
</table>

For remaining course requirements please contact the advisor.

**Contact:** Heidi Brocious  
Assistant Professor of Social Work  
University of Alaska Fairbanks  
(907) 796-6213
UNDERGRADUATE MINOR OPTIONS

The same discipline may not be used to satisfy the major and the minor (i.e. English major and English minor does not make a degree.) If a course is a requirement of both the major and the minor, a student may use the course to meet both content requirements but will not receive double credit and will have need advisor approval for a course substitution. A minimum of six credits must be taken at UAS.

Alaska Native Studies Minor

The Alaska Native studies program offers the student the opportunity to explore an interdisciplinary curriculum in Alaska Native cultures, history, and perspectives. The program provides critical understanding and insights to students who anticipate professional involvement in Alaska Native rural and urban communities.

MINIMUM CREDIT HOURS 18

Students may only count a maximum of six credits in one topic area. Courses taken as foundations may not be counted as electives.

Select two from the following (6 credits total):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ANTH S200</td>
<td>Alaska Native Cultures</td>
<td>3</td>
</tr>
<tr>
<td>ANTH S225</td>
<td>Artistic Expressions and Oral Narratives of Alaska Natives</td>
<td>3</td>
</tr>
<tr>
<td>ANTH S475</td>
<td>Alaska Native Social Change</td>
<td>3</td>
</tr>
<tr>
<td>ART S263</td>
<td>Northwest Coast Art History and Culture</td>
<td>3</td>
</tr>
</tbody>
</table>

Select from the following (12 credits total):

Language Skills

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>AKL S101</td>
<td>Haida I</td>
<td>1</td>
</tr>
<tr>
<td>AKL S102</td>
<td>Haida II</td>
<td>1</td>
</tr>
<tr>
<td>AKL S103</td>
<td>Tlingit I</td>
<td>1</td>
</tr>
<tr>
<td>AKL S104</td>
<td>Tlingit II</td>
<td>1</td>
</tr>
<tr>
<td>AKL S105</td>
<td>Elementary Tlingit I</td>
<td>4</td>
</tr>
<tr>
<td>AKL S106</td>
<td>Elementary Tlingit II</td>
<td>4</td>
</tr>
</tbody>
</table>

Humanities Skills

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART S180/280/380/480</td>
<td>Northwest Coast Art: Selected Topics</td>
<td>1-3</td>
</tr>
<tr>
<td>ART S181/281/381</td>
<td>Beginning/Intermediate/Advanced Northwest Coast Design</td>
<td>1-3</td>
</tr>
<tr>
<td>ART S183</td>
<td>Northwest Coast Harvesting and Preparation of Basketry Materials</td>
<td>5</td>
</tr>
<tr>
<td>ART S189</td>
<td>Northwest Coast Tool Making</td>
<td>2</td>
</tr>
<tr>
<td>ART S263</td>
<td>Northwest Coast Art History and Culture</td>
<td>1-3</td>
</tr>
<tr>
<td>ART S282/382/482</td>
<td>Beginning/Intermediate Northwest Coast Basketry</td>
<td>1-3</td>
</tr>
<tr>
<td>ART S284</td>
<td>Beginning Northwest Coast Basketry Design</td>
<td>1</td>
</tr>
<tr>
<td>ART S285/385/485</td>
<td>Beginning/Intermediate/Advanced Northwest Coast Carving</td>
<td>1-3</td>
</tr>
<tr>
<td>ART S286/386/486</td>
<td>Beginning/Intermediate/Advanced Northwest Coast Woolen Weaving</td>
<td>1-3</td>
</tr>
<tr>
<td>ENGL S365</td>
<td>Literature of Alaska: Native and Non-Native Perspectives</td>
<td>3</td>
</tr>
<tr>
<td>GEOG S302</td>
<td>Geography of Alaska: People, Places, Potential</td>
<td>3</td>
</tr>
</tbody>
</table>

Anthropology Minor

The minor in anthropology provides students with knowledge and understanding about cultures around world and how social organization, kinship, religion, politics, economics, and technology impacts how individuals, communities, and societies interact. Students will study methods, theories, concepts, ideas, and application of the discipline of anthropology. The minor integrates University and social science competencies into the program.

MINIMUM CREDIT HOURS 18

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH S202</td>
<td>Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH S205</td>
<td>Biological Anthropology</td>
<td>3</td>
</tr>
</tbody>
</table>

Select three from the following (9 credits):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH S211</td>
<td>Fundamentals of Archaeology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH S225</td>
<td>Artistic Expressions and Oral Narratives of Alaska Natives</td>
<td>3</td>
</tr>
<tr>
<td>ANTH S311</td>
<td>Methods and Theories in Archaeology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH S314</td>
<td>Archaeology of Southeast Alaska</td>
<td>3</td>
</tr>
<tr>
<td>ANTH S324</td>
<td>Psychological Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH S335</td>
<td>Native North Americans</td>
<td>3</td>
</tr>
<tr>
<td>ANTH S342</td>
<td>Arctic Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH S351</td>
<td>Culture Dynamics and Change</td>
<td>3</td>
</tr>
<tr>
<td>ANTH S354</td>
<td>Culture and Ecology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH S351</td>
<td>Ethnohistory</td>
<td>3</td>
</tr>
<tr>
<td>ANTH S428</td>
<td>Tlingit Culture and History</td>
<td>3</td>
</tr>
<tr>
<td>ANTH S435</td>
<td>Northwest Coast Cultures</td>
<td>3</td>
</tr>
<tr>
<td>ANTH S458</td>
<td>Alaska Native Economic and Political Development</td>
<td>3</td>
</tr>
<tr>
<td>HIST S115</td>
<td>Alaska, Land, and People</td>
<td>3</td>
</tr>
<tr>
<td>HIST S341</td>
<td>History of Alaska</td>
<td>3</td>
</tr>
<tr>
<td>SOC S346</td>
<td>Alaskan Social Problems*</td>
<td>3</td>
</tr>
</tbody>
</table>

* Special topics courses that emphasize Alaska Native Perspectives may be approved for program.
Art Minor

The minor in art develops skills and appreciation in the visual arts as well as enhancing abilities in many of the following areas: reading, writing, speaking, computer literacy, professional behavior and especially critical thinking.

MINIMUM CREDIT HOURS 18

ART S105 Beginning Drawing 3
ART S162 Color and Design 3

Select one from the following (3 credits):
ART S261 History of World Art I 3
ART S262 History of World Art II 3

Select 6 credits from 1 of the following areas:

Drawing
ART S205 Intermediate Drawing 3
ART S304 Drawing and Modeling: Selected Topics 3
ART S305 Advanced Drawing 3
ART S319 Life Drawing 3
ART S404 Figure Studies 3
ART S405 Senior Drawing 3

Painting
ART S213 Beginning Painting (Oil or Acrylic) 3
ART S223 Watercolor Painting 3
ART S313 Intermediate Painting 3
ART S323 Intermediate Watercolor 3
ART S413 Advanced Painting 3
ART S423 Advanced Watercolor 3

Ceramics
ART S201 Beginning Ceramics 3
ART S226 Primitive Fire Pottery 3
ART S301 Intermediate Ceramics 3
ART S401 Advanced Ceramics 3
ART S450 Raku Pottery 3

Sculpture
ART S211 Introductory Photography 3
ART S311 Intermediate Sculpture 3
ART S411 Advanced Sculpture 3

Printmaking
ART S207 Beginning Printmaking: Serigraphy (Silkscreen) 3
ART S208 Beginning Printmaking: Relief 3
ART S210 Beginning Printmaking: Intaglio (Etching) 3
ART S307 Intermediate Printmaking: Serigraphy (Silkscreen) 3
ART S308 Intermediate Printmaking: Relief 3
ART S310 Intermediate Printmaking: Intaglio (Etching) 3
ART S407 Advanced Printmaking: Serigraphy (Silkscreen) 3
ART S408 Advanced Printmaking: Relief 3
ART S410 Advanced Printmaking: Intaglio (Etching) 3

Select one from the following (3 credits):
ART S261 History of World Art I* 3
ART S262 History of World Art II* 3
ART S363 History of Modern Art 3

*Biology Minor

This minor is designed to provide students with a broad introduction to the discipline of Biology as well as the opportunity for advanced study in three focus areas.

MINIMUM CREDIT HOURS 18

BIOL S105 Fundamentals of Biology I 4
BIOL S106 Fundamentals of Biology II 4

Select three from the following (10-12 credits):*
BIOL S215 Introduction to Marine Biology 3
BIOL S239 Introduction to Plant Biology 4
BIOL S271 Ecology 4
BIOL S300 Vertebrate Zoology 4
BIOL S305 Invertebrate Zoology 4
BIOL S310 Physiology 4
BIOL S362 Genetics 4
BIOL S373 Conservation Biology 3
BIOL S382 Wetlands Ecology 4
BIOL S384 Marine Mammalogy 4
BIOL S401 Phycology 4
BIOL S426 Ornithology 4
BIOL S427 Introduction to Ichthyology 4
BIOL S441 Animal Behavior 4
BIOL S445 Vascular Plants of Southeast Alaska 3
BIOL S480 Aquatic Pollution 3
BIOL S481 Marine Ecology 4
BIOL S482 Evolution 4
BIOL S495 Behavioral Ecology 3

*Must include at least one 4 credit course

Business Minor

The required courses in the business minor are designed to provide non-business majors with a broad introduction to business disciplines, terminology, and career opportunities.

MINIMUM CREDIT HOURS 15

ACCT S201 Principles of Financial Accounting 3
BA S301 Principles of Management 3
BA S343 Principles of Marketing 3

Select two from the following (6 credits total):
ACCT S202 Principles of Managerial Accounting 3
___ S___ Advisor-approved upper division accounting course 3
___ S___ Advisor-approved upper division business administration course 3
Computer Information and Office Systems Minor

The minor in computer information and office systems is designed to provide students with proficiency in using computers complementing their academic areas of study and increasing their employability. Students complete 15 credits from any one of the following CIOS occupational endorsements:

MINIMUM CREDIT HOURS 15

Administrative Office Support
Introductory Network Administration
Computer Applications
Medical Office Specialist
Networking Essentials
Programming Foundations
Web Authoring
Web Foundations

See individual listings under Occupational Endorsements.

Construction Technology Minor

The minor in Construction Technology is designed to provide students with a broad understanding of the details and components of residential construction. Students will gain hands-on experience in woodworking, carpentry, design, drafting and electrical wiring.

MINIMUM CREDIT HOURS 18

CT S120 Basic Construction Techniques 3
CT S201 Cold Climate Coastal Construction 3
Select 4 from the following (12 credits):
CT S135 Residential Wiring 3
CT S150 Basic Drafting 3
CT S222 Building Construction I 3
CT S225 Construction Planning and Scheduling 3
CT S226 Construction Estimating 3

Creative Writing Minor

The minor in creative writing is designed to provide students with the skills necessary to write poetry, fiction, and creative non-fiction. Students also analyze contemporary literature for technique and form. This minor will help prepare students for entrance into an M.F.A. program.

MINIMUM CREDIT HOURS 18

ENGL S261 Introduction to Creative Writing 3
ENGL S461 Advanced Creative Writing: Selected Topics 6
Select three from the following (9 credits):
ENGL S363 Nature Writing 3
ENGL S362 Memoir Writing 3
ENGL S461 Advanced Creative Writing: Selected Topics 3
ENGL S491 Internship in Creative Writing 3
ENGL S499 Thesis in Creative Writing 3

English Literature Minor

The minor in English Literature is designed to provide students with a broad overview of English and American literature as well as to enhance their reading, speaking, research, writing and critical thinking skills.

MINIMUM CREDIT HOURS 18

ENGL S215 Introduction to Literary Study 3
ENGL S223 Survey of British Literature I 3
ENGL S224 Survey of British Literature II 3
ENGL S225 Survey of American Literature I 3
ENGL S226 Survey of American Literature II 3
ENGL S311 Advanced Composition 3

Environmental Science Minor

This minor is designed to introduce students to disciplines in the physical sciences and provides the opportunity for advanced study in three focus areas.

MINIMUM CREDIT HOURS 18

ENVS S101 Introduction to Environmental Science 4
Select one from the following (4 credits):
CHEM S105 General Chemistry 4
GEOL S104 Physical Geology 4
PHYS S103 College Physics 4
PHYS S211 General Physics 4
Select 10 credits from the following:
ENVS S110 Introduction to Geographic Information Systems 1
ENVS S111 Introduction to Differential Global Positioning Systems 1
ENVS S301 Introduction to Soil Science 4
ENVS S310 Geographic Information Systems (GIS) 3
ENVS S402 Limnology 4
ENVS S403 Remote Sensing 3
ENVS S404 Snow Hydrology 3
ENVS S408 Biogeochemistry 3
ENVS S410 Advanced GIS 3
ENVS S420 Atmospheric Science 3
CHEM S341 Organic and Biological Chemistry 1 4
CHEM S350 Environmental Chemistry 4
GEOL S271 Earth Materials 4
GEOL S300 Geology of Alaska 3
GEOL S301 Geomorphology 4
### Undergraduate Minor Options

#### Geology Minor

- **GEOL S302** Hydrology 4
- **GEOL S310** Glaciation & Climate Change 3
- **GEOL S315** Glacier Surveying 3

*Additional prerequisites are required for upper division courses.*

#### French Minor

This minor is designed to provide students with a full grammatical understanding of the language, proficiency in reading and writing, and a command of vocabulary and idiomatic expressions. This program will stress active speaking and comprehension.

**MINIMUM CREDIT HOURS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN S101</td>
<td>Beginning French I</td>
<td>4</td>
</tr>
<tr>
<td>FREN S102</td>
<td>Beginning French II</td>
<td>4</td>
</tr>
<tr>
<td>FREN S201</td>
<td>Intermediate French I</td>
<td>4</td>
</tr>
<tr>
<td>FREN S202</td>
<td>Intermediate French II</td>
<td>4</td>
</tr>
<tr>
<td>FREN S317</td>
<td>French Conversation**</td>
<td>3</td>
</tr>
<tr>
<td>FREN S331</td>
<td>Language and Culture of the French Speaking World</td>
<td>3</td>
</tr>
<tr>
<td>HIST S262</td>
<td>History of France</td>
<td>3</td>
</tr>
</tbody>
</table>

*6 credits must be upper division

**May be repeated when content varies**

#### History Minor

The minor in history provides students with a broad understanding of past cultures, social groups, political economy, nation-states, collective mentalities and civilizations. The minor helps students develop knowledge of historical background and context that supplements their major course of study. By completing this minor, students will develop university competencies in oral and written communication, critical thinking, professional behavior, and a social sciences competency in the appreciation of cultural diversity.

**MINIMUM CREDIT HOURS**

<table>
<thead>
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<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>HIST S492</td>
<td>Seminar in History: Selected Topics*</td>
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<tr>
<td>select both</td>
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<tr>
<td>HIST S105</td>
<td>World History I</td>
<td>3</td>
</tr>
<tr>
<td>HIST S106</td>
<td>World History II</td>
<td>3</td>
</tr>
<tr>
<td>or both</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIST S131</td>
<td>U.S. History I</td>
<td>3</td>
</tr>
<tr>
<td>HIST S132</td>
<td>U.S. History II</td>
<td>3</td>
</tr>
<tr>
<td>or both</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIST S227</td>
<td>Early Modern Europe, 1400-1815</td>
<td>3</td>
</tr>
<tr>
<td>HIST S228</td>
<td>Modern Europe, 1815-2000</td>
<td>3</td>
</tr>
</tbody>
</table>

*May be repeated for course and program credit providing course title and content are different.*

#### Human Communication Minor

The minor in human communication is designed to provide students with a broad introduction to the discipline of human communication as well as enhance their reading, speaking, research, writing, computer literacy, professional behavior and critical thinking and quantitative skills.

**MINIMUM CREDIT HOURS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM S111</td>
<td>Fundamentals of Oral Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM S235</td>
<td>Small Group Communication and Teambuilding</td>
<td>3</td>
</tr>
<tr>
<td>COMM S237</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM S241</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>COMM S250</td>
<td>Introduction to Human Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

*Select two from the following (6 credits):*

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM S220</td>
<td>Leadership I</td>
<td>3</td>
</tr>
<tr>
<td>COMM S230</td>
<td>Argumentation and Debate</td>
<td>3</td>
</tr>
<tr>
<td>COMM S330</td>
<td>Intercultural Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM S335</td>
<td>Organizational Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM S346</td>
<td>From Page to Stage: Oral Interpretation</td>
<td>3</td>
</tr>
<tr>
<td>COMM S380</td>
<td>Communication Theory</td>
<td>3</td>
</tr>
<tr>
<td>COMM S420</td>
<td>Leadership II</td>
<td>3</td>
</tr>
<tr>
<td>COMM S475</td>
<td>Communication in Education and Training</td>
<td>3</td>
</tr>
</tbody>
</table>

*Select three from the following (9 credits):*

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM S451</td>
<td>Gendered Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM S452</td>
<td>Family Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM S460</td>
<td>Rhetorical Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

*Select one from the following (3 credits):*

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL/COMM S491</td>
<td>Internship</td>
<td>3</td>
</tr>
<tr>
<td>ENGL/COMM S494</td>
<td>Practicum</td>
<td>3</td>
</tr>
<tr>
<td>HUM S499</td>
<td>Humanities Capstone</td>
<td>3</td>
</tr>
</tbody>
</table>
Undergraduate Minor Options

**Legal Studies Minor**

The minor in legal studies is designed to introduce students to the major areas of U.S. law. A basic knowledge of the legal system can be useful in any career as well as enhance one's awareness of the rights and responsibilities of citizens in our society.

**MINIMUM CREDIT HOURS 18**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAWS S101</td>
<td>Introduction to Law</td>
<td>3</td>
</tr>
<tr>
<td>LAWS S235</td>
<td>Criminal Litigation</td>
<td>3</td>
</tr>
<tr>
<td>LAWS S310</td>
<td>Personal Injuries and Property Damage</td>
<td>3</td>
</tr>
<tr>
<td>LAWS S332</td>
<td>Contracts</td>
<td>3</td>
</tr>
<tr>
<td><strong>Select one from the following (3 credits):</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LAWS S360</td>
<td>Business Organizations</td>
<td>3</td>
</tr>
<tr>
<td>LAWS S380</td>
<td>Family Law</td>
<td>3</td>
</tr>
<tr>
<td><strong>Select one from the following (3 credits):</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LAWS S410</td>
<td>Administrative Law and Procedures</td>
<td>3</td>
</tr>
<tr>
<td>LAWS S434</td>
<td>Constitutional Law</td>
<td>3</td>
</tr>
</tbody>
</table>

**Mathematics Minor**

This minor is designed to provide students with a solid background in calculus as well as introduce them to upper division mathematics. This will enhance the students’ competence and confidence in problem solving, critical thinking and quantitative skills.

**MINIMUM CREDIT HOURS 18**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH S200</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH S201</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH S202</td>
<td>Calculus III*</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Advisor-approved upper division MATH or STAT courses</td>
<td>6</td>
</tr>
</tbody>
</table>

* Or an upper division mathematics or statistics course

**Northwest Coast Art Minor**

**MINIMUM CREDIT HOURS 22**

**Select 15 credits from one of the following areas:**

### Weaving
- ART S116 Fiber Arts-Spinning 1-3
- ART S138 Natural Dye 1-3
- ART S286 Beginning NW Coast Woolen Weaving 1-3
- ART S386 Intermediate NW Coast Woolen Weaving 1-3
- ART S486 Advanced NW Coast Woolen Weaving 1-3

### Basketry
- ART S183 Northwest Coast Harvesting and Preparation of Basketry Materials .5
- ART S284 Northwest Coast Basket Design 1
- ART S282 Beginning Northwest Coast Basketry 1-3
- ART S382 Intermediate Northwest Coast Basketry 1-3
- ART S482 Advanced Northwest Coast Basketry 1-3

### Carving
- ART S285 Beginning Northwest Coast Carving 1-3
- ART S385 Intermediate Northwest Coast Carving 1-3
- ART S485 Advanced Northwest Coast Carving 1-3
- ART S189 Northwest Coast Toolmaking 2

*Other approved elective topics in Carving and Northwest Coast Arts.*

**Philosophy Minor**

The minor in philosophy allows students to focus their philosophical study in order to develop their skills and achieve a deeper understanding of themselves and their world. Students completing the minor will gain a general knowledge of the history of philosophy and the major topics with which philosophers have been concerned. In addition, they will develop their skills in critical thinking, writing, and speaking.

**MINIMUM CREDIT HOURS 18**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GOVT S230</td>
<td>Introduction to Political Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHIL S101</td>
<td>Introduction to Logic and Reasoning</td>
<td>3</td>
</tr>
<tr>
<td>PHIL S201</td>
<td>Introduction to Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHIL S206</td>
<td>Symbolic Logic</td>
<td>3</td>
</tr>
<tr>
<td>PHIL S273</td>
<td>Perspectives on the Natural World</td>
<td>3</td>
</tr>
<tr>
<td>PHIL S301</td>
<td>Ethics</td>
<td>3</td>
</tr>
<tr>
<td>PHIL S293/393 Selected Topics in Philosophy</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Professional Communication Minor**

This minor is designed to provide students with a broad overview of the different channels of communication with which they will be expected to have some familiarity and skill for most professional work environments. Furthermore, students’ reading, research, writing, speaking, computer literacy, professional behavior, and critical thinking skills will be enhanced.
**Undergraduate Minor Options**

### Spanish Minor

This minor is designed to provide students with a full grammatical understanding of the language, plus a good handle on techniques for reading and writing, in addition to good command of vocabulary and idiomatic expressions. This program will stress active speaking and comprehension.

<table>
<thead>
<tr>
<th>MINIMUM CREDIT HOURS</th>
<th>18</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ENGL S311</strong> Advanced Composition</td>
<td>3</td>
</tr>
<tr>
<td><strong>COMM S335</strong> Organizational Communication</td>
<td>3</td>
</tr>
<tr>
<td><strong>COMM S475</strong> Communication in Education and Training</td>
<td>3</td>
</tr>
<tr>
<td><strong>ENGL S494</strong> Practicum</td>
<td>3</td>
</tr>
<tr>
<td><strong>HUM S499</strong> Humanities Capstone</td>
<td>3</td>
</tr>
<tr>
<td><strong>COMM S220</strong> Leadership I</td>
<td>3</td>
</tr>
<tr>
<td><strong>COMM S235</strong> Small Grp Communication and Teambuilding</td>
<td>3</td>
</tr>
<tr>
<td><strong>COMM S237</strong> Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td><strong>COMM S241</strong> Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td><strong>COMM S250</strong> Introduction to Human Communication</td>
<td>3</td>
</tr>
<tr>
<td><strong>COMM S30</strong> Intercultural Communication</td>
<td>3</td>
</tr>
<tr>
<td><strong>COMM S30</strong> Organizational Communication</td>
<td>3</td>
</tr>
<tr>
<td><strong>COMM S30</strong> Communication Theory</td>
<td>3</td>
</tr>
<tr>
<td><strong>COMM S475</strong> Communication in Education and Training</td>
<td>3</td>
</tr>
<tr>
<td><strong>COMM S451</strong> Gendered Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td><strong>ENGL S212</strong> Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td><strong>ENGL S414</strong> Research Writing</td>
<td>3</td>
</tr>
<tr>
<td><strong>JOUR S100</strong> Introduction to Journalism</td>
<td>3</td>
</tr>
<tr>
<td><strong>JOUR S101</strong> Introduction to Mass Communication</td>
<td>3</td>
</tr>
<tr>
<td><strong>JOUR S102</strong> Introduction to News Editing and Layout</td>
<td>3</td>
</tr>
<tr>
<td><strong>JOUR S221</strong> Introduction to Photography</td>
<td>3</td>
</tr>
<tr>
<td><strong>JOUR S224</strong> Intermediate Photography</td>
<td>3</td>
</tr>
<tr>
<td><strong>JOUR S294/394/494</strong> Newspaper Practicum</td>
<td>3</td>
</tr>
</tbody>
</table>

**Advisor-approved CIOS course** | 3

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### Tlingit Language Minor

The minor in Tlingit is designed to provide students with an appreciation of the unique nature of the language, and with basic ability to communicate in culturally relevant settings, read and write the standard orthography, and understand the fundamental grammatical concepts used in linguistic analysis of Tlingit.

<table>
<thead>
<tr>
<th>MINIMUM CREDIT HOURS</th>
<th>18</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AKL S105</strong> Beginning Tlingit I</td>
<td>4</td>
</tr>
<tr>
<td><strong>AKL S106</strong> Beginning Tlingit II</td>
<td>4</td>
</tr>
<tr>
<td><strong>AKL S205</strong> Intermediate Tlingit I</td>
<td>4</td>
</tr>
<tr>
<td><strong>AKL S206</strong> Intermediate Tlingit II</td>
<td>4</td>
</tr>
<tr>
<td><strong>AKL S305</strong> Advanced Tlingit I</td>
<td>3</td>
</tr>
<tr>
<td><strong>AKL S306</strong> Advanced Tlingit II</td>
<td>3</td>
</tr>
</tbody>
</table>

At least six credits must be upper division Tlingit language courses as appropriate.

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### Theatre Minor

The minor in theatre is designed to provide students with a broad introduction to the discipline of theatre as well as enhance their reading, speaking, research, writing, computer literacy, professional behavior, and critical thinking skills.

<table>
<thead>
<tr>
<th>MINIMUM CREDIT HOURS</th>
<th>18</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>THR S211</strong> Theatre History and Literature I</td>
<td>3</td>
</tr>
<tr>
<td><strong>THR S212</strong> Theatre History and Literature II</td>
<td>3</td>
</tr>
<tr>
<td><strong>THR S218</strong> Studies in Theatre</td>
<td>3</td>
</tr>
<tr>
<td><strong>THR S221</strong> Acting I</td>
<td>3</td>
</tr>
<tr>
<td><strong>THR S222</strong> Acting II</td>
<td>3</td>
</tr>
<tr>
<td><strong>THR S331</strong> Directing I</td>
<td>3</td>
</tr>
<tr>
<td><strong>THR S418</strong> Advanced Studies in Theatre</td>
<td>3</td>
</tr>
<tr>
<td><strong>COMM S346</strong> From Page to Stage: Oral Interpretation</td>
<td>3</td>
</tr>
<tr>
<td><strong>ENGL S330</strong> Shakespeare</td>
<td>3</td>
</tr>
<tr>
<td><strong>ENGL S418</strong> Themes in Literature (only when playwright or plays are the topic)</td>
<td>3</td>
</tr>
<tr>
<td><strong>THR S391/S491</strong> Internship in Production, Arts Administration, Acting</td>
<td>1-3</td>
</tr>
<tr>
<td><strong>THR S394/S494</strong> Practicum in Production, Arts Administration, Acting</td>
<td>1-3</td>
</tr>
<tr>
<td><strong>THR S397/S497</strong> Independent Study</td>
<td>1-3</td>
</tr>
</tbody>
</table>
Women’s and Gender Studies Minor

This minor is designed to provide a comprehensive overview of the academic study of women, the social construction of gender, gay, lesbian as well as race and class issues. This minor offers the opportunity to gain a broad perspective on the diverse academic approaches to the study of women in particular and of gender, race, class and sexuality in general.

MINIMUM CREDIT HOURS 18

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>WGS S201</td>
<td>Introduction to Women’s and Gender Studies</td>
<td>3</td>
</tr>
<tr>
<td>WGS S499</td>
<td>Senior Project in Women’s and Gender Studies</td>
<td>3</td>
</tr>
<tr>
<td><strong>Select one from the following (3 credits):</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOC S301</td>
<td>Sociology of Close Relationships</td>
<td>3</td>
</tr>
<tr>
<td>SOC S377</td>
<td>Men, Women and Change</td>
<td>3</td>
</tr>
<tr>
<td><strong>Select one from the following (3 credits):</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY S269</td>
<td>Human Sexuality</td>
<td>3</td>
</tr>
<tr>
<td>PSY S313</td>
<td>Psychology of Women</td>
<td>3</td>
</tr>
<tr>
<td><strong>Select one from the following (3 credits):</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMM S451</td>
<td>Gendered Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENGL S421</td>
<td>Women and Literature: Selected Topics</td>
<td>3</td>
</tr>
<tr>
<td><strong>Select one from the following (3 credits):</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIST S202</td>
<td>US Women’s History</td>
<td>3</td>
</tr>
<tr>
<td>HIST S280</td>
<td>History of Women in Europe</td>
<td>3</td>
</tr>
<tr>
<td>HIST S380</td>
<td>History of Gender and Sexuality in Modern Europe</td>
<td>3</td>
</tr>
</tbody>
</table>
Graduate Studies Programs

The mission of the UAS Graduate Studies Program is to prepare graduates who have developed a genuine mastery of a discipline, and who give promise of becoming lifelong learners.

Admission to graduate school is an opportunity; it is also a significant responsibility. Graduate school requires careful planning and a commitment to the study of a chosen discipline or profession.

Graduate study at UAS has as its principal purpose, the attainment of a high level of competence in a chosen field of learning. Upon completion of graduate studies, the graduate should be able to claim scholarly and professional standing in his or her field. The goal of scholarship should be the student’s strongest motivation as a graduate student.

The graduate program at UAS encompasses a well-defined and recognized area of advanced study. It consists of a sequence of courses, seminars, independent studies, and research investigations differing significantly from the undergraduate experience. The intellectual interaction among graduate students and their faculty remains the most significant factor in post-baccalaureate study. Most course work will be in small classes designed for graduate students only. The professors provide exceptional attention to the intellectual needs of each student. Working with peers in small groups provides intellectual challenges, support, and camaraderie that will have a permanent and positive impact on the student’s life. UAS’ graduate programs are designed to encourage students to develop and enhance these intellectual opportunities.

The following graduate programs are offered:

**Master of Arts in Teaching**
- Early Childhood Education (available by distance delivery)
- Elementary Education (K-8 Juneau)
- Elementary Education (K-8 Distance)
- Secondary Education (Juneau campus, also serving Sitka and outreach locations)

**Master of Education**

The following are all available via distance delivery:
- Early Childhood Education
- Educational Leadership
- Educational Technology
- Mathematics Education (K-8)
- Reading Specialist
- Special Education

**Master of Business Administration**
(Web-based, available by distance delivery)

**Master of Public Administration**
(Juneau campus, also available by distance delivery)

Admissions

Students who wish to earn an advanced degree are advised to seek formal admission to graduate study as soon as possible. Any courses taken before final admission to a graduate study program at UAS may be used as part of the graduate program only if approved by the student’s advisor. Students must not assume that they will be admitted to a degree program because they have been permitted to enroll in graduate courses. In general, students may be admitted to a master program if they have a bachelor’s degree appropriate to the intended master degree from an accredited institution and a GPA of 3.00 overall computed on a four-point scale. Program faculty will determine the adequacy of a student’s preparation to pursue graduate study in that area and whether program facilities are sufficient for the student’s goals. Fulfillment of minimum requirements does not guarantee admission to a graduate program, and graduate credit earned by a student before admission to a program might not be acceptable toward a degree.

Transcripts demonstrating baccalaureate degree(s) completion must be received prior to processing an application file.

Admission must be complete by the end of the semester to which the student is applying otherwise the student must reapply.

Conditional Admission

Students who do not meet all the requirements for formal admission to graduate study may be granted conditional admission. Conditional admission is not automatic but is granted when the advisor and program dean judge that the student shows potential for advanced academic work. For purposes of conditional admission, UAS will temporarily accept unofficial tran-
scripts. Official transcripts must be provided by the end of the first semester of attendance.

When conditions specified for change of status have been met, the student should contact his or her advisor. Admission to regular graduate status may then be recommended. The student will receive written notification of any change in status from the program dean. International applicants will not be considered for conditional admission.

**Active/Inactive Admission Status**

Students admitted to a graduate degree program will remain in active status for seven years from the date of their acceptance into the program regardless of the number of courses taken during any sub period of the seven-year interval. Students who are declared inactive and who wish to reapply must meet all requirements for readmission, including payment of the application fee.

**General University Requirements**

General university requirements for master degree students include maintaining a minimum GPA of 3.00 and completing the minimum credit hours required for their program. All courses must be post baccalaureate credits, and all but 6 semester credits must be at the 600 level. Courses at the 100-300 level cannot be used in graduate programs.

Courses at the 500 level earned at any University of Alaska campus or equivalent types of continuing education courses from any college or university may not be applied toward the degree program or be counted as an elective to complete the required number of credits. Non-catalog courses (i.e., 693 special topics) may be used in a graduate program with advisor approval. No more than 6 credits may be special topics. Specific course requirements for individual programs are listed in the official UAS catalog and in program bulletins.

**Graduate Advisor**

Students will be assigned to a graduate advisor. The graduate advisor recommends the student for advancement to candidacy, supervises the student’s research project or graduate exit portfolio (if applicable), and certifies the student’s completion of all degree requirements.

**Good Standing**

A student in good standing is one who maintains a B (3.00) average throughout his/her program. A grade of C is the minimum passing grade in any course in the student’s program.

**Academic Probation and Program Removal**

If a student’s graduate program grade point average drops below 3.00, the student will automatically be placed on academic probation and dropped from candidacy. Terms and conditions of the probation are determined by the advisor in conformance with UAS graduate study requirements. These may include specific conditions and/or credit limitations that the student must meet during his/her next enrollment at UAS. When the student is removed from academic probation, the student should contact his/her advisor to reapply for advancement to candidacy.

A student remaining on academic probation for two enrolled semesters will be removed from the program. To continue to pursue a degree, the student must submit a new application for admission including supporting documents and the application fee.

**Grading**

Generally, letter grades are used in graduate study at UAS. Some courses may, however, be offered as pass/fail. These are usually short courses, thesis or graduate portfolio credits. An explanation of the grading system appears on pages 54 and 55.

**Transfer of Graduate Credits**

A maximum of 9 graduate credit hours may be transferred from another accredited institution outside the University of Alaska system if approved by the student’s advisor and the graduate dean. Applicants to UAS programs admitted to the same graduate program from UAA or UAF may transfer up to two-thirds of the credits required for the graduate degree program if approved by the student’s advisor and the graduate dean. At least one-third of the credits must be earned at UAS.

**Time Limit on Graduate Study**

All courses, projects, and theses required for a graduate degree program must be completed within a seven-year period from the semester of the first course and the semester of degree completion.

**Full-Time/Half-Time Status**

A graduate student enrolled in nine or more graduate semester credit hours or its equivalent will be classified as full time. Students enrolled in five to eight graduate credits are classified as half-time.
Study Load, Summer Session

During summer session, students may not exceed a total of 12 credits without prior approval of the student’s advisor or the program dean. For sessions of one week, students may not exceed one credit hour.

Approval of the Program of Study

The program plan for a graduate degree is determined by the basic program requirements and by the student in consultation with and approval of the advisor. Faculty advisors provide guidance in selecting the courses which satisfy university and program requirements and which contribute to the academic and professional goals of the student. The advisor, program dean and graduate dean must approve the program of study before advancement to candidacy.

Advancement to Candidacy

After the student has been unconditionally admitted to the graduate program, and before applying for graduation, the student must submit to their program director an Advancement to Candidacy form that lists all courses to be applied to their degree. The Advancement to Candidacy form and any subsequent changes must be approved by the program director and the graduate dean.

Completion of Degree Requirements

Unless the advisor approves a substitution by revising the program of study, students must complete all courses listed on the advancement to candidacy form before the degree will be granted. Copies of the revised program of study must be sent to the Registrar at the time of the revision.

Graduation Requirements

Application for Certificate: Certificate candidates must formally apply for completion. A $10 fee is required. The application must be filed with Admissions & Records by October 1 for fall, February 1 for spring and July 1 for summer completion.

Application for Graduation: Degree candidates must formally apply for graduation. A $25 fee is required. The application for graduation must be filed with the Office of Admissions and Records no later than October 1 for Fall, February 1 for Spring, and July 1 for Summer completion.

Diplomas and Commencement: UAS issues diplomas to graduates at the end of each semester. Students who complete degree requirements during the academic year are invited to participate in the annual commencement ceremony held in May.

Enrollment During Semester of Graduation: Graduate students must be enrolled during the semester in which the degree is to be granted. Students whose only remaining requirement for the degree is the completion of the research project or professional portfolio must register and pay for at least one graduate credit during the semester in which the degree is to be granted. Extended Registration (EXTB or EXTE S693, non-credit) will satisfy this requirement. A student’s graduation may be delayed if he or she is not registered in the semester of graduation.

Grade Point Average: To meet graduation requirements, the student’s grade point average must be 3.00 or above.

Responsibility: The responsibility for meeting all requirements for graduation rests with the student.

Procedures for Second or Dual Master’s Degrees

Second Master’s Degree

The following procedures are required for students who wish to pursue a second master degree:

1. A new application for admission to the new program
2. All procedures required for the initial degree apply, including updated transcripts, if applicable; three new letters of reference; formal paper or letter of application; and payment of application fee
3. A maximum of 9 semester credit hours from other graduate degrees the student has received, may be approved by the advisor except for a transferring student who was in the process of earning a second degree from another University of Alaska campus. The rules under “Transfer of Graduate Credit” would then apply

Dual Master’s Degrees

A graduate student may work concurrently toward the completion of the requirements of two master’s degrees in complementary disciplines where an overlap of coursework and/or research occurs. The dual degree program is planned in consultation with and approved by the advisors from each program. The courses to be accepted dually for the two degrees shall be determined by the department(s) involved but may not exceed one-third of the required semester credits for a degree. If the two master’s programs have different totals for course credits, the one-third limit is determined by the smaller course total.

To ensure time for adequate planning, application for admission to the second program in the dual degree program must be made no later than one month before
the semester in which the student starts the final one-third of the course credits for the first degree. All requirements for each degree must be met, and no more than 9 credits can be transferred from a previously awarded master’s degree.

The following procedures are required for students who wish to pursue dual master’s degrees:

1. A new application for admission to the second master’s program and payment of an additional application fee
2. Official transcripts for any University or college work attempted at other institutions in the interim between applying for the first and second master’s programs
3. A new formal paper or letter of application, where applicable, appropriate to the new program
4. New letters of reference, if applicable
MASTER’S DEGREES

Business Administration in Service Management, M.B.A.

Master of Business Administration
Distance Delivery

For updated information on application deadlines, continue to consult the website at: www.uas.alaska.edu/som/mba.

The master program in business administration is practice-oriented, relevant to Alaskan industries, and leads to a general master of business administration degree. The program features an initial three-day residential seminar in Juneau to set the agenda, ten 3-credit, graduate-level (600) business courses offered sequentially in a seven-week web-delivered format, and two additional elective courses selected in consultation with advisor. It is delivered to an annual cohort consisting of 25 students maximum. The program is two years in length. Student commitment to participate for the full two years is a condition of admission.

Prerequisites

Students entering the MBA program are expected to have introductory level knowledge of management, marketing, accounting, statistics, and micro- and macroeconomics. Students whose transcripts are deficient in any of these subjects must prove competency citing relevant business experience.

Application Requirements

1. Online application http://uasonline.alaska.edu at including the $60 application fee
2. Official academic transcripts sent directly to UAS from the college or university which awarded the baccalaureate degree
3. Professional resume or vita
4. A 1,200 word statement of professional objectives describing past managerial experience, outlining professional goals, and stating how the UAS MBA program might help you achieve your professional objectives. Please note how your background and experience will contribute to the quality of the discussion among program participants. In talking about your academic background, please include where and when you completed the prerequisite courses required in the UAS MBA classes
5. Three letters of reference must be sent directly from the referee. These three referees should preferably include someone familiar with your prior academic work and someone familiar with your managerial experience
6. Items 1-5 are required for a complete application file. If you wish, you may also submit any other documentation which you feel is relevant and important for our admission decision

Degree Requirements

Candidates for the Master of Business Administration degree must satisfy all University graduate degree requirements in the UAS catalog as well as the specific program requirements in this section. Students must earn a B in all core courses (3.00).

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<thead>
<tr>
<th>MINIMUM CREDIT HOURS</th>
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<tr>
<td>MAJOR REQUIREMENTS</td>
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<tr>
<td>BA 5610 Management Information Systems</td>
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<td>BA 5612 Organizational Theory and Behavior</td>
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<td>BA 5646 Service Operations Management</td>
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<td>BA 5655 Corporate Strategy</td>
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<td>BA 5670 Human Resource and Personnel Management</td>
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<td>BA 5689 Research in Business Administration</td>
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<tr>
<td>BA 5690 Business Administration Capstone</td>
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<tr>
<td>BA 5692A Seminar in Finance</td>
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<tr>
<td>BA 5692B Seminar in Marketing</td>
<td>3</td>
</tr>
<tr>
<td>S Advisor-approved electives*</td>
<td>6</td>
</tr>
</tbody>
</table>

*May be chosen from 600-level business or public administration courses or may transfer 600-level business or public administration courses from another accredited institution. All choices must be approved in advance.

Public Administration, M.P.A.

Master of Public Administration
Juneau, Distance Delivery

The master program in public administration provides a strong interdisciplinary context in which to pursue the study of policy formation, implementation, and administration.
Application Requirements
Admission to the Master of Public Administration degree requires the following:
1. A completed online application at http://uaonline.alaska.edu
2. $60 application fee
3. Official academic transcript indicating baccalaureate degree sent directly to UAS
4. Professional resume or vita
5. Two page (approximately 1,000 words) statement of professional objectives describing past public and non-profit experiences, outlining professional goals and stating how the MPA program will help achieve your professional objectives
6. Three recommendations addressing professional dispositions on special forms provided by the UAS MPA program

Items 1-6 are required for a complete application file. If you wish, you may submit any other documentation which you feel is relevant. Items 4 and 5 may be submitted by e-mail. See Graduate Study – Admissions for more information.

Admission Requirements
Applicants are required to have successfully completed an introductory course in statistics and a course in microeconomics for admission to the MPA program.

Degree Requirements
Candidates for the Master of Public Administration degree must satisfy all University graduate degree requirements in this catalog as well as the specific program requirements in this section. A minimum of 36 approved credits is required for the degree, in addition to evidence of practical experience in public or non-profit administration.

In order to permit students to pursue individual interests, a limited substitution of required courses is possible. Course substitutions must be approved by the student’s advisor and the program dean. The student’s approved program of study is reflected in the Application for Advancement to Candidacy.

MINIMUM CREDIT HOURS 36

MAJOR REQUIREMENTS 24
PADM S601 Introduction to Public Administration 3
PADM S604 Research Methods in Administration 3
PADM S610 Organization Theory and Behavior 3
PADM S618 Law for Public Managers 3
PADM S625 Economics and Public Policy 3
PADM S628 Public Financial Management 3
PADM S624 Human Resources Administration 3
PADM S688 Program Evaluation and Performance Measurement 3

ELECTIVES 9
____ ____ Advisor-approved electives 9

CAPSTONE 3
____ ____ Capstone Course 3

To qualify for graduation from the MPA program, students must complete the Capstone course with a grade of B or higher.

Master of Public Administration Concentrations
MPA students have the option to use their electives to establish a concentration in either Rural Development or Criminal Justice. Coursework for these concentrations is offered by distance technologies through the Rural Development and Justice programs at the University of Alaska Fairbanks.

Concentration in Rural Development
The Rural Development concentration has a special focus on needs of indigenous and other rural communities, including management of tribal governments, community organizations, and indigenous-controlled profit and non-profit corporations.

CONCENTRATION REQUIREMENTS 9
RD F601 Political Economy of the Circumpolar North 3
RD F651 Management Strategies for Rural Development 3
____ ____ Advisor-approved course* 3

*To be selected in consultation with the UAF Rural Development Advisor and MPA Program Director.

Concentration in Criminal Justice
The Criminal Justice concentration emphasizes the application of justice issues and concepts to Alaska, preparing students to meet the challenges of a modern society and the Justice professions.

CONCENTRATION REQUIREMENTS 9
JUST F605 Administration and Management of Criminal Justice Organizations 3
JUST F640 Community/Restorative Justice 3
____ ____ Advisor-approved course* 3

*To be selected in consultation with the UAF Justice Advisor and MPA Program Director.

Fisheries, M.S. through UAF

Master of Science
Juneau

Degree Requirements
Admission to the master of science in fisheries degree program is governed by the general requirements for admission to graduate study. Candidates for the master of science in fisheries degree must satisfy all general and University degree requirements. A total of 30 credits is
required of which a minimum of 24 credits must be at the 600 level. Up to 6 credits of 400–level course work may be substituted for the 600–level course work by approval of the graduate committee. A thesis reporting the results of original research is an important part of each student’s individualized program of studies. Students may take classes at Fairbanks, Juneau, Kodiak, Seward, and other fisheries facilities of the University of Alaska to obtain a broad-based graduate education in fisheries. Primary course offerings at the graduate level are offered in Fairbanks and Juneau.

**MINIMUM CREDIT HOURS** 30

\[ \text{(F) course offered at Fairbanks} \quad \text{(J) course offered at Juneau} \]

**PREREQUISITES**

*Complete both:*
- MATH S200/F200 Calculus I 4
- STAT S273/F301 Elementary Statistics 3

*Complete one of the following:*
- BIOL S305/F305 Invertebrate Zoology 4
- BIOL S427 Introduction to Ichthyology 4
- FISH F427 Ichthyology 4

**PROGRAM REQUIREMENTS** 12–18

- STAT S401/F401 Regression and Analysis of Variance 4
- FISH F699 Thesis Research 6-12

**Electives (include at least one of the following):**
- FISH F421 Fisheries Population Dynamics 4
- FISH F601 Quantitative Fishery Science 3
- FISH F621 Advanced Fish Population Dynamics I 4
- FISH F622 Advanced Fish Population Dynamics II 4

**GRADUATE SEMINARS (in the appropriate discipline)** 2

The student shall submit a satisfactory thesis on a topic approved by his or her graduate committee. Students working in subject areas involving significant non-English literature may be expected to demonstrate the capacity to read the appropriate foreign language.

For further information contact an advisor at the UAF School of Fisheries and Ocean Sciences.

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**UAF School of Fisheries and Ocean Sciences**

The School of Fisheries and Ocean Sciences is part of the University of Alaska Fairbanks. The School is home to the program in Fisheries (with faculty in Juneau and Fairbanks) and the graduate program in Marine Sciences and Limnology (based in Fairbanks).

The Center enjoys access to a wide spectrum of marine and freshwater habitats. The natural environment serves as classrooms and research laboratory for students. The research engaged in by the faculty and graduate students covers problems from all over Alaska, from Southeast Alaska waters to the Bering Sea.

In addition to a variety of Fisheries courses, the Center’s faculty offers instruction in advanced courses in Statistics. The M.S. and Ph.D. in Fisheries are offered to prepare students for careers in fisheries management, fisheries research, or general aquatic biology.

Research programs currently include conservation biology of salmon, evolution and systematics of marine fish, management of sustainable fisheries, dynamics of exploited populations, toxic effects of pollutants, population biology of marine mammals, culture of salmon and seaweeds, molecular and population genetics, and stock separation techniques.

The new three-story building (31,000 sq. ft.) is located at Lena Point adjacent to the U.S. National Marine Fisheries Services, Ted Stevens Marine Research Institute, approximately 17 miles north of Juneau. The building is equipped with a high-quality seawater system, walk-in freezer, cold-room, wet and dry-lab research facilities and advanced lab instrumentation. Rented offices house several faculty, a classroom, a large computer lab, and a study area.

Financial assistance for graduate students is provided through research assistantships from state, federal and industry-funded grants to the Center and through University fellowships.

fisheries@uaf.edu
www.sfos.uaf.edu/fishdiv
Degree Programs

Bachelor of Science in Fisheries
Upper-division Fisheries courses are offered at the Juneau Center to qualified undergraduates; the B.S. Fisheries program is located on campus at both Fairbanks and Juneau.

Master of Science in Fisheries

Doctor of Philosophy

Note: There are specific requirements for admission to the M.S. and Ph.D. in fisheries program. Refer to the University of Alaska Fairbanks Graduate Catalog. www.uaf.edu/catalog/current/grad/enroll.html

Dean
Denis Wiesenbug

Faculty

Milo D. Adkison
Associate Professor of Quantitative Fisheries

Keith Cridde
Ted Stevens Distinguished Professor of Marine Affairs

Ginny Eckert
Associate Professor of Biology
(UAS with joint appointment UAF)

Richard Gard
Professor of Fisheries, Emeritus (UAS)

Anthony J. Gharrett
Professor of Fisheries

Lewis J. Haldorson
Professor of Fisheries, Emeritus

Nicola Hillgruber
Assistant Professor of Fisheries

Brendan P. Kelly
Associate Professor of Biology
(UAS with joint appointment UAF)

Gordon Kruse
President’s Professor of Fisheries

Terrance J. Quinn II
Professor of Fish Population Dynamics

William W. Smoker
Professor of Fisheries

Michael S. Stekoll
Professor of Chemistry and Biochemistry
(UAS with joint appointment UAF)

David Tallmon
Assistant Professor of Biology
(UAS with joint appointment UAF)

Sherry Tamone
Associate Professor of Biology
(UAS with joint appointment UAF)
Master of Arts in Teaching

The Master of Arts in Teaching (M.A.T.) programs are designed for students who have completed a baccalaureate degree with content coursework appropriate to their teaching area and grade level and who are seeking a teaching certificate. M.A.T. programs at UAS have been awarded national recognition through the National Association for the Education of Young Children (NAEYC), the Association of Childhood Education International (ACEI), the National Council of Teachers of English (NCTE), the National Council of Teachers of Mathematics (NCTM), and the National Science Teachers Association (NSTA). Other subject areas are in process of applying for national recognition. The M.A.T. programs are delivered two ways:

1. One-year intensive programs in elementary education or secondary education
2. A distance program in elementary education for those in Alaska rural communities or for others who desire this flexibility

For a complete application packet containing all the forms and instructions (Juneau programs), call (907) 796-6525 for M.A.T. Elementary and Secondary, (907) 796-6424 for M.A.T. Early Childhood Education, and (907) 694-7019 or (907) 796-6533 for M.A.T. Elementary Distance. The toll free number for all programs is 1-866-465-6424. Or find application and program information online www.uas.alaska.edu/education. Select “Beginning Teachers”.

Application Requirements

Admission to the Master’s of Arts in Teaching program requires the following:

1. A completed graduate application and $60 processing fee
2. An official transcript indicating baccalaureate degree and a GPA of 3.00
3. Official transcripts from all universities or colleges attended. These will be used for assessment of applicant’s content preparation
4. Two recommendations addressing professional dispositions for the Elementary program on specific forms provided by the UAS School of Education. Secondary program requires one recommendation addressing professional dispositions and one knowledge of content
5. A writing sample consisting of two individual pieces: 1) a statement of professional objectives and 2) an impromptu writing sample
6. An official copy of Praxis I exam results
7. Signed waiver form to allow potential host teachers access to student application information
8. Student information sheet; form provided by School of Education
9. Applicants for the M.A.T. Elementary distance program must also submit documentation of successful work with children in an elementary or early childhood school setting along with a Memorandum of Agreement from the local school district administration; form provided by School of Education
10. Applicants to the M.A.T. Secondary and M.A.T. Early Childhood Education must submit a resume

Praxis I and II Exams

To successfully graduate from the programs, interns must pass all three sections of the Praxis I exam at state approved levels. Passing CBEST or WEST-B scores in reading, writing, and mathematics may be submitted in lieu of passing Praxis I scores.

Prior to completing the M.A.T. program, prospective teachers must pass Praxis II content exams meeting Alaska cut scores. Elementary candidates take the Praxis II exam Elementary Content Knowledge 0014.

For Secondary students, the Praxis II exam(s) will be in the content area where endorsement is desired. See your advisor for information about which content area Praxis II tests are recognized by the State of Alaska.

M.A.T. Elementary and Secondary Programs, Juneau

The M.A.T. Elementary program based in Juneau and the M.A.T. Secondary program based in Juneau and also serving Sitka and other selected sites are intensive 12-month classroom-based programs designed to serve baccalaureate graduates who wish to prepare for a career in either elementary or secondary teaching. The programs operate on a one-year cycle beginning in July. Upon successful completion of one of these programs, students will receive a Master of Arts in Teaching degree and be recommended for an Alaska Initial elementary (grades K-8) or secondary (grades 7-12) teaching certificate. Certification is granted by the Alaska Department of Education and Early Development (DEED).
In addition to the admission requirements listed, a student teacher placement in a school district must be available for the applicant.

The Juneau M.A.T. Elementary and Secondary programs consist of an introductory summer session, two semesters of intensive internship with course work, and a following summer session. The course work is interdisciplinary, based on the latest research and theory in teacher education. The programs have four phases:

**Phase One:**
A seven week summer session that prepares students to begin the school year as teacher-interns.

**Phases Two and Three:**
- **Elementary Students.** During the public school year (end of August through the end of May), the M.A.T. student serves as an intern with a team of two teachers in an elementary school and/or middle school thereby broadening their experience by visiting contrasting grade levels on a regular basis. In the fall semester, interns will be at their assigned school three days a week and take course work on campus two days a week plus one evening. In the spring semester, interns will be at their assigned schools four days a week and take course work on campus one day a week plus one evening.
- **Secondary Students.** During the public school year (end of August through the end of May), the M.A.T. student serves as an intern with a host teacher in a middle school or high school. In the fall and spring semesters, interns will be at their assigned schools four days a week and take course work on campus one day a week plus one evening.

**Phase Four:**
A one-month summer session will draw on the recent classroom experiences of students and extend their knowledge and preparation for the profession.

The application deadline for the M.A.T. Elementary and Secondary programs in Juneau is March 1.

### Elementary Education, M.A.T.

**Master of Arts in Teaching Juneau**

Students who enroll in the M.A.T. Elementary program in Juneau must show evidence of adequate course work or demonstrate knowledge in the basic content areas of history, literature, composition, mathematics, biological science, physical science, and the arts. Placements for this program are only available in Juneau.

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<th>MINIMUM CREDIT HOURS</th>
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<td><strong>MAJOR REQUIREMENTS</strong></td>
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<tr>
<td>ALST 5600 Alaska Resources, People and Perspectives</td>
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<tr>
<td>ED 5620 Curriculum Development</td>
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<tr>
<td>ED 5626 Classroom Research</td>
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<tr>
<td>ED 5636A, B, C Integrated Educational Technology</td>
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<tr>
<td>ED 5640 Instruction in the Arts: Art, Music, and Drama</td>
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<td>ED 5641 Instruction in Science, Social Studies, Physical Education and Health</td>
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<tr>
<td>ED 5643 Learning Theory, Development and Guidance</td>
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<tr>
<td>ED 5645 Designing Curriculum for Effective Instruction</td>
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<tr>
<td>ED 5666 Advanced Studies in the Exceptional Learner</td>
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<tr>
<td>ED 5680 Advanced Multicultural Education</td>
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<tr>
<td>ED 5681 Reading and Writing/Literacy Instruction I</td>
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<tr>
<td>ED 5682 Reading and Writing/Literacy Instruction II</td>
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<tr>
<td>ED 5686 Mathematics Instruction: Theory and Practice I</td>
<td>2</td>
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<tr>
<td>ED 5687 Mathematics Instruction: Theory and Practice II</td>
<td>2</td>
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<tr>
<td>ED 5691 Teaching Internship (Fall)</td>
<td>2</td>
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<tr>
<td>ED 5691 Teaching Internship II (Spring)</td>
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</table>

**Exit Criteria**

1. A Master’s Portfolio that provides evidence that the student meets all program goals/outcomes
2. Praxis I exam scores meeting Alaska cut scores
3. Praxis II exam scores meeting Alaska cut scores
4. 3.00 GPA

**Contact:** Dr. Anne Jones  
(907) 796-6053  
rajones@uas.alaska.edu

### Elementary Education, M.A.T.

**Master of Arts in Teaching Distance Delivery**

This program is offered by distance delivery methods to students in rural communities and others who desire the flexibility of a distance program. Students in this program must be self-directed learners, must have access to high speed internet connections, and must schedule time during the school year to complete weekly intensive practicum assignments as well as a semester of student teaching in an elementary or middle school. The Elementary certification program is embedded in the M.A.T. program. For more information on certification see the Professional Certification Programs section of this catalog. This program leads to a master’s degree as well as recommendation for an Alaska Initial Elementary (grades K-8) teaching certificate.
Applicants should consult with an advisor for individual program scheduling:
Admission Application deadlines.
Fall: July 15
Spring: Nov. 1
Summer: April 1

**MINIMUM CREDIT HOURS:** 42

**PREREQUISITES** 15
ALST S300 Alaska Studies 3
ED S230 Introduction to Educational Technology* 3
ED S304 Literature for Children and Young Adults 3
ED S320A Art in the K-8 Curriculum 1
ED S320B Physical Education in the K-8 Curriculum 1
ED S320C Music in the K-8 Curriculum 1
ED S333 The Learner and the Learning Process* 3
*ED S230 and ED S333 must be completed before registering for graduate-level coursework

**MAJOR REQUIREMENTS** 42
ED S615 Literacy in the Intermediate and Middle School Grades 3
ED S616 Math Methods in the K-8 Classroom 3
ED S617 Science Methods in the K-8 Classroom 3
ED S618 Social Studies Methods in the K-8 Classroom 3
ED S619 Classroom Management and Discipline 3
ED S661 Literacy and Young Children 3
ED S680 Advanced Multicultural Education 3
ED S688 Student Teaching 6
ED S692 Education Seminar 3
EDSE S482 The Inclusive Classroom for All Children 3

Recommendation for certification will be granted upon successful completion of the above coursework and the prerequisite coursework. Students are encouraged to complete the remaining coursework required for the M.A.T. degree during their initial years as classroom teachers:

ED S626 Classroom Research 3
ED S698 Master’s Research Project or Portfolio 3

Select one from the following (3 credits):
ED S628 Technology in Instructional Design 3
S Advisor-approved 600-level educational technology course 3

**Exit Criteria**
1. A Master’s Portfolio that provides evidence that the student meets all program goals/outcomes
2. Praxis I exam scores meeting Alaska cut scores
3. Praxis II exam scores meeting Alaska cut scores
4. 3.00 GPA

**Early Childhood Education, M.A.T.**

**Master of Arts in Teaching**
**Distance Delivery**

This program is offered by distance delivery methods to students in rural communities and others who desire the flexibility of a distance program. Students in this program must be self-directed learners, must have access to high speed Internet connections, and must schedule time during the school year to complete weekly intensive practicum assignments as well as a semester of student teaching in an elementary or middle school. The Early Childhood Education Certificate program is embedded in the Master of Arts in Teaching program. For more information on the certification see the Professional Credential Programs section of this catalog. This program leads to a Masters’ degree as well as recommendation for an Alaska Initial Early Childhood Education (grades PreK-3) teaching certificate.

Applicants should consult with an advisor for individual program scheduling:

**MINIMUM CREDIT HOURS:** 40

**PREREQUISITES** 15
ED S230 Intro to Educational Technology 3
ECE S242 Child and Family Ecology 3

Select one from the following (3 credits):
ECE S245 Early Child Development 3
PSY S245 Child Development 3

Select one from the following (3 credits):
ED S308 Indigenous Culture in Our Schools 3
ED S300 Multicultural Education 3

Select one from the following (3 credits):
ALST S300 Alaska Studies 3
HIST S341 History of Alaska 3

Note: ED S230 must be completed before registering for graduate-level coursework

**MAJOR REQUIREMENTS** 40
ED S605 Early Childhood Education Principles and Practices 3
ED S610 Classroom Management and Child Guidance in Early Childhood Education 3
ED S651 Oral language & Playful literacy 3
ED S661 Literacy and Young Children 3
ED S662 Advanced Studies in Play and Child Development in Early Childhood Education 3
ED S663 Integrated Constructivist Curriculum in Early Childhood Programs 3
ED S664 Curriculum Development in Early Childhood Programs 3
ED S688 Student Teaching 6
ED S695 Certificate Portfolio Capstone 1
EDSE S605 Early Childhood Special Education 3

Recommendation for certification will be granted upon successful completion of the above coursework and
Master’s Degrees in Education

Master of Education

The M.Ed. is offered with emphasis in Early Childhood Education, Educational Technology, Mathematics Education, Reading, and Special Education. The Master of Education programs extend and develop classroom skills and abilities of practicing teachers in elementary and secondary education. Applicants to the Master of Education program must have a Bachelor of Education degree or its equivalent from an accredited institution, and/or a current teaching certificate.

Application Requirements

Admission to the Master of Education Program requires the following:

1. A completed application and $60 processing fee
2. Official academic transcript indicating a baccalaureate degree and a GPA of 3.0
3. Two recommendations addressing professional dispositions on specific forms provided by the UAS School of Education
4. Statement of Professional Objectives. This is a 2-3 page typewritten and double spaced formal paper containing a summary of educational experiences, a description of professional goals related to what is needed to teach students in Alaska and beyond, and a statement of how the program for advanced teaching candidates might help in attaining those goals. (An advanced teaching candidate is someone who is currently teaching, has taught, has experience in education, or has a teaching credential and access to a classroom for field experience.) This statement will be judged in terms of readability and style as well as compatibility of the student’s objectives and expectations and the goals of the program
5. Field experience statement form, also available in packet of application materials, if required
6. A copy of a current teaching or administrative certificate, or program coordinator’s permission is required for entry into the M.Ed. Reading Specialist and Special Education, and preferred for entry into the M.Ed. Educational Technology program.

Prerequisite Coursework

Students are encouraged to complete the remaining coursework required for the M.A.T. degree during their initial years as classroom teachers:

- ED S626 Classroom Research 3
- ED S628 Technology in Instructional Design or other 600-level Ed Tech course 3
- ED S698 Master’s Research Project 3

Exit Criteria

1. A Master’s Portfolio that provides evidence that the student meets all program goals/outcomes
2. Praxis I exam scores meeting Alaska cut scores
3. Praxis II exam scores meeting Alaska cut scores
4. 3.00 GPA

Contact: Dr. Dave Marvel
(907) 796-6079
dave.marvel@uas.alaska.edu

Secondary Education, M.A.T.

Master of Arts in Teaching

Juneau

The Master of Arts in Teaching, Secondary program is for students who have completed a baccalaureate degree and who are seeking a teaching certificate in secondary or middle grades education. Applicants to this program must show evidence of the successful completion of an established teaching major in a subject normally taught in Alaska secondary schools (e.g. English language arts, social studies, mathematics, sciences). Placements for this program are made in Juneau, Sitka, and selected other Alaska communities. A total of 36 graduate credits are required.

MINIMUM CREDIT HOURS: 36

MAJOR REQUIREMENTS 36

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>ALST S600</td>
<td>Alaska’s Resources, People, and Perspectives</td>
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<tr>
<td>ED S612</td>
<td>School-Community Relations</td>
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<td>Curriculum Development</td>
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<td>Educational Research</td>
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<td>ED S630</td>
<td>Classroom Integration of Tool Software</td>
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<td>Advanced Educational Psychology</td>
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<td>Reading and Literacy in the Content Area</td>
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<td>ED S680</td>
<td>Advanced Multicultural Education</td>
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<tr>
<td>ED S691</td>
<td>Teaching Internship I (Fall)</td>
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<td>ED S691</td>
<td>Teaching Internship II (Spring)</td>
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</tr>
<tr>
<td>ED S692</td>
<td>Educational Seminar</td>
<td>3</td>
</tr>
</tbody>
</table>

Exit Criteria

1. A Master’s Portfolio that provides evidence that the student meets all program goals/outcomes,
Applicants to the M.Ed. Early Childhood Education and M.Ed. Reading Specialist, M.Ed. Mathematics, and M.Ed. Special Education programs should also apply to the appropriate certificate program at this time.

**Early Childhood Education, M.Ed.**

*(Grades Preschool and K-3)*

**Master of Education**

**Distance Delivery**

The M.Ed. Early Childhood Education program is designed as a part-time program for practicing preschool and primary teachers, with an emphasis on classroom application. It is possible for teachers to complete the course work during two school years and three summers, while teaching in their own district. Though most of the program can be distance delivered, at least two weeks of on-campus time is required during two summers.

The purpose of this program is to extend and develop classroom skills and abilities for practicing teachers in levels pre-kindergarten through third grade. The plan of study should reflect the graduate student’s own professional and personal growth objectives. A maximum of 3 credits of 400-level coursework can be included in the approved plan of study.

The M.Ed. Early Childhood Education program is not a teacher certification program. The program has earned national recognition through the National Association for the Education of Young Children (NAEYC.)

**MINIMUM CREDIT HOURS**  34

**MAJOR REQUIREMENTS**  34

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>ED S605</td>
<td>Early Childhood Education Principles and Practices</td>
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<td>ED S610</td>
<td>Classroom Management and Child Guidance in Early Childhood</td>
<td>3</td>
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<tr>
<td>ED S626</td>
<td>Classroom Research</td>
<td>3</td>
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<td>ED S628</td>
<td>Technology in Instructional Design (or other 600-level ED technology course)</td>
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<td>ED S651</td>
<td>Oral Language and Playful Literacy</td>
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<td>ED S661</td>
<td>Literacy and Young Children</td>
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<td>ED S662</td>
<td>Advanced Studies in Play and Child Development in Early Childhood Education</td>
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<td>Integrated Constructivist Curriculum in Early Childhood Education</td>
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<td>ED S664</td>
<td>Curriculum Development in Early Childhood Education</td>
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<td>ED S695</td>
<td>Certificate Portfolio Capstone</td>
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<td>ED S698</td>
<td>Master’s Research Project</td>
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<tr>
<td>EDSE S605</td>
<td>Early Childhood Special Education</td>
<td>3</td>
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</table>

Select 3 credits from each of the following areas (9 credits total):

- Research
- Technology
- Special Student Populations or Multicultural Education

The Master’s Research Project or Portfolio must provide evidence that the student meets all program goals/outcomes.

Contact: Susan Andrews  
(907) 796-6412  
smandrews2@uas.alaska.edu

**Educational Leadership, M.Ed.**

**Master of Education**

**Juneau & Distance Delivery**

The M.Ed. Educational Leadership program is a cohort program designed to prepare candidates to become school administrators in Alaska. The program prepares candidates for the challenges and opportunities inherent in assuming roles as educational leaders in public schools. The program is specifically targeted at preparing administrators for the rural school districts in the state.

The M.Ed. program in Educational Leadership is designed to provide candidates the opportunity to begin the program in one summer session and complete it in the next. In addition, candidates will be expected to complete courses and School of Education approved internship during the school year. Summer courses will be held on the Juneau campus of the University of Alaska Southeast. Fall and spring courses will be delivered through technology.

**Application Requirements**

Admission to the M.Ed. in Educational Leadership requires the following:

1. Completed application and $60 non-refundable fee
2. Official academic transcript indicating a baccalaureate degree with a GPA of 3.00
3. Three years public school teaching experience.
4. Letter of recommendation and support from the superintendent of schools and school board of the district in which the internship will occur.
5. Statement of professional objectives in a 2-3 page paper. This paper will cover the candidate’s educational and professional experiences and outline the professional goals to be achieved through the M.Ed. in Educational Leadership.
Educational Technology, M.Ed.

Master of Education
Distance Delivery

The M.Ed. in Educational Technology develops the skills and abilities to make effective use of technology in a classroom setting. The Educational Technology program has been awarded national recognition by the International Society for Technology in Education. ED S698 Master’s Research Project or Portfolio is the final course in the program sequence. The Master’s Research Project or Portfolio must provide evidence that the student meets all program goals/outcomes.

The M.Ed. Educational Technology program is not a teacher certification program. For an initial teaching certificate see Bachelor of Arts in Elementary Education programs, or Masters of Arts in Teaching programs. Students wanting a K-12 Educational Technology teaching endorsement must also apply to the Educational Technology Graduate Certificate Program.

Mathematics Education, M.Ed.

Master of Education
Distance Delivery

The M. Ed. in Mathematics Education is designed to provide content and pedagogy appropriate for the teaching of mathematics with options for increasing the teacher’s understanding of content area literacy, the inclusion of students with special needs and utilizing technology to teach mathematics. The mathematics content is designed to strengthen understanding of the mathematics taught in the K-8 curriculum. Candidates must prepare an exit portfolio, demonstrating competency in the nine outcomes of the School of Education (i.e., philosophy, development, diversity, content, student learning, learning environment, professionalism, technology). The M.Ed. Mathematics Education program is not a teacher certification program. For an initial teaching certificate see Bachelor of Arts in Elementary Education programs, or Masters of Arts in Teaching programs. Students wanting a K-8 Mathematics Education teaching endorsement must also apply to the Mathematics Education (K-8) Certificate Program.

Contact: Dr. Marsha Gladhart
(907) 796-6047
marsha.gladhart@uas.alaska.edu.

Contact: Dr. Virgil Fredenberg
(907) 796-6082
virgil.fredenberg@uas.alaska.edu.
Reading Specialist, M.Ed.

Master of Education
Distance Delivery

The M.Ed. in Reading program is designed specifically to deepen P-12 teachers’ pedagogical content knowledge with the aim of improved student literacy achievement. This program is delivered in face-to-face and distance formats so that it is possible to complete the degree while teaching in your own district. Technological tools facilitate course delivery, communication, and research. Enhancements include streamed video, braided discussions, audio conferencing, video reflections, and use of Internet resources. Students in the master’s reading program focus on developmental, cognitive, and sociocultural aspects of reading acquisition, instruction, and assessment. Professional and caring attitudes and beliefs about teaching lead to responsive and rigorous instruction in reading and literacy for all P-12 students, including those who are culturally and linguistically diverse. Accomplished teaching professionals promote collaboration with students, colleagues, parents, families, and the larger community to improve literacy learning and student achievement in their contexts. Students prepare an exit portfolio in line with the goals of the School of Education and the program standards of the International Reading Association to demonstrate levels of knowledge and pedagogy commensurate with the skills and dispositions of highly competent advanced teaching professionals.

The International Reading Association awarded the graduate UAS Reading program national recognition in 2004.

MINIMUM CREDIT HOURS 33

PROGRAM REQUIREMENTS 33

ED S671 Language Reading and Culture 3
ED S674 Developing Reading ECE-12 3
ED S675 Reading and Cognition 3
ED S676 Reading Instruction and Assessment I 3
ED S677 Reading Instruction and Assessment II 3
ED S678 Literature and Reading, Supporting Readers at All Levels 3
ED S679 Reading and Literacy in the Content Areas 3
ED S696 Reading Teacher as Leader* 3
ED S628 Technology in Instructional Design 3
ED S626 Classroom Research 3
ED S698 Master's Research Project or Portfolio 3

*Must pass ED S696 with a B or higher to graduate

Recommendation for certification will be issued upon completion of the above coursework. The Alaska Department of Education and Early Development grants the endorsement upon completion of the Institutional Recommendations and the required fee from the student. Students must be accepted into the graduate certificate program.

Contact: Dr. Mary-Claire Tarlow
(907) 796-6435
maryclaire.tarlow@uas.alaska.edu

Special Education, M.Ed.

Master of Education
Distance Delivery

The M.Ed. program in Special Education prepares teachers to develop and implement culturally responsive special education services for students with disabilities. The program focuses on the unique needs of (a) children and youth with disabilities; (b) Alaska’s diverse Native and non-Native communities; and (c) Alaska’s remote and rural communities.

The M.Ed. program in Special Education is designed to accommodate practicing teachers, paraprofessionals, and other school-based professionals. Courses are, therefore, offered in the afternoons and evenings and in the summer. All courses are delivered via teleconference and augmented with online resources. This distance-delivered format allows candidates who live and work in Alaska’s remote and rural communities to remain in their communities while completing their graduate studies.

MINIMUM CREDIT HOURS (36)

ED S626 Classroom Research 3
ED S692 Education Seminar 3
ED S698 Master’s Research Project 3
EDSE S605 Early Childhood Special Education 3
EDSE S610 Assessing of Students with Disabilities 3
EDSE S612 Curriculum & Strategies I: Low Incidence 3
EDSE S622 Curriculum & Strategies II: High Incidence 3
EDSE S677 Teaching Reading to Struggling Learners 3
EDSE S682 Inclusive Education for Students with Disabilities 3
EDSE S685 Transition Considerations for Secondary Students with Disabilities 3
EDSE S694 Special Education Practicum 3
EDSE S695 Special Education Portfolio 3

Contact: Dr. Thomas Scott Duke
(907) 796-6029
thomas.duke@uas.alaska.edu
Graduate Certificates

Available in:
- Early Childhood Education
- Educational Technology
- Elementary Education K-8
- Mathematics Education K-8
- Reading Specialist
- Special Education

Graduate certificates provide candidates with eligibility endorsements to an Alaska teaching certificate. All course work must be completed within a seven-year period immediately preceding the date the graduate certificate is granted. Graduate certificates are granted by the University of Alaska Southeast; UAS provides the institutional recommendation to the Alaska Department of Education and Early Development for endorsement.

Admission Requirements

Admission to the Early Childhood Education, Educational Technology, and Mathematics Education (K-8) Graduate Certificates requires degree.

1. Application for admission and $60 fee
2. Copy of a current Alaska teaching certificate
3. Official transcript(s) are required only for courses transferred in from another institution

Call (907) 796-6424 (toll free: 1-866-465-6424) for application materials. Call (907) 796-6047 for Educational Technology application materials or go to www.uas.alaska.edu/education.

There are additional requirements for applicants who wish to pursue the M.Ed. in Early Childhood education or in Educational Technology. See Graduate Studies section for admission requirements for these degrees.

Early Childhood Education Graduate Certificate

(Grades Preschool and K-3)

Teaching Graduate Certificate
Distance Delivery

MINIMUM CREDIT HOURS 25

CERTIFICATE REQUIREMENTS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<td>ED 5605</td>
<td>Early Childhood Education Principles and Practices</td>
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<td>ED 5610</td>
<td>Classroom Management and Child Guidance in Early Childhood Education</td>
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<tr>
<td>ED 5611</td>
<td>Oral language &amp; Playful literacy</td>
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<td>ED 5612</td>
<td>Literacy and Young Children</td>
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<tr>
<td>ED 5613</td>
<td>Advanced Studies in Play and Child Development in Early Childhood Education</td>
<td>3</td>
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<tr>
<td>ED 5614</td>
<td>Integrated Constructivist Curriculum in Early Childhood Programs</td>
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</tr>
<tr>
<td>ED 5615</td>
<td>Curriculum Development in Early Childhood Programs</td>
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<td>EDSE 5605</td>
<td>Certificate Portfolio Capstone</td>
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<tr>
<td>EDSE 5606</td>
<td>Early Childhood Special Education</td>
<td>3</td>
</tr>
</tbody>
</table>

*Prerequisite: Any 100-level mathematics course with a B or higher.

Exit Requirements

1. GPA of 3.00
2. Satisfactory completion of courses

Contact: Susan Andrews
(907) 796-6412
smandrews2@uas.alaska.edu
Graduate Certificates

Educational Technology Graduate Certificate
(Grades K-12)

Teaching Graduate Certificate
Distance Delivery

MINIMUM CREDIT HOURS 21

CERTIFICATE REQUIREMENTS 21

ED S628 Technology in Instructional Design 3
ED S632 Classroom Internet Integration 3
ED S633 Classroom Integration of Multi-Media Technology 3
ED S634 Classroom Integration of Audio-Video Technology 3
ED S635 Thinking About Technology 3
ED S673 Educational Applications of Networking 3
ED S697 Advisor-approved Independent Study or elective course 3

Exit Requirements
1. Satisfactory completion of courses
2. Faculty Evaluation
3. GPA of 3.00

Contact: Dr. Marsha Gladhart
(907) 796-6047
marsha.gladhart@uas.alaska.edu

K-8 Elementary Graduate Certificate

Distance Delivery

The teacher certification program in Elementary Education is a graduate certificate that leads to recommendation for an elementary Initial Teacher Certificate. The program is offered by distance delivery only and is available to students in urban and rural areas throughout Alaska. Students in the program must be self-directed learners, must have access to high speed Internet connections, and must schedule time during the school year to complete weekly intensive practicum assignments and a semester of student teaching in an elementary or middle school. Certification students must receive the approval of the local school district, as extensive practicum experiences are required.

Courses are delivered via audio conference, DVD, online conferencing, and/or correspondence. Students should be familiar with using email, the Internet, and computer conferencing and should have access to a speakerphone, a digital camera, a digital video camera, a scanner, and a fax machine.

Applicants must have a bachelor’s degree with a general education background from an accredited institution. The program advisor will examine transcripts to determine if the applicant has sufficient background in writing, mathematics, social science, science, psychology, arts, physical education, and health. Applicants who lack sufficient background in one or more of these areas can expect to take additional coursework.

Certification students may opt to apply to the distance delivered Master of Arts in Teaching program after completion of the 300- and 400-level courses in their program with a GPA of 3.00 or higher. Applicants must submit a new graduate application form and $50 processing fee.

Application Requirements

Admission to the certification program requires the following, in addition to those listed on page 121:

1. A completed credential application and $60 processing fee
2. An official transcript indicating baccalaureate degree and a GPA of 3.0
3. Two recommendations on specific forms available from the School of Education.
4. A writing sample consisting of two pieces:
   1.) a statement of professional objectives
   2.) an impromptu writing sample
5. An official copy of Praxis I test scores
6. Letter of support from local school district administration
7. Documentation of successful work with children in an early childhood or elementary school setting
8. Signed waiver form to allow potential host teachers access to student application information
9. Student information sheet

Praxis II Exam

Application materials are available at www.uas.alaska.edu/education. To successfully graduate from the program, interns must pass all three sections of the Praxis II exam at state approved levels.

MINIMUM CREDIT HOURS 42

PREREQUISITES 3
ED S230 Intro to Educational Technology or competency*

*Content competency in writing, mathematics, social science, science, psychology, arts, physical education, and health

CERTIFICATION REQUIREMENTS 42

ALST S300 Alaska Studies 3
ED S304 Literature for Children and Young Adults 3
ED S320A Art in the K-8 Curriculum 1
ED S320B Physical Education in the K-8 Curriculum 1
ED S320C Music in the K-8 Curriculum 1
Graduate Certificates

ED S333 The Learner and the Learning Process* 3
ED S615 Literacy in the Intermediate and Middle School Grades 3
ED S616 Math Methods in the K-8 Classroom 3
ED S617 Science Methods in the K-8 Classroom 3
ED S618 Social Studies in the K-8 Classroom 3
ED S619 Classroom Management and Discipline 3
ED S661 Literacy and Young Children 3
ED S680 Advanced Multicultural Education 3
ED S688 Student Teaching 6
EDSE S482 Inclusive Classrooms for All Children 3
*ED S333 must be completed prior to graduate-level classes.

Contact: Dr. Katy Spangler
(907) 694-7019
katy.spangler@uas.alaska.edu.

Mathematics Education (K-8) Graduate Certificate

Teaching Graduate Certificate Distance Delivery
The Mathematics Education (K-8) Certificate is a culturally responsive program designed to provide K-8 teachers with a deeper understanding of mathematical content and pedagogy. The courses will emphasize non-traditional, hands-on methods and approaches providing both rigor and pedagogy. Topics addressed include: problem solving; numeration and operations; algebra and functions; geometry and measurement; data analysis; statistics and probability; and calculus and trigonometry. ED S608 and ED S614 are offered on Juneau campus during summer session. Remaining courses in the program may be offered by distance. It is expected that those enrolled in the program will complete it in 18–24 months.

MINIMUM CREDIT HOURS 21

CERTIFICATE REQUIREMENTS 21
ED S608 Mathematical Problem Solving: An Overview for K-8 Teachers 3
ED S614 Numeration and Operations: Math Content and Pedagogy for K-8 Teachers 3
ED S654 Algebra and Functions: Math Content and Pedagogy for K-8 Teachers 3
ED S655 Geometry and Measurement: Math Content and Pedagogy for K-8 Teachers 3
ED S656 Data Analysis, Statistics and Probability: Math Content and Pedagogy for K-8 Teachers 3
ED S657 Concepts of Calculus and Trigonometry: Math Content and Pedagogy for K-8 Teachers 3
ED S698 Master’s Research Project or Portfolio 3

Exit Requirements
1. Professional portfolio that provides evidence that the candidate meets all program goals/outcomes
2. GPA of 3.00
3. Satisfactory completion of all courses

Contact: Dr. Virgil Fredenberg
(907) 796-6082
virgil.fredenberg@uas.alaska.edu

Reading Specialist Graduate Certificate

Teaching Graduate Certificate Distance Delivery
Students will be certified at the grade level of their certification.

Application Requirements
Admission to the Reading Certificate program requires the same application materials as the M.Ed. in Reading Specialist (see page 119). If the Reading Specialist Graduate Certificate application is submitted with the M.Ed. application, the $60 application fee will be charged only once.

Call (907) 796-6525 for Reading Certificate program application materials.

MINIMUM CREDIT HOURS 24

CERTIFICATE REQUIREMENTS 24
ED S671 Language, Culture and Literacy 3
ED S674 Developing Reading, ECE-12 3
ED S675 Reading and Cognition 3
ED S676 Reading Instruction and Assessment I 3
ED S677 Reading Instruction and Assessment II 3
ED S678 Literature and Reading: Supporting Readers at All Levels 3
ED S679 Reading and Literacy in the Content Areas 3
ED S696 Teacher as Leader 3

Exit Requirements
1. GPA of 3.00
2. Satisfactory completion of all courses

Contact: Dr. Mary-Claire Tarlow
(907) 796-6435
maryclaire.tarlow@uas.alaska.edu
Special Education Graduate Certificate

Teaching Graduate Certificate
Juneau, Distance Delivery

The Graduate Certificate program in Special Education prepares teachers to develop and implement culturally responsive special education services for students with disabilities. The program focuses on the unique needs of: (a) children and youth with disabilities; (b) Alaska’s diverse Native and non-Native communities; and (c) Alaska’s remote and rural communities.

Candidates can complete the Graduate Certificate program in Special Education in 12 months. Candidates who complete the Graduate Certificate program in Special Education can receive an endorsement in special education from the Alaska Department of Education and Early Development.

The Graduate Certificate in Special Education program is designed to accommodate practicing teachers, para-professionals, and other school-based professionals. Courses are, therefore, offered in the afternoons and evenings and in the summer. All courses are delivered via teleconference and augmented with online resources. This distance-delivered format allows candidates who live and work in Alaska’s remote and rural communities to remain in their communities while completing their graduate studies.

MINIMUM CREDIT HOURS  27

CERTIFICATE REQUIREMENTS

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<td>EDSE S605</td>
<td>Early Childhood Special Education</td>
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<tr>
<td>EDSE S610</td>
<td>Assessment of Students with Disabilities</td>
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<td>EDSE S612</td>
<td>Curriculum &amp; Strategies I: Low Incidence</td>
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<td>EDSE S622</td>
<td>Curriculum &amp; Strategies II: High Incidence</td>
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<td>EDSE S677</td>
<td>Teaching Reading to Struggling Learners</td>
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<td>EDSE S682</td>
<td>Inclusive Education for Students with Disabilities</td>
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<td>EDSE S685</td>
<td>Transition Considerations for Secondary Students with Disabilities</td>
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<td>EDSE S694</td>
<td>Special Education Practicum</td>
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<tr>
<td>EDSE S695</td>
<td>Special Education Portfolio</td>
<td>3</td>
</tr>
</tbody>
</table>

Exit Requirements

1. Satisfactory completion of required coursework with a minimum GPA of 3.00 in all special education courses
2. An approved Special Education Professional Development Portfolio

Contact: Dr. Thomas Duke
(907) 796-6029
thomas.duke@uas.alaska.edu
Human Service Program, University of Alaska Fairbanks

Students in the Human Services (HSV) program receive skills-based training based on a foundation of theory. After completing foundation courses, students select an area of concentration (addictions counseling, mental health and developmental disabilities, residential care, supervision and management in human services, or workforce development). They learn interviewing and assessment, case management, crisis intervention, group counseling and specific skills needed within their concentration area.

The program prepares students for entry-level positions in human services agencies. Persons with a strong desire to help others, a sincere respect for mankind and a commitment to their own personal growth may find this field rewarding. They must be emotionally stable, flexible and interested in working with people of diverse social, cultural and economic backgrounds. Recovery from life traumas and addictions can be a positive attribute if the student has successfully worked through specific issues and is willing to continue personal growth.

Students completing a concentration will receive a credential from the human service program. Those who complete an addictions concentration are eligible for certification as substance abuse counselor technicians through the Alaska Commission for chemical dependency professionals certification board. A credential in family empowerment is also offered to students who complete specific classes.

Interested students should contact UAS-Sitka to learn more about this distance education option. Students should contact the College of Rural Alaska at (907) 455-2842, and see: www.uaf.edu/catalog/current/programs/human_services.html.

Health Science Careers: Nursing, Allied Health

Nursing

The University of Alaska Southeast (UAS) has partnered with the University of Alaska Anchorage (UAA) to bring nursing education to all three campuses. Students interested in pursuing careers in nursing are able to take a variety of prerequisite and co-requisites needed for successful application to the UAA nursing program. Interested students should review course information in the UAS “Certificate in Pre-Nursing Qualifications”. Further information about these options can be found at the UAS Health Science web page at: www.uas.alaska.edu/healthscience.

If you are interested in pursuing a degree in nursing please contact a Health Sciences advisor for detailed information.

The nursing degrees available to students wishing to remain in Southeast Alaska while studying are the A.A.S. in Nursing and a bridge program from the A.A.S. to the B.S.N. degree. The didactic parts of these UAA outreach nursing programs are delivered via distance modalities. The clinical rotations are for the most part completed in local health care facilities. Students can expect to spend approximately 6 weeks in Anchorage for specialty rotations.

The University of Alaska has expanded its effort to recruit Alaska Natives into nursing education. This UA effort, known as the RRANN (Recruitment and Retention of Alaskan Native Nurses) program, is funded by a grant from the US Department of Health and Human Services, Division of Nursing. The RRANN program is dedicated to encouraging personal growth within an academic setting that recognizes individual strengths and cultural diversity. This program is being offered at all UAS locations. Students are encouraged to contact a Health Sciences advisor for specific information about the UAS pre-nursing program, the UAA Nursing programs and the UA RRANN program. Information can also be obtained from www.uas.alaska.edu/healthscience.

Radiologic Technology

The University of Alaska Southeast (UAS) has partnered with the University of Alaska Anchorage (UAA) Medical Imaging Department to bring radiologic technology (Rad Tech) education to Southeast Alaska. Students interested in pursuing careers in radiologic technology are able to take a variety of courses from UAS required for preparation and admission to, and completion of, the AAS in Rad Tech degree. Interested students are urged to carefully review information about the UAS “Certificate
in Pre-Radiologic Technology Qualifications” (CPRTQ). Further information about these options can be found at the UAS Health Science web page at: www.uas.alaska.edu/healthscience.

Interested students should also directly contact the UAA Medical Imaging program at 907-786-6940.

**Other Options in Allied Health**

There are other options in healthcare preparation in addition to the Nursing and Rad Tech opportunities described above. Students who are interested in a general health sciences background should review the UAS “A.A.S. in Health Sciences”, a degree that also contains all required courses found in both the CPNQ and CPRTQ certificates. The UAS core of health science and related courses may meet the needs of students interested in pre-medicine, health information management (HIM), or a number of other programs in the allied health field that are offered at the University of Alaska and other institutions of higher education. Students should seek advisement at the earliest possible opportunity if career goals include nursing, medicine, or related areas of allied health. Contact the UAS Health Sciences program for more information or go to the UAS Health Science web page at www.uas.alaska.edu/healthscience.

**Internships**

Academic internships are experience-based courses that place a student in an organization, public or private, under the supervision a qualified professional in the agency and a UAS faculty member. In some cases, the internships may carry a salary as well as credits. Internships that generate credit require satisfactory completion of a minimum of four hours of work per week for each credit (0 + 0 + 4). To apply for an internship, a student must be admitted to a University program, and must also demonstrate sufficient educational preparation for the internship before applying. Interested students should consult with their advisor before applying. Internship credit may be applied toward undergraduate programs as follows: Six (6) credits in a certificate program, nine (9) credits in an associate degree, and twelve (12) credits in a bachelor’s degree program. Contact Departmental faculty and/or Career Services at 796-6368 for internship information.

**Phi Theta Kappa, Ketchikan Campus**

The Ketchikan campus sponsors a chapter of Phi Theta Kappa international honorary society for students in two-year colleges. This is one of two chapters in Alaska, and provides opportunities for academic growth as well as fellowship, transfer, and scholarship support.

**Rural Development, University of Alaska Fairbanks**

The rural development program is designed for those committed to the empowerment of Alaska Native and other rural communities. This interdisciplinary degree provides a broad understanding of development processes in Alaska and the global community. It also provides specific tools essential for rural leadership, including grant proposal writing, business planning, resources co-management, and project management and evaluation.

Students work with a faculty advisor to develop a concentration in one of six areas: Community Organization and Service, Community Research and Cultural Documentation, Land/Renewable Resources, Rural Health and Human Services Management, Small Business Management, Tribal and Local Government Administration.

Rural development is available to students away from the Fairbanks campus through the applied field-based program. Special admission requirements apply. Contact the Sitka campus for further information.