

## 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's 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:** A second Associate of Applied Science 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's degree work, only one A.A. may be earned by a student.

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

**Graduate Degrees:** See Graduate Study at UAS.

## Undeclared Program for Undecided Students (Juneau applicants only)

UAS offers a variety of bachelor degree options, and it's natural that incoming students may not be positive of 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 admissions.

Undeclared students are advised in the Student Resource Center. As an undeclared or deciding applicant, students are not selecting a specific degree program when they arrive, but will eventually choose a degree by working with their advisors and exploring career options. This transi-

tion 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 areas and at the same time fulfill general education and other course requirements or electives in almost any curriculum.

# Academic Programs

Campus Key: J = Juneau, K = Ketchikan, S = Sitka, D = Distance

## Business

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 curricula are designed to develop critical thinking, communication skills, basic computer knowledge, awareness of ethical issues, and expertise in the 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.), and Associate of Applied Science in Paralegal Studies, and the four-year Bachelor's of Business Administration program (B.B.A.) with an emphasis in accounting, management or general business.

Certificate 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. Graduates will generally pursue or strengthen a professional-level accounting or management career.

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 is 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 of Business (interim)**

Karen Schmitt

## **Faculty**

David J. Ackerman

Assistant Professor of Business Administration (J)

Janet L. Dye

Professor of Accounting (J)

Michael E. Dwyer

Assistant Professor of Business Administration (J)

Steven L. Hamilton

Assistant Professor of Business Administration (J)

Cathy A. LeCompte

Assistant Professor of Business Administration (K)

Vacant

Professor of Accounting (J)

Vacant

Professor of Accounting (J)

Vacant

Professor of Accounting (J)

## **Business Degrees**

Certificates

- Accounting Technician (J, K, S)
- Small Business Management (J, K)

Associate of Applied Science

- Business Administration (J, K, D)\*
- Paralegal Studies (J)

Bachelor of Business Administration (J, D)

With emphasis areas in:

- Accounting
- Management\*
- General Business\*

Minors

\*Affiliated with the Service Members Opportunity College.  
Contact Admissions Office SOC Counselor.

## **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, computer information and office systems, construction, welding, law enforcement, environmental technology, and health information management. Certificates and Associate of Applied Science (A.A.S.) degrees are offered in certain fields.

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

A variety of teaching methods is used, 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 of Career Education**

Karen Schmitt

## **Faculty**

Steve Brandow

Assistant Professor of Welding Technology (K)

Glen N. Craig

Assistant Professor of Diesel/Hydraulics (J)

Patricia DeAngelis

Assistant Professor of Computer Information and Office Systems (K)

H. Eve Dillingham

Assistant Professor of Computer Information and Office Systems (J)

Susan Feero

Instructor of Computer Information and Office Systems (S)

Marquam George

Assistant Professor of Construction Technology (J)

Pat Hughes

Assistant Professor of Construction (S)

Eric Hummel

Assistant Professor of Computer Information and Office Systems (K)

Steve Johnson  
Assistant Professor of Computer Information and Office Systems (J)

Carol Liberty  
Associate Professor of Health Information Management (S)

John Martin  
Assistant Professor of Automotive Technology (J)

Lee Michalsky  
Assistant Professor of Environmental Technology (S)

Tim Powers  
Associate Professor of Computer Information and Office Systems (J)

Allen Puckett  
Assistant Professor of Welding Technology (S)

Juan Rivero  
Assistant Professor of Computer Information and Office Systems (J)

Charles Ross  
Assistant Professor of Construction Technology (J)

Marianne Stillner  
Assistant Professor of Nursing Education (J)

## **Career Education Degrees**

### **Certificates of Completion (Departmental Programs)**

- Basic Computing Skills Core
- Administrative Office Support
- Application Programming
- Cisco Networking Certification
- Computer Applications
- Database Administration
- Desktop Publishing and Graphics
- Medical Office Specialist
- Multimedia Arts
- Networking Essentials
- Programming Foundations
- Professional Cisco Networking
- Server Administration
- Web Authoring
- Web Foundations

### **Construction Technology (J)**

- Residential/Light Construction

### **Power Technology (J)**

- Automotive emphasis
- Diesel/Heavy Duty emphasis
- Diesel/Marine emphasis
- Marine Engine Room Preparation

## **Welding Technology (J, K, S)**

### **Certificates**

- Computer Information and Office Systems (J, K, S)
- Health Information Management Coding Specialist (S)
- Environmental Technology (S)
- Law Enforcement (S)

### **Associate Of Applied Science**

- Apprenticeship Technology (J, K, S)
- Computer Information and Office Systems (J, K, S)
- Construction Technology (J)
- Environmental Technology (S)
- Health Information Management (S)
- Power Technology (J)

## **Education**

The Center for Teacher Education faculty's mission is to identify, prepare, and strengthen effective teachers for sustained contributions to students and the education profession in rural and urban settings in Alaska and nationally. Our graduates will be informed, reflective, and responsive teachers within diverse classroom, school and community contexts.

While mastering competencies stated in the Alaska Standards for Teachers and Administrators, students also demonstrate competencies as outlined by UAS's vision and conceptual framework. Our programs place special emphasis on diverse needs of students and up to date technology and provide strong field-based approaches to becoming effective teachers. All programs are available on the Juneau campus or are offered throughout 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 the State and the country. In addition, our programs and Professional Education Center offer a variety of opportunities for teachers to advance their learning and become educational leaders.

## Dean of Education

Dr. Marilyn J. Taylor

## Faculty

Marla Brownlee

Assistant Professor of Education

Scott Christian

Assistant Professor of Education

Marjorie Fields

Professor of Education

Kathrin Greenough

Assistant Professor of Education

Rhonda Hickok

Assistant Professor of Education

Shirley Kaltenbach

Assistant Professor of Education

Jeffrey Lofthus

Assistant Professor of Education

Norma Mallonee

Assistant Professor of Education

David Marvel

Associate Professor of Education

Tom McKenna

Assistant Professor of Educational Technology

Jason B. Ohler

Professor of Education

Katherine Spangler

Professor of Education

Mary-Claire Tarlow

Associate Professor of Education

Mary Wegner

Assistant Professor of Education

## Education Degrees

Certificate of Completion (National Credentialing Program)

- Child Development Associate Credential (J, S, D)

Certificate

- Early Childhood Education (J, D)

Associate of Applied Science

- Early Childhood Education (J, D)

Bachelor of Arts

- Elementary Education (J)

Master of Arts in Teaching

- Early Childhood Education (D)
- Elementary Education (J)
- Elementary Education (D)
- Secondary Education (J)

Master of Education

With emphasis areas in:

- Early Childhood Education (D)
- Educational Technology (D)
- Elementary Education (J)
- Secondary Education (J)

Credential Programs

- Early Childhood Education (D)
- Elementary Education (D)

Endorsement Programs

- Early Childhood Education Endorsement (D)
- Educational Technology Endorsement (D)
- Reading Endorsement (D)

## Humanities

Humanities at UAS include the disciplines of art, dance, English (composition and literature), journalism, languages, linguistics, music, philosophy, speech communications, and theater and are closely related to the social sciences. The humanities concern 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 learn the nature of its spirit, which is characterized by the effort to 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, communications, or English as well as general studies 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.

## Dean of Arts & Sciences

vacant

## Faculty

Judith Andree

Associate Professor of English (J)

Rick Bellagh

Assistant Professor of Spanish (J)

Donald Cecil  
Professor of English (J)

Nina Chordas  
Assistant Professor of English (J)

Jennifer Coburn-Engquist  
Assistant Professor of Speech Communication (J)

Nora Marks Dauenhauer  
Affiliate Professor of English (J)

Richard Dauenhauer  
Affiliate Professor of English (J)

Jo Devine-Acres  
Associate Professor of English (J)

Peter Dubois  
Instructor of Theatre (J)

Alexis Easley  
Assistant Professor of English (J)

James Hale  
Assistant Professor of English (J)

Jeffrey Herrmann  
Instructor of Theatre (J)

Susan Koester  
Professor of Speech Communication (J)

Kevin Krein  
Assistant Professor of Philosophy (J)

Rod Landis  
Assistant Professor of English (K)

Anita Maynard-Losh  
Instructor of Theatre (J)

Liz McKenzie  
Assistant Professor of English (S)

Art Petersen  
Professor of English, Emeritus (J)

Alice Tersteeg  
Professor of Art (J)

## **Degrees**

Associate of Arts (J, K, S)

Bachelor of Liberal Arts (J)

Certificate of Outdoor Skills & Leadership (J)

With emphasis areas in:

- Art
- Communications
- General Studies (Distance Delivered)
- English

## **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 program at UAS is to allow the educated citizen to make rational decisions in today's society. Degree-seeking students can achieve a B.S. in Biology, a B.S. in Environmental Sciences, or a B.L.A. in Mathematics. Students not seeking a degree in mathematics and sciences are offered a variety of general-interest courses, including courses that fulfill elective and general education requirements. Course work in mathematics and science also supports allied health programs and other transfer programs. Courses in mathematics and sciences are listed under the following catalog headings: astronomy, biology, chemistry, geology, environmental sciences, mathematics, oceanography, physics and statistic

## **Dean of Arts & Sciences**

vacant

## **Faculty**

Brian Blitz  
Assistant Professor of Mathematics (J)

Carl A. Byers  
Assistant Professor of Mathematics (J)

Marnie Chapman  
Assistant Professor of Biology (S)

Cathy Connor  
Assistant Professor of Geology (J)

Paul Cotter (J)  
Assistant Professor of Biology

Ginny L. Eckert  
Assistant Professor of Biology (J)

Donald W. Greenberg  
Professor of Mathematics and Physics (J)

Lisa Hoferkamp  
Assistant Professor of Chemistry (J)

Eran Hood (J)  
Assistant Professor of Environmental Science

Tom Harmon (J)  
Assistant Professor of Mathematics

Christopher Hay-Jahans (J)  
Assistant Professor of Mathematics

Brendan P. Kelly  
Associate Professor of Biology (J)

Joe Liddle  
Assistant Professor of Mathematics (S)

Elizabeth Mathews  
Assistant Professor of Biology (J)

Ronald Seater  
Professor of Mathematics (J)

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

Janice Straley  
Assistant Professor of Marine Biology (S)

Richard Stephens  
Assistant Professor of Mathematics (J)

Sherry Tamone  
Assistant Professor of Biology (J)

## Degrees

Bachelor of Liberal Arts (J)  
With emphasis in  
• Mathematics

Bachelor of Science in Biology (J)  
• General Biology  
• Marine Biology

Bachelor of Science in Environmental  
Science (J)

## 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, public administration, 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 is the student senior assessment 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 senior assessment portfolio is formally reviewed twice: The first review takes place at the completion of 30 credits, and the final review occurs at the completion of 75 credits, prior to graduation.

## Dean of Arts & Sciences

vacant

## Faculty

Ashley Ahrens  
Assistant Professor of Economics (J)

Jonathan F. Anderson  
Assistant Professor of Public Administration (J)

Mike Dunning  
Assistant Professor of History (K)

Marilyn Knapp  
Assistant Professor of History (S)

Daniel Monteith  
Assistant Professor of Anthropology (J)

Virginia S. Mulle  
Associate Professor of Sociology (J)

Heather Nash  
Assistant Professor of Psychology (J)

David Noon  
Assistant Professor of History (J)

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

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

Shelley A. Theno  
Assistant Professor of Psychology (J)

Clive S. Thomas  
Professor of Political Science (J)

Robin Walz  
Assistant Professor of History, (J)

## Social Science Degrees

Bachelor of Liberal Arts (J)  
With emphasis areas in:

- Government
- Social Science

Master of Public Administration (J, D)

# Undergraduate Degree and Certificate Requirements

## Certificates of Completion (Departmental Programs)

### Computer Information & Office Systems Certificates of Completion

Certificates of completion will be issued by the department in Computer Information and Office Systems with options in Administrative Office Support, Advanced Computer Programming, Cisco Networking Certification, Computer Applications, Computer Programming, Desktop Publishing and Graphics, Medical Office Specialist, Networking Essentials, and Web Publishing. These certificates are intended to indicate competence in technical and professional courses and are articulated with the AAS in Computer Information and Office Systems.

Basic computer use is required to begin coursework for this certificate. Beginning computer users are encouraged to take CIOS 100, Computers for Absolute Beginners, during the summer semester. A minimum grade of C is required in all courses. Some courses will be offered only by distance delivery. Due to the rapid change in technology the certificates in Advanced Computer Programming, Cisco Networking Certification, Computer Applications, Computer Programming, Desktop Publishing and Graphics, Networking Essentials, and Web Publishing must be completed in a maximum of three years.

#### Administrative Office Support (J, K, S, D)

Provides students with skills to serve as administrative office assistants.

Minimum Credit Hours	20
ACCTS100 Record Keeping for a Small Business or	
ACCTS121 Introduction to Accounting	3
CIOS S101 Computer Keyboarding and Formatting	3
CIOS S110A Microcomputer Operating Systems, Part 1	1
CIOS S125 Messaging and Scheduling Management	1
CIOS S130 Word Processing Concepts and Applications I	1
CIOS S135 Spreadsheet Concepts and Applications I	1
CIOS S140 Database Concepts and Applications I	1

CIOS S146A Internet Concepts and Applications I	1
CIOS S160 Business English	3
CIOS S230 Word Processing Concepts and Applications II	2
CIOS S264 Records Management	2
CIOS S294 Business Practicum	1

#### Basic Computing Skills (J, K, S, D)

Provides students with basic computing skills. Prerequisite to entering CIOS certificate and degree programs.

Minimum Credit Hours	6
CIOS S100 Computers for Absolute Beginners	1
CIOS S101A Computer Keyboarding and Formatting	1
CIOS S110A Microcomputer Operating Systems, Part A	1
CIOS S130 Word Processing Concepts and Applications I	1
CIOS S135 Spreadsheet concepts and Applications I	1
CIOS S146A Internet Concepts and Applications	1

#### Cisco Networking Certification (J, K, S)

Prepares students for Cisco Certified Network Associate (CCNA) certification.

Minimum Credit Hours	20
CIOS S117 Mathematics for Computer Technology	1
CIOS S241 Cisco Networking Academy I	4
CIOS S244 Cisco Networking Academy II	4
CIOS S247 Cisco Networking Academy III	4
CIOS S248 Cisco Networking Academy IV	4
CIOS S249 Advanced Networking Topics	3

#### Computer Applications (J, K, S, D)

Provides students with skills to perform standard office automation tasks in business and organizations.

Minimum Credit Hours	20
CIOS S101A Computer Keyboarding and Formatting	1
CIOS S110 Microcomputer Operating Systems	3
CIOS S125 Messaging and Scheduling Management	1
CIOS S130 Word Processing Concepts and Applications I	1
CIOS S135 Spreadsheet Concepts and Applications I	1
CIOS S140 Database Concepts and Applications I	1
CIOS S146 Internet Concepts and Applications	3
CIOS S151 Presentation Graphics Concepts and Applications	1
CIOS S230 Word Processing Concepts and Applications II	2
CIOS S235 Spreadsheet Concepts and Applications II	2
CIOS S240 Database Concepts and Applications II	2
CIOS S250 Integrated Applications	1
Advisor-approved CIOS elective	1

#### Desktop Publishing and Graphics (J, K, S, D)

Provides students comprehensive desktop publishing skills leading to self-employment or introductory employment in graphic arts field.

Minimum Credit Hours	20
CIOS S108 Graphic Design Fundamentals for Computer Applications	3
CIOS S152 Digital Image Editing Concepts and Applications I	1
CIOS S230 Word Processing Concepts and Applications II	2
CIOS S251 Desktop Publishing Concepts and Applications	3
CIOS S254 Desktop Publishing and Graphics Project	2
CIOS S259 Preparing Electronic Documents	1
CIOS S160 Business English	3
CIOS S260 Business Communications	3

### Medical Office Specialist (J, K, S, D)

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 S130 Word Processing Concepts and Applications I	1
CIOS S160 Business English	3
CIOS S166 Medical Office Procedures	3
CIOS S264 Records Management	2
CIOS S266 Medical Transcription	3
CIOS S294 Business Practicum	2
HIM S135 Medical Terminology	3

### Networking Essentials (J, K, S)

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	2
CIOS S111 Microcomputer Concepts	2
CIOS S117 Mathematics for Computer Technology	1
CIOS S209 Maintaining and Upgrading Your PC I	3
CIOS S210 Maintaining and Upgrading Your PC II	3
CIOS S241 Cisco Networking Academy I	4
CIOS S245 Computer Network Concepts and Administration	3
CIOS S294 Networking Practicum	2

### Programming Foundations (J, K, S, D)

Provides students with minimum skills to serve as entry-level application programmers.

---

**Minimum Credit Hours** **20**

CIOS S117 Mathematics for Computer Technology	1
CIOS S170 Programming Fundamentals	3
CIOS S171 Web Scripting	3
CIOS S274 Programming in C	3
CIOS S275 Programming in Java	3
CIOS General Education Courses	
S374 Programming C++	3
CIOS S376 Programming in Perl	3
Advisor-approved CIOS electives	1

### Web Authoring Certificate of Completion (J, K, S)

Provides students with comprehensive web publishing skills leading to self-employment or introductory employment in the web publishing field.

---

**Minimum Credit Hours** **20**

CIOS S240 Database Concepts & Applications II	2
CIOS S253 Animated Web Sites	3
CIOS S257 Web Authoring Tools	3
CIOS S258 XML, DHTML, and Cascading Style Sheets	3
CIOS S259 Preparing Electronic Documents	1
CIOS S261 Advanced Web Graphics	1
CIOS S278 Server Page Programming	3
CIOS S279 Database Theory and SQL	3
CIOS Advisor Approved Electives	1

### Web Foundations (J, K, S, D)

Provides students with the knowledge skill and ability to design and build all necessary components of a non-commercial website.

#### Course requirements:

Place out of or successfully challenge CIOS S100, CIOS S101A, CIOS S110A, CIOS S130, CIOS S135, and CIOS S146A (Basic Computing Skills Core).

---

**Minimum Credit Hours** **20**

CIOS S108 Graphic Design Fundamentals for Computer Applications	3
CIOS S117 Math for Computer Technology	1
CIOS S140 Database Concepts & Applications I	1
CIOS S146B Internet Concepts and Applications	2
CIOS S152 Digital Image Editing Concepts and Applications	3
CIOS S153 Web Site Design and HTML	3
CIOS S156 Creating and Editing Web Graphics	1
CIOS S170 Programming Fundamentals	3
CIOS S171 Web Scripting	3

## Upper Division Certificate of Completion (J)

### Application Programming (J)

Finalizes preparation for students entering the application-programming field as an application programmer.

Prerequisite: Completion of Programming Foundation Certificate.

---

**Minimum Credit Hours** **21**

CIOS S377 VB and VBA	3
CIOS S471 Object-Oriented Programming	3
CIOS S472 Data Structures and Algorithms	3
CIOS S474 Programming in C#	3
CIOS S481 Emergent Languages	3
CIOS S480 Software Engineering	3
CIOS S484 Programming in PHP	3

### Database Administration Certificate of Completion (J)

Finalizes preparation for students entering the e-commerce field as database programmers.

---

**Minimum Credit Hours** **21**

CIOS S312 System Administration	3
CIOS S371 Systems Analysis	3
CIOS S441 Systems Design Principles	3
CIOS S442 Database Administration with Oracle	3
CIOS S445 Database Development with Oracle Tools	3
CIOS S447 Database Administration using MySQL	3
CIOS S448 Integrating Databases in E-Commerce Solutions	3

## E-Business Departmental Certificate (J)

Prepares students for the managerial issues relating to Information Technology with continued training in a specialized area of interest.

---

### Minimum Credit Hours 25

CIOS S401 The Internet: Past and Present	1
CIOS S411 Managing Customer Service	1
CIOS S430 Internet Ethics and Law	1
CIOS S473 Managing Secure Server Licensing Protocols	2
CIOS S432 Project Management in E-Business	3
CIOS S479 Electronic Payment Systems	1
CIOS S485 Senior Presentation/Portfolio Defense	1
And 15 CIOS advisor approved electives from one of the following upper division certificates: database, multimedia arts, application programming	15

## Multimedia Arts Certificate of Completion (J)

Finalizes preparation for students entering the e-commerce field as multimedia specialists.

---

### Minimum Credit Hours 19

CIOS S253 Animated Websites	3
CIOS S356 Streaming Media Technologies and Practices	1
CIOS S362 Digital Photography	1
CIOS S461 Information Design	3
CIOS S463 Digital Audio	3
CIOS S464 Digital Video	3
CIOS S4673-D Modeling and Animation	3
CIOS S469 Multimedia Design Project	3

## Professional Cisco Networking Certification (J, K, S)

Prepares students for Cisco Certified Network Professional certification.

---

### Minimum Credit Hours 16

CIOS S341 Cisco Networking Academy V: Building Scalable Networks	4
CIOS S342 Cisco Networking Academy VI: Building Remote Access Networks	4
CIOS S343 Cisco Networking Academy VII: Building Multilayer Switched Networks	4
CIOS S344 Cisco Networking Academy VIII: Internetworking and Troubleshooting	4

## Server Administration Certificate of Completion (J)

Prepares students with comprehensive knowledge, skill, and ability in managing the hardware and software challenges needed to set up, configure, route, backup and protect servers in an e-commerce or business setting.

---

### Minimum Credit Hours 28

CIOS S241 Cisco Networking Academy I	4
CIOS S310 UNIX and Related Operating Systems	3
CIOS S311 Help Desk Practicum	3
CIOS S312 System Administration	3
CIOS S315 Web Server Administration	3
CIOS S320 Server Load Balancing and Information Security	3
CIOS S356 Streaming Media Technologies and Practices	1
CIOS S358 Advanced XML	2
CIOS S371 Systems Analysis	3
CIOS S376 Programming in Perl	3

## Construction Technology (J) Certificate of Completion

### Residential/Light Construction

This certificate of completion introduces a general overview of the industry and provides skill development opportunities. The certificate is articulated with the AAS degree in Construction Technology.

---

### Minimum Credit Hours 28

ACCT S100 Recordkeeping for Small Businesses	3
CIOS S110A Microcomputer Concepts and Operations	1
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
CT S224 Mechanical Systems for Building	3
CT S226 Construction Estimating	3
DT S150 Basic Drafting	3
TT S100 Practical Math for Industry	3

## Child Development Associate (CDA) Credential (J, D) Certificate of Completion

The CDA is the first step in the UAS early childhood education career ladder. The CDA credential is awarded by the Council For Early Childhood Recognition based in Washington, D.C. The credential is awarded by the Council upon assessment of competency. UAS offers 14 early childhood courses (1 credit each) that prepare students to demonstrate the required competencies. Course work for the national CDA award applies towards degrees in early childhood education at UAS. Course work is available in Juneau and through distance delivery.

---

### Program Requirements 14

ECD S109 CDA Assessment Preparation	1
ECD S112 Young Children and Health	1
ECD S113 Safe Learning Environment	1
ECD S114 Effective Learning Environment	1
ECD S121 Physical Development of Young Children	1
ECD S122 Young Children and Cognitive Development	1
ECD S123 Language and Literature Activities for Young Children	1
ECD S124 Young Children and Creative Development	1
ECD S131 Developing Positive Self-Concepts in Young Children	1
ECD S141 Guidance for Young Children	1
ECD S142 Social Development for Young Children	1
ECD S171 Program Management	1
ECD S172 Professional Issues	1
ECD S221 The Young Child and the Family	1

## Power Technology (J) Certificate of Completion

Certificates of completion include options in Diesel/Heavy Duty, or Diesel/Marine with an option for engine room preparation. The certificates provide technical courses in the appropriate specialties. The certificate is articulated with the AAS in Power Technology.

### Automotive Emphasis (J)

Minimum Credit Hours		29
AUTO S100	Basic Automotive Systems	3
AUTO S121	Auto Electrical I	3
AUTO S122	Engine Performance I	3
AUTO S131	Auto Electrical II	3
AUTO S140	Basic Engines	3
AUTO S150	Frame Suspension & Alignment	3
AUTO S152	Brake Systems	3
AUTO S160	Power Trains & Differentials	4
AUTO S202	Fuel & Emission Systems	4

### Diesel/Heavy Duty Emphasis (J)

Minimum Credit Hours		27
DESL S110	Heavy Duty Engines	6
DESL S125	Hydraulics	3
DESL S130	Refrigeration & Air Conditioning	2
DESL S171	Heavy Duty Electrical Systems	3
DESL S180	AC Power Generation	3
DESL S250	Heavy Duty Brakes and CDL Preparation	2
DESL S255	Heavy Duty Suspension & Alignment	2
DESL S260	Heavy Duty Power Trains	3
WELD S120	Basic Welding I	3

### Diesel/Marine Emphasis (J)

Minimum Credit Hours		28
DESL S110	Heavy Duty Engines	6
DESL S125	Hydraulics	3
DESL S130	Refrigeration & Air Conditioning	2
DESL S171	Heavy Duty Electrical Systems	3
DESL S180	AC Power Generation	3
DESL S261	Marine Auxiliary Systems	3
DESL S262	Marine Auxiliary Systems Lab	2
DESL S263	Marine Transmissions	3
WELD S120	Basic Welding I	3

### Marine Engine Room Preparation Emphasis (J)

Minimum Credit Hours		28
DESL S110	Heavy Duty Engines	6
DESL S130	Refrigeration & Air Conditioning	2
DESL S171	Heavy Duty Electrical Systems	3
DESL S180	AC Power Generation	3
DESL S161	Applied Marine Hydraulics	1
DESL S261	Marine Auxiliary Systems	3
DESL S262	Marine Auxiliary Systems Lab	2
MT S129	Basic Safety Training	2
DESL S263	Marine Transmissions	3
WELD S120	Basic Welding I	3

## Welding (J, K, S) Certificate of Completion

### Welding Certificate of Completion (J, K, S)

Courses designed to develop skills in welding are available at all three UAS campuses. The facilities and equipment vary on each campus, which necessitates different teaching styles and course presentations. All three campuses teach skills essential for passing the various AWS welding certifications and testing is available through independent testers.

### AWS Welding Certificate of Completion (K)

A certificate of completion based upon the AWS standards set forth in the AWS EG2.0-95 and AWS Qc11, Guide for the Training and Qualification of Welding Personnel. The mission of the AWS Welding Certificate of Completion is to prepare students to meet the need for industrial applications of welding in the workplace. This certificate of completion requires full time enrollment for two semesters and is designed for students to complete competencies in Entry Level and Advanced Welding.

Minimum credit hours		24
WELD S150	AWS Entry Level Welder	12
WELD S151	AWS Advanced Welder	12

### Welding Technology Emphasis (J, K)

Minimum credit hours		22
WELD S120	Basic Welding	3
WELD S121	Arc Welding I	3
WELD S122	Arc Welding II	3
WELD S123	Pipe Welding	3
WELD S124	Aluminum Welding	3
WELD S125	Welder Qualifications	1
WELD S144	Blueprints & Weld Symbols	3
WELD S148	Weld Shop & Projects	3

### Welding Technology Emphasis (S)

Minimum credit hours		20
WELD S104	Oxyacetylene Welding, Cutting and Brazing	2
WELD S105	Arc Welding	2
WELD S107	Arc Welding II	2
WELD S108	Arc Welding III	2
WELD S130	MIG Welding	2
WELD S131	TIG Welding	2
WELD S132	Pipe Welding, Uphill Techniques	2
WELD S133	Pipe Welding, Downhill Techniques	2
WELD S135	Blueprints and Symbols	2
WELD S200	Metal Fabrications Laboratory	2

## Certificates

Certificates require 9 credits of general requirements be completed as well as major requirements for a minimum of 30 credits. The requirements for the certificates are 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 (J, K, S, D)

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

<b>General requirements</b>	<b>9-10</b>
ENGL S111, CIOS S160 or SPC S111	3
PSY S153, BA S201, CIOS S262 or PSY S101	3
CIOS S116, MATH S105, or higher MATH course	3-4

<b>Major Requirements</b>	<b>21</b>
Accounting Principles	6
Selected from ACCT S121, S122, S201 or S202	
ACCT S222 Computer Automated Accounting	3
BA S151 Introduction to Business	3
or Advisor Approved Business Course	
CIOS S135 Spreadsheet Concepts & Applications I	1
CIOS S235 Spreadsheet Concepts & Applications II	2
Advisor approved Computer Elective	3
Advisor approved Electives	3

**Minimum Credit Hours** **30**

### Computer Information and Office Systems Certificate (J, K, S, D)

This certificate prepares individuals to secure entry-level employment in positions requiring information technology and administrative support skills. Basic computer use (Basic Computer Skills Core) is required to begin coursework. See individual Certificates of Completion detailed course listing. A minimum grade of C is required in all courses.

<b>General requirements</b>	<b>10-12</b>
Written Communication	6
ENGL S111 Methods of Written Communication	3
and	
ENGL S211 Intermediate Composition with Modes of Literature	
or	
ENGL S212 Technical Report Writing	3
OR	
CIOS S160 Business English	3
and	
CIOS S260 Business Communications	3
CIOS S262 Professional Development	3
Computational Skills:	
CIOS S116 Business Math	3
or	
CIOS S117 Mathematics for Computer Technology	1

**Major Requirements** **20**

Pick one of the following Certificates of Completion

- Administrative Office Support
- Programming Foundations
- Cisco Networking Certification
- Computer Applications
- Desktop Publishing and Graphics
- Medical Office Specialist
- Networking Essentials
- Web Authoring
- Web Foundations

**Minimum Credit Hours** **30**

### Early Childhood Education (J, D)

(Paraprofessional Level)

This certificate is designed to give intensive training in a specific occupational area. Skills gained are job-entry level in nature and work completed may apply toward degree programs in the field.

Courses for a certificate in early childhood education are the same as those in the 30-credit hour "major requirement" for the associate of applied sciences in early childhood education. Students must demonstrate a level of competence in English equivalent to ENGL S111 and a math competency through MATH S054 in order to graduate from this program. English and math placement exams are required as part of the admissions procedure.

<b>Program Requirements:</b>	<b>30</b>
ECE S112 Young Children and Health	1
ECE S113 Safe Learning Environment	1
ECE S114 Effective Learning Environment	1
ECE S121 Physical Development of Young Children	1
ECE S122 Young Children and Cognitive Development	1
ECE S123 Language and Literature Activities for Young Children	1
ECE S124 Young Children and Creative Development	1
ECE F130 Culture, Learning and the Young Child*	2
ECE S141 Classroom Management	1
ECE S142 Social Development for Young Children	1
ECE S143 Developing Positive Self-Concepts in Young Children	1
ECE F170 Practicum I* (concurrent with EC F130)	1
ECE S171 Program Management	1
ECE S172 Professional Issues	1
EDE S205 Overview of Early Childhood Profession	3
ECE S210 Guidance and Discipline	3
ECE F220 Infant and Toddler Care*	2
ECE S221 The Young Child and the Family	1
ECE F230 Introduction to the Exceptional Child*	3
ECE F245 Child Development*	3

**Minimum Credit Hours** **30**

\*Taught by distance by UAF

## Environmental Technology (S, D) Certificate

This certificate program emphasizes technical operations. Students successfully completing this program qualify for the Department of Environmental Conservation Operator-in-Training Certification examination and meet educational requirements for Level One 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

### General Education Requirements 9–10

Written Communication	
ENGL S111 Written Communications	3
Mathematics	3–4
ENVTS102 Applied Mathematics for Water/ Wastewater Operations	(3)
or	
MATH S105 Intermediate Algebra	(4)
Social Science	
SOC S102 Science, Technology and Society	3

ENVT 102 meets Certificate requirements only. Math S105 is required for the Associate Degree and will be advised for students who wish to proceed to degree completion.

### Environmental Technology Core Requirements 22

ENVTS101 Introduction to Environmental Technology	3
ENVTS105 Technical Physics	3
ENVTS105A Technical Physics Lab	1
ENVTS106 Water/Wastewater Mechanics	2
OR	
ENVTS250 Sanitary Survey Training	3
ENVTS110 Drinking Water Systems	3
ENVTS111 Wastewater Systems	3
ENVTS120 Small Utility Management & Supervision	2
ENVTS130 Basic Sanitary Chemistry/Microbiology	2
ENVTS132 Basic Sanitary Chemistry/Microbiology Lab	2

### Minimum Credit Hours 30

## Health Information Management (HIM)

### Coding Specialist (S, D) Certificate

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. A national credentialing exam is available (and it is

recommended that students gain experience in the workplace before taking this exam).

### General Requirements 13

ENGL S111 Methods of Written Communication	3
or	
CIOS S160 Business English	3
BIOL S111 Anatomy & Physiology I	4
BIOL S112 Anatomy & Physiology II	4
CIOS S110A Operating Systems & Environments	1
CIOS S135 Spreadsheet Concepts & Applications I	1
or	
CIOS S140 Database Concepts & Applications I	1

### HIM Coding Specialist 17

HIM S135 Medical Terminology	3
HIM S190 CPT-4 Procedural Coding	3
HIM S210 ICD-9-CM Coding	3
HIM S215 Physician Office Coding & Reimbursement	2
HIM S260 Data Quality & Reimbursement	2
HIM S270 Pathophysiology	3
HIM S271 Pharmacology	1

### Minimum Credit Hours 30

## Law Enforcement (S) Certificate

The law enforcement program is a full-time, rigorous and highly structured program offered in cooperation with the Alaska Public Safety Academy. The program is a pre-employment curriculum comparable to training offered in municipal police officer training academies. The program is also recognized by the National Park Service as meeting training requirements for seasonal law enforcement officers.

**Admission:** Students must meet all criteria established for admission to the Academy, and must abide by Academy rules and regulations. Students are required to reside at the Academy while completing the 12-credit Justice course requirement. Students may reside at the Student Campus Residence Hall while completing the required English and speech courses at the Sitka campus during an intensive 6-week program which precedes the Academy course work. Alternately, students may transfer the required English and speech courses from other institutions. No portion of the Justice course work may be transferred from another institution.

### Minimum Credit Hours 18

ENGL S110 Basic Writing	3
or	
ENGL S111 Methods of Written Communication	3
SPC S111 Fundamentals of Oral Communication	3

### Public Safety Academy Law Enforcement Training:

JUST S111 Physical Training	1
JUST S112 Procedural Law	2
JUST S113 Criminal Justice	1
JUST S114 Traffic Law Enforcement	1

JUST S115 Police Procedures	5
JUST S116 Criminal Investigation	2
ENGL S101 College Skills (Optional Course)	1

## Outdoor Skills & Leadership Certificate (J)

The certificate in Outdoor Skills and Leadership will be a nine month intensive humanities program designed to develop skills and characteristics that are essential to success as an individual, a group member, and a leader in outdoor and adventure settings. The program incorporates outdoor risk management, leadership skills, specific outdoor activity skills (such as rock and ice climbing, kayaking, skiing, camping), and academic work in areas such as Alaska history, science, philosophy, and communication. Both outdoor and academic courses are designed to develop not only knowledge but also personal traits such as self-reliance and good judgment. The curriculum includes 34 credits of course work and practical learning experiences. Individuals who complete the program will have the knowledge and skills to plan and manage a variety of outdoor experiences and will be well qualified for entry level positions in the outdoor industry.

<b>General requirements</b>	<b>13</b>
ODS S193 Wilderness First responder	4
ODS S206 Outdoor Leadership	3
SPC S235 Small Group Communication and Team Building	3
PHIL S271 Perspectives on the Natural World	3
Additional courses may be needed to prepare students to complete required courses	

<b>Major Requirements</b>	<b>12</b>
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
ODS S205 Backcountry Navigation and Travel	2
ODS S221 Glacier Travel and Crevasse Rescue Fundamentals	2

Advisor approved Electives	<b>9</b>
----------------------------	----------

Minimum Credit Hours	<b>34</b>
----------------------	-----------

## Small Business Management (J, K, S, D)

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.

<b>General requirements</b>	<b>9</b>
ENGL S111 OR CIOS S260	
CIOS S116, MATH S105, or higher MATH course	
PSY S153, SPC S237 or SPC S111	

<b>Major Requirements</b>	<b>21</b>
ACCTS100 Recordkeeping for Small Business	3
or	
ACCTS201 Principles for Financial Accounting	3
BA S166 Small Business Management	3
BA S201 Introduction to Management and Supervision	3
Approved BA, ECON, LAWS, or ACCT electives	6
Approved CIOS Elective	3
Approved Electives	3

<b>Minimum Credit Hours</b>	<b>30</b>
-----------------------------	-----------

## Associate Degrees

### Associate of Arts Degree (J, K, S, D) A.A.

The associate of arts degree 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.



## Apprenticeship Technology (J, K, S) A.A.S.

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 Student Services for further information.

Program Requirements		22-23
ENGL	S111 Methods of Written Communication	3
ENGL	S212 Technical Report Writing	3
CIOS	S262 Professional Development	3
SPC	S111 Fundamentals of Oral Communications	3
MATH	S107 College Algebra or Elementary Statistics course	3-4
	Emergency Trauma Technician	4
	Computer Applications Courses	3
	Technical Credits from approved apprenticeship	38

**Minimum Credit Hours** 60-61

## Business Administration (J, K, D) A.A.S.

The Business Administration program provides a course of study in various aspects of business management that prepares students for entry into the job market.

**Degree Requirements:** The A.A.S. degree in business administration requires a minimum of 60 credit hours.

General Requirements		15
<b>Written Communication Skills</b>		<b>6</b>
ENGLS111	Methods of Written Communication (3) and either	
ENGLS211	Intermediate Composition with Modes of Literature (3)	
	or	
ENGLS212	Technical Report Writing (3)	
	or	
CIOS	S160 Business English (3)	
	and	
CIOS	S260 Business Communications (3)	
	Oral Communication Skills	3
	Selected from SPC S111, S235, S237 or S241.	
	From the following areas: Humanities, Social Sciences, Natural Sciences, or Mathematics	6
	Major Requirements	30
ACCTS201	Principles of Financial Accounting **	3
ACCTS202	Principles of Managerial Accounting	3

ACCTS222	Computer Automated Accounting or	3
ACCTS316	Accounting Information Systems	3
BA	S151 Introduction to Business or	3
BA	S166 Small Business Management	3
BA	S201 Introduction to Management and Supervision	3
	or	
BA	S301 Principles of Management	3
BA	S330 Legal Environment of Business or	3
LAWS	S101 Introduction to Law	3
	Advisor approved Computer Electives	3
CIOS S135	Spreadsheet Concepts & Applications I and	1
CIOS	S235 Spreadsheet Concepts & Applications II	2
	or	
CIOS	S140 Database Concepts & Applications I and	1
CIOS	S240 Database Concepts & Applications II	2
CIOS	S260 Business Communication	3
ECON	S201 Principles of Economics I: Macroeconomics*	3
	or	
ECON	S202 Principles of Economics II: Microeconomics	3

\*Note: Math S105 is a corequisite.

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

**Approved Electives** 15

Electives can be used to obtain an emphasis in accounting, computer information and office systems, or management.

**Minimum Credit Hours** 60

## Computer Information and Office Systems (J, K, S, D) A.A.S.

Computer Information and Office Systems is a program designed for people interested in securing employment in positions requiring information technology and administrative support skills. Basic computer use is required to begin coursework for this degree. Absolute beginners are encouraged to take CIOS S100, Computers for Absolute Beginners, during the summer semester.

**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 courses.

**General Requirements 15**

Written Communication	6
ENGL S111 Methods of Written Communication (3) and either:	
ENGLS211 Intermediate Composition with Modes of Literature (3)	
or	
ENGLS212 Technical Report Writing (3)	
or	
CIOS S160 Business English (3)	
and	
CIOS S260 Business Communication (3)	
Oral Communication Skills	3
From among the following areas: Humanities, Social Sciences, 6	
Natural Sciences, Mathematics	
Major Requirements	Varies
CIOS S116, or CIOS S117	1-3
CIOS S262	3

Completion of two of the certificates from the following list:

Administrative Office Support	22
Programming Foundations	20
Cisco Networking Certification	20
Computer Applications	20
Desktop Publishing and Graphics	20
Medical Office Specialist	20
Networking Essentials	20
Web Authoring	20
Web Foundations	20
(see Certificate section for details)	
Approved Electives	Varies

**Minimum Credit Hours 60**

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

**Construction Technology (J, D) A.A.S.**

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 residential construction, supervision, estimating, scheduling, safety, and the allied fields of materials and equipment sales and service.

**Degree Requirements:** The Associate of Applied Science degree in Construction Technology requires a minimum of 60 credit hours.

**General Requirements: 15**

Written Communication Skills	6
ENGL S111 Methods of Written Communication (3) and either:	
ENGL S211 Intermediate Composition with Modes of Literature (3)	
or	
ENGL S212 Technical Report Writing (3)	

or	
CIOS S160 Business English (3)	
and	
CIOS S260 Business Communication (3)	
Oral Communication Skills	3
CIOS S262 Professional Development	3
From the following areas: Humanities, Social Sciences, Natural Sciences, Mathematics	3

**Major Requirements 43**

ACCTS100 Recordkeeping for Small Business	3
BA S166 Small Business Management	3
CIOS S110A Microcomputer Concepts and Operation	1
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
CT S224 Mechanical Systems for Buildings	3
CT S225 Construction Planning & Scheduling	3
CT S226 Construction Estimating	3
DT S150 Basic Drafting	3
DT S160 House Planning & Architectural Design	3
DT S175 Introduction to AutoCAD	3
TT S100 Practical Math for Industry	3
WOOD S100 Woodworking I	3
Technical or Vocational Electives	3

**Minimum Credit Hours 61**



*The UAS Construction Technology program is intensive and thorough.*

## Early Childhood Education (J, D) A.A.S.

Early Childhood Education courses are designed to prepare teachers for work in preschools, child care programs, Head Start schools, and as assistants in public school primary grades. The credits earned in the C.D.A. and the certificate program can be part of the A.A.S. degree.

The associate degree is offered through the Juneau campus or distance delivery, with many of the required courses available through the Ketchikan and Sitka campuses.

In keeping with an open admissions policy for associate degrees, the only admissions requirements are completion of English and math placement tests for advising purposes.

General Education Requirements			15
ENGL	S111	Methods of Written Communication	3
ENGL	S211	Intermediate Composition with Modes of Literature	3
	or		
ENGL	S212	Technical Report Writing	3
	or		
CIOS	S260	Business Communications	3
		Oral Communication Skills	3
		From the following areas: Humanities, Social Sciences, Math or Natural Sciences.	6

Major Requirements			30
ECE	S112	Young Children and Health	1
ECE	S113	Safe Learning Environment	1
ECE	S114	Effective Learning Environment	1
ECE	S121	Physical Development of Young Children	1
ECE	S122	Young Children and Cognitive Development	1
ECE	S123	Language and Literature Activities for Young Children	1
ECE	S124	Young Children and Creative Development	1
ECE	F130	Culture, Learning and the Young Child*	2
ECE	S141	Classroom Management	1
ECE	S142	Social Development of Young Children	1
ECE	S143	Developing Positive Self-Concepts in Young Children	1
ECE	F170	Practicum I* (concurrent with EC F130)	1
ECE	S171	Program Management	1
ECE	S172	Professional Issues	1
EDE	S205	Overview of Early Childhood Profession	3
ECE	S210	Guidance and Discipline	3
ECE	F220	Infant and Toddler Care*	2
ECE	S221	The Young Child and the Family	1
ECE	F230	Introduction to the Exceptional Children*	3
ECE	F245	Child Development*	3
		Approved Electives	15

Minimum Credit Hours	60
*Taught by distance through UAF.	

## Environmental Technology (S, D) A.A.S.

The Associate of Applied Science degree offers both the technology emphasis and a utility management emphasis. Students successfully completing the degree with Utility Operations Emphasis are qualified for the Department of Environmental Conservation Operator-in-Training Certification examination; meet educational requirements for Levels One, Two, and Three 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 Utility Management emphasis offers basic skills required for management of small community utilities.

General Education Requirements			16
		Written Communication	6
ENGL	S111	Methods of Written Communication (3) and	
ENGL	S212	Technical Report Writing (3)	
	or		
CIOS	S260	Business Communication (3)	
		Oral Communication Skills	3
		Mathematics	
MATH	S105	Intermediate Algebra	4
		Social Science	
SOC	S102	Science, Technology and Society	3

Environmental Technology Core Requirements			29
ENVTS101		Introduction to Environmental Technology	3
ENVTS105		Technical Physics	3
ENVTS105A		Technical Physics Lab	1
ENVTS106		Water/Wastewater Mechanics	2
		or	
ENVTS250		Sanitary Survey Training	3
ENVTS110		Drinking Water Systems	3
ENVTS111		Wastewater Systems	3
ENVTS120		Small Utility Management & Supervision	2
ENVTS130		Basic Sanitary Chemistry/Microbiology	2
ENVTS132		Basic Sanitary Chemistry/Microbiology Lab	2
ENVTS202		Hazardous Materials Management	2
ENVTS203		Solid Waste Management	3
ENVTS240		Practicum	3

### Choose one emphasis

Utility Operations Emphasis:			15
ENVTS204		Instrumentation	2
ENVTS210		Water Treatment	3
ENVTS211		Wastewater Treatment	3
ENVTS212		Hydraulics	3
ENVTS230		Interm Sanitary Chemistry/Microbiology	2
ENVTS232		Interm Sanitary Chemistry/Microbiology Lab	2

Utility Management Emphasis:			60
ACCTS121		Introduction to Accounting I	3
ACCTS122		Introduction to Accounting II	3
BA	S201	Introduction to Management & Supervision	3
ENVTS220		Utility Structure & Organization	3
ENVTS221		Financial Management for Small Utilities	3
		Minimum Credit Hours	60

## Health Information Management (S, D) A.A.S

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 of Accreditation of Allied Health Education Programs (CAAHEP) in collaboration with the American Medical Association and the American Health Information Management Association's Council on Accreditation. Graduates are eligible to write the national examination; successful completion of the examination leads to the professional designation of Accredited Record Technician (A.R.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.

### General Requirements **20**

Written Communication Skills	6
ENGL S111 Methods of Written Communication (3) and	
ENGL S212 Technical Report Writing (3)	
or	
CIOS S260 Business Communication (3)	
Oral Communication Skills	3
Selected from SPC S111, S235, S237 or S241	
Mathematics Skills	3
CIOS S116, MATH S105, or higher math course	
Natural Sciences	8
BIOL S111 Anatomy and Physiology I (4)	
BIOL S112 Anatomy and Physiology II (4)	

### Major Requirements **40**

Computer Information and Office Systems courses	
CIOS S110A Microcomputer Concepts and Operations	1
CIOS S135 Spreadsheet Concepts and Applications I	1
CIOS S140 Database Concepts and Applications I	1
Health Information Management	
HIM S110 Introduction to Health Information Practice	3
HIM S120 Operation of a Health Information Service	3
HIM S135 Medical Terminology	3
HIM S160 Alternative Delivery Systems	3
HIM S180 Computer Applications/Emerging Technologies	2
HIM S190 CPT-4 Procedural Coding	3
HIM S210 ICD-9-CM Coding	3
HIM S215 Physician Office Coding and Reimbursement	2
HIM S240 Legal Aspects of Health Information	2
HIM S250 Quality Management	2
HIM S260 Data Quality & Reimbursement	2
HIM S270 Pathophysiology	3
HIM S271 Pharmacology	1
HIM S280 Health Care Management	3
HIM S290 Management Preceptorship	2

**Minimum credit hours **60****

## Paralegal Studies (J) A.A.S.

The paralegal studies courses are designed to prepare individuals for employment in attorneys' offices, the court system, and other legal agencies doing work that requires a basic working knowledge of the legal system and its processes.

**Degree Requirements:** The A.A.S. degree in paralegal studies requires a minimum of 60 credit hours.

### General Requirements **15**

Written Communications Skills	6
ENGL S111 Methods of Written Communication (3) and either	
ENGL S211 Intermediate Composition with Modes of Literature (3)	
or	
ENGL S212 Technical Report Writing (3)	
or	
CIOS S160 Business English (3)	
and	
CIOS S260 Business Communications (3)	
Oral Communication Skills	3
Selected from SPC S111, S235, S237 or S241.	
From the following areas: Humanities, Social Sciences, Natural Sciences, Mathematics	6

### Major Requirements **24**

LAWS S101 Introduction to Law	3
LAWS S112 Civil Procedure	3
LAWS S235 Criminal Litigation	3
LAWS S240 Methods and Techniques of Legal Research	3
LAWS S294 Practicum: Field Practice	3
LAWS S310 Personal Injuries and Property Damage	3
LAWS S332 Contracts	3
LAWS S434 Constitutional Law	3

### Approved Electives **12**

Generally, in order to qualify as an approved elective, a course must have law as its subject matter content. Example of courses that would automatically be approved include:

LAWS S210 Evidence	3
LAWS S215 Paralegal Profession in Practice	3
LAWS S223 Real Estate Law	3
LAWS S330 Legal Environment of Business	3
LAWS S334 Advanced Business Law	3
LAWS S360 Business Organization	3
LAWS S380 Family Law	3
LAWS S394 Practicum: Field Practice	3
LAWS S410 Administrative Law and Procedures	3
LAWS S498 Selected Research Problems in Law and Public Administration	3

### Electives **9**

**Minimum Credit Hours **60****

## Power Technology (J) A.A.S.

### 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 (see department for details).

**Admission requirements:** Students will be admitted to the Automotive Emphasis 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.

### General Requirements: 15

Written Communication Skills	6
ENGL S111 Methods of Written Communication (3) and either:	
ENGL S211 Intermediate Composition with Modes of Literature (3)	
or	
ENGL S212 Technical Report Writing (3)	
or	
CIOS S160 Business English (3)	
and	
CIOS S260 Business Communication (3)	
Oral Communication Skills	3
Selected from SPC S111, S235, S237 or S241.	
From the following areas: Humanities, Social Science, Natural Sciences, Mathematics	3
CIOS S262 Professional Development	3

### Major Requirements: 46

TT S100 Practical Math for Industry	3
Automotive Requirements	
AUTO S100 Basic Automotive Systems	3
AUTO S121 Auto Electrical I	3
AUTO S122 Engine Performance I	3
AUTO S131 Auto Electrical II	3
AUTO S140 Basic Engines	3
AUTO S150 Frame Suspension and Alignment	3
AUTO S152 Brake Systems	3
AUTO S160 Power Trains and Differentials	4
AUTO S202 Fuel and Emission Systems	4
AUTO S222 Engine Performance II	3
AUTO S227 Auto Electrical III	3
DESL S105 Diesel Fuel Systems	3
DESL S106 Diesel Engines Simplified	3
DESL S130 Refrigeration & Air Conditioning	2

### Minimum Credit Hours 61

### 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):

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

### General Requirements: 15

Written Communication Skills	6
ENGL S111 Methods of Written Communication (3) and either:	
ENGL S211 Intermediate Composition with Modes of Literature (3)	
OR	
ENGL S212 Technical Report Writing (3)	
OR	
CIOS S160 Business English (3)	
and	
CIOS S260 Business Communication (3)	
Oral Communication Skills	3
From the following areas: Humanities, Social Science, Natural Sciences, Mathematics	3
CIOS S262 Professional Development	3

### Major Requirements 47

TT S100 Practical Math for Industry	3
WELD S120 Basic Welding I	3
WELD S149 Maintenance Welding	3
Diesel Requirements	
DESL S105 Diesel Fuel Systems	3
DESL S110 Heavy Duty Engines	6
DESL S125 Hydraulics	3
DESL S130 Refrigeration and Air Conditioning	2
DESL S171 Heavy Duty Electrical Systems	3
DESL S180 AC Power Generation	3
DESL S250 Heavy Duty Brakes & CDL Preparation	2
DESL S255 Heavy Duty Suspension and Alignment	2
DESL S260 Heavy Duty Power Trains	3
DESL S291 Internship	3
DESL S261 Marine Auxiliary Systems	3
DESL S262 Marine Auxiliary Systems Lab	2
DESL S263 Marine Transmissions	3

### Minimum Credit Hours 62

## Bachelor Degrees

### Bachelor of Arts in Elementary Education (J) (B.A.)

The Bachelor of Arts in Elementary Education is a new four-year undergraduate degree leading to a Type A certification in Elementary Education in the state of Alaska. 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 and the Alaska Standards for Culturally Responsive Schools.

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 courses are integrated with student teaching.

#### Admission Criteria:

Pre-major status: Applicants enter as premajors and will be considered for full admission into the Bachelor of Arts in Elementary Education program after meeting the following:

1. Completion of GERs
2. Minimum G.P.A. of 2.75
3. Completion of 60 credits
4. Successful completion of Praxis I exam (Alaska state scores)
5. Completion of change of major form

#### Admission to Methods and Internship (Capstone Year)

1. Full Elementary Education Major status
2. Submission of application to methods and internship by March 15
3. One professional letter of recommendation from someone, other than an education professor, who can speak to their disposition and potential as a future elementary teacher
4. Writing competency
5. Math competency
6. Overall G.P.A. of 2.75, with a minimum of 2.0 in each major academic area
7. A current resume and letter of introduction to future host teacher and principal
8. Fingerprinting and criminal background check
9. Completion of all required subject area coursework
10. Current negative tine test
11. Successful interview

Exit Criteria: Approved portfolio based on the UAS vision and conceptual framework, Alaska State Standards and NCATE Standards to be completed in the Senior Capstone Year as part of methods courses and student teaching.

Degree Requirements: Candidates must complete the GERs as well as the specific program requirements listed below 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.

---

#### General Education Requirements: 37 - 41

Written Communication 6  
 ENGL S111 Methods of Written Communication (3)  
 ENGL S211 Intermediate Composition with Modes of Literature (3)

Oral Communication 3

Choose one of the following  
 SPC S111 Block (with ENGL S111) Fundamentals of Oral Communication (3)  
 SPC S235 Small Group Communication and Team Building (3)  
 SPC S237 Interpersonal Communication(3)  
 SPC S241 Public Speaking (3)

Humanities 16

Choose two of the following (4)  
 Visual Art Appreciation and Principles (2)  
 Under development. Please see advisor  
 Music Appreciation and Principles (2)  
 Under development. Please see advisor  
 Drama Appreciation and Principles (2)  
 Under development. Please see advisor

Must take (12)

PSY S101 Introduction to Psychology (3)  
 HIST S105 World History I (3)  
 GEOG S101 Introduction to Geography (3)  
 GOVT S101 Introduction to American Government (3)

Math and Science 12-16

Must take  
 GEOL S104 Physical Geology (4)  
 MATH S107 College Algebra (4)

Either  
 BIOL S103 Biology and Society (4)  
 or  
 BIOL S105 Fundamentals of Biology I(4) and  
 BIOL S106 Fundamentals of Biology II(4)

---

#### Content Area Requirements 35

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.

Humanities	7
ENGL S311 Advanced Composition (3)	
PE / Dance (1)	
Under development. Please see advisor	
PE Health and Fitness (1)	
Choose one of the following (must be the one not chosen in the GERs)	
Visual Art Appreciation and Principles (2)	
Under development. Please see advisor	
Music Appreciation and Principles (2)	
Under development. Please see advisor	
Drama Appreciation and Principles (2)	
Under development. Please see advisor	
Social Science	15
ALST S300 Alaska Studies (3)	
HIST S131 History of US (3)	
PSY S2xx Child Development (3)	
Under development. Please see advisor	
Choose one (3)	
ANTH S200 Alaska Native Cultures (3)	
ANTH S202 Cultural Anthropology (3)	
ANTH S225 The Arts and Legends of Native Alaskans (3)	
ANTH S240 Gender Roles in Society (3)	
Choose one (3)	
PSY S302 Social Psychology (3)	
SOC S345 Education and Society (3)	
Natural Science & Math	13
MATH S205 Mathematics for Elem School Teachers I(3)	
MATH S206 Mathematics for Elem School Teachers II (3)	
PHYS S102 Survey of Physics (4)	
ASTR S225 General Astronomy (3)	

**Education Requirements 56**

ED S222 Orientation to the Teaching Profession (3)	
ED S230 Introduction to Educational Technology (2)	
ED S302 Foundations of Literacy (3)	
ED S320A Art in the Curriculum (1)	
ED S320B Physical Education in Elementary Curriculum (1)	
ED S320C Music in the Elementary Curriculum (1)	
ED S320D Drama in the Elementary Curriculum (1)	
ED S320E Health in the Elementary Curriculum (1)	
ED S333 The Learner and the Learning Process (3)	
ED S380 Multicultural Education (3)	
ED S415 Teaching Literacy/Social Studies in Elementary Schools (6)	
ED S426 Teaching Math & Science in Elementary Schools (5)	
ED S448 Elementary Classroom Management (3)	
ED S452 Student Teaching (9)	
ED S460 Integrated Curriculum and Instruction (2)	
ED S494 Computers in Education Practicum (1)	
ED S498 Portfolio Preparation (2)	
EDSE A482 Inclusive Classrooms for All Children (3) (UAA Distance)	
Choose one	
ED S304 Children's Literature (3)	
ENGL S305 Studies in Children's Literature (3)	

## Bachelor of Arts in Secondary Education

Students wishing to receive teacher certification in Middle Grades and Secondary Education, must first complete a B.A. or B.S. degree in their content area. Upon completion of the Bachelor's degree, the student is eligible to apply for the 12 month Master of Arts in Teaching program (see page 103). Contact Dr. David Marvel in the Center for Teacher Education for advising information.

## Bachelor of Arts in Social Work

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 are 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; Math or Computer Science and Natural Science

**Major Requirements 36**

SWK F103 Social Work in the Human Services	3
SWK F220 Values, Ethics and Social Work Practice	3
SOC F242 The Family: Cross-Cultural Perspectives	3
SOC/PSY F250 Statistics for the Behavioral Sciences	3
SWK F306 Social Welfare: Policies and Issues	3
SWK F342 Human Behavior in the Social Environment	3
SWK F460 Social Work Practice I	3
SWK F461 Practicum in Social Work I	3
SWK F463 Social Work Practice II	3
SWK F464 Practicum in Social Work II	3
SOC F473 Social Science Research Methods	3

### Liberal Arts Required Courses

PSY 101 Introduction to Psychology	3
SOC F100X Individual, Culture and Society	3
BIOL F103X Biology and Society	3
PSY 240 Developmental Psychology	3
ANTH242 Native Cultures of Alaska	3

For more information contact:

Jim Caringi  
 Clinical Assistant Professor of Social Work,  
 University of Alaska Fairbanks  
 University Alaska Southeast  
 11120 Glacier Highway  
 Juneau, AK 99801  
 (907) 465-8763  
 (907) 463-3402  
[ffjcc1@uaf.edu](mailto:ffjcc1@uaf.edu)

Judy Shepard  
 Department Head of Social Work  
 Assistant Professor of Social Work  
 University of Alaska Fairbanks  
 (907) 474-7240  
 (907) 474-5284  
[ffjes@uaf.edu](mailto:ffjes@uaf.edu)

## Bachelor of Business Administration (J, D) (B.B.A.)

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.

**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 the English, math (through Math 107), and speech 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, and BA 462, Business Policy. 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.

**Admission:** To be formally admitted to the B.B.A. program, a student must be in good standing at the University and have satisfied all general education and lower division requirements for the degree.

---

### General Education Requirements: 35

The following courses must be included in the GERs for this degree: MATH S107 or higher level math, and ECON S201 and S202. Students considering graduate studies in business, such as an MBA, should be aware that some programs require calculus (See MATH S200, S201, and S202)

---

### Major Requirements 39

Lower Division		
ACCTS201	Principles of Financial Accounting*	3
ACCTS202	Principles of Managerial Accounting	3
Advisor approved Computer Electives		3
CIOS S135	Spreadsheet Concepts & Applications I and	1
CIOS S235	Spreadsheet Concepts & Applications II or	2
CIOS S140	Database Concepts & Applications I and	1
CIOS S240	Database Concepts & Applications II	2
STAT S273	Elementary Statistics	3
*ACCT S121 and S122 together will substitute for ACCT S201.		

Upper Division		
BA S301	Principles of Management	3
BA S310	Management Information Systems or	3
ACCTS316	Accounting Information Systems	3
BA S325	Financial Management	3
BA S330	Legal Environment of Business	3
BA S343	Principles of Marketing	3
BA S374	Introduction to Management Science or	3
BA S375	Project Management or	3
BA S412	Operations Management/Production	3
BA S462	Administrative Policy	3
BA S490	Political and Social Environment of Business	3

### Choose one emphasis area.

---

#### Accounting Emphasis 30

ACCTS310	Income Tax for Individuals	3
ACCTS311	Intermediate Accounting I	3
ACCTS312	Intermediate Accounting II	3
ACCTS342	Advanced Managerial Cost	3
ACCTS452	Auditing	3
CIOS S260	Business Communications	3
Advisor approved accounting electives		6
Advisor Approved Upper Division Electives		3
Other Electives		3

---

#### Management Emphasis 30

BA S351	Organizational Behavior	3
BA S361	Human Resource Management	3

BA S487 International Business	3
Upper-division credits approved by advisor	9
Other electives approved by advisor.	12
<b>General Business Administration Emphasis</b>	<b>30</b>
Advisor approved upper-division business electives	9
Upper-division credits approved by advisor	9
Other electives approved by advisor	12
<b>Electives</b>	<b>16</b>
<b>Minimum Credit Hours</b>	<b>120</b>

## Bachelor of Liberal Arts (J) (B.L.A.)

With emphasis in

- Art
- Communications
- General Studies (Distance Delivered)
- Government
- English
- Mathematics
- Social Science

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 programs 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 (page 14)

**Distance Students:** Email [distance.ed@uas.alaska.edu](mailto:distance.ed@uas.alaska.edu) or call 1-800-478-9069.

**Premajor Status:** Applicants enter as premajors and will be considered for full admission into the BLA program after completion of the following:

1. The General Education Requirements (GERs) and the BLA-required GERs with a cumulative 2.5 grade point average.
2. A BLA Portfolio Review by the 62<sup>nd</sup> credit of study. BLA, Social Science program students need to complete SSCI S210, First Portfolio Review Class instead of the Junior Portfolio.

**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.

### General Education Requirements **35 credits**

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

1. World Language or Alaska Native Language (8 credits minimum in a one-year sequence)
2. History (6 credits in a one-year sequence in any area of survey or introductory history)
3. PHIL S201 Introduction to Philosophy (3 credits)
4. ART S261 History of World Art I (3 credits) for the Art Emphasis only

Choose one:

For BLA degree with a minor:

### Breadth Requirements **28 credits**

1. Humanities (9 credits minimum) in at least two disciplines with a maximum of 6 credits in one discipline.
2. Social Science (9 credits minimum) in at least two disciplines with a maximum of 6 credits in one discipline.
3. Mathematics or Natural Sciences (7 credits). MATH S108 or higher math course; all natural science courses; or ANTH S205, GEOG S205, PHIL S204, and STAT S273.
4. Communications (3 upper-division credits minimum) in English composition, literature, creative writing, or speech communication.

### Minor Requirements **15-18 credits**

### Electives **9-12 credits**

For BLA degree without a minor:

### Breadth Requirements **43 credits**

1. Humanities (15 credits minimum) in at least two disciplines with a maximum of 9 credits in one discipline.
2. Social Science (15 credits minimum) in at least two disciplines with a maximum of 9 credits in one discipline.
3. Mathematics or Natural Sciences (7 credits). MATH S108 or higher math course; all natural science courses; or ANTH S205, GEOG S205, PHIL S204, and STAT S273.
4. Communications (6 upper-division credits minimum) in English composition, literature, creative writing, or speech communication.

### Electives **12 credits**

### Choose one emphasis area. **30 credits**

A minimum 2.75 grade point average is required. Grades below C- are not accepted. 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.

The emphasis areas are:

- Art
- Communications
- General Studies
- Government
- English
- Mathematics
- Social Science

### Art Emphasis (30 credits)

Note: ART S105 must be taken as a prerequisite to ART S106 and can count as either a Humanities Breadth or Elective in this program. ART S261 must be taken as the required Fine Art GER for this program

ART	S106	Beginning Drawing II	(3)
ART	S162	Color and Design	(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)

Select one (3)

ART	S201	Beginning Ceramics	
ART	S211	Sculpture	

Select one (3)

ART	S307	Intermediate Printmaking Serigraphy (Silkscreen)	
ART	S308	Intermediate Printmaking: Relief	
ART	S310	Intermediate Printmaking: Intaglio (Etching)	

Note: ART S207, S208 and S210 are required prerequisites for the courses listed above. They can count as either Humanities Breadth or Electives in this program.

Required:

HUM	S499	Humanities Course Capstone	(3)
-----	------	----------------------------	-----

Upper Division Art electives (6)

### Communications Emphasis (30 credits)

18 credits from a, b, or c and at least 3 credits from each of the other categories. A total of 30 credits is required. 15 credits must be upper division. Humanities 499 is also required.

#### a. Composition and Creative Writing (both fiction and nonfiction)

ENGL	S212	Technical Report Writing	(3)
ENGL	S261	Intro to Creative Writing	(3)
ENGL	S311	Advanced Composition	(3)
ENGL	S361	Intermediate Creative Writing	(3)
ENGL	S393/493	Special Topics	
ENGL	S397/497	Independent Study	
ENGL	S414	Research Writing	(3)
ENGL	S461	Advanced Creative Writing	(3)
LA	S499	Bachelor of Liberal Arts Thesis	(1-6)

#### b. English

ENGL	S218	Themes in Lit: Selected Topics	(3)
ENGL	S221	Survey of World Literature I	(3)

ENGL	S222	Survey of World Literature II	(3)
ENGL	S223	Survey of British Literature I	(3)
ENGL	S224	Survey of British Literature II	(3)
ENGL	S225	Survey of American Lit I	(3)
ENGL	S226	Survey of American Lit II	(3)
ENGL	S265	Literature of Alaska	(3)
ENGL	S270	Alaska Native Literature	(3)
ENGL	S321	Advanced Survey of World Lit I	(3)
ENGL	S322	Advanced Survey of World Lit II	(3)
ENGL	S323	Advanced Survey of British Lit I	(3)
ENGL	S324	Advanced Survey of British Lit II	(3)
ENGL	S325	Adv Survey of American Lit I	(3)
ENGL	S326	Adv Survey of American Lit II	(3)
ENGL	S365	Advanced Literature of Alaska	(3)
ENGL	S370	Advanced Alaska Native Literature	
ENGL	S418	Themes in Lit: Selected Topics	(3)
ENGL	S430	Shakespeare: Selected Topics	(3)
ENGL	S393/S493	Special Topics	
ENGL	S397/S497	Independent Study	
LA	S499	Bachelor of Liberal Arts Thesis	(1-6)

#### c. Speech Communication

SPC	S218	Studies in Speech Communication	(3)
SPC	S235	Small Group Communication and Teambuilding	(3)
SPC	S237	Interpersonal Communications	(3)
SPC	S241	Public Speaking	(3)
SPC	S330	Intercultural Communication	(3)
SPC	S335	Organizational Communication	(3)
SPC	S418	Advanced Studies in Speech Communication	(3)
SPC	S475	Speech Communication in Educ & Trng	(3)
SPC	S291/S491	Advanced Speech Communication Internship	(1-9)
SPC	S294/S494	Speech Communication Practicum	(1-3)
SPC	S397/S497	Independent Study	

#### d. Other Communications

COMT	S432	Telecommunications	(3)
COMT	S434	Applied A-V Technologies	(3)
COMT	S473	Advanced Telecomm & Networking	(3)
ED	S612	School-Community Relations	(3)
FRENS101		Elementary French I	(4)
FRENS102		Elementary French II	(4)
FRENS201		Intermediate French I	(4)
FRENS202		Intermediate French II	(4)
JOUR	S101	Introduction to Journalism	(3)
JOUR	S102	Introduction to News Editing & Layout	(3)
JOUR	S294-S494	Newspaper Practicum	(1-3)
RUSS	S101	Elementary Russian I	(4)
RUSS	S102	Elementary Russian II	(4)
RUSS	S201	Intermediate Russian I	(4)
RUSS	S202	Intermediate Russian II	(4)
SPANS101		Elementary Spanish I	(4)
SPANS102		Elementary Spanish II	(4)
SPANS201		Intermediate Spanish I	(4)
SPANS202		Intermediate Spanish II	(4)
SPANS317		Spanish Conversation	(3)
THR	S211	Introduction to Drama I	(3)
THR	S212	Introduction to Drama II	(3)
THR	S221	Acting I	(3)
THR	S294/S494	Theater Practicum	(1-3)
THR	S321	Acting II	(3)
THR	S331	Directing	(3)

Other approved language

## English Emphasis (30 credits)

All of the following (18 credits):

ENGL	S250	Introduction to Literary Study	(3)
ENGL	S323	Advanced Survey of British Lit I	(3)
ENGL	S324	Advanced Survey of British Lit II	(3)
ENGL	S325	Advanced Survey of American Lit I	(3)
ENGL	S326	Advanced Survey of American Lit II	(3)
HUM	499	Humanities Capstone Course	

At least 6 credits from the following:

ENGL	S305	Studies in Children's Literature	(3)
ENGL	S321	Advanced Survey of World Lit I	(3)
ENGL	S322	Advanced Survey of World Lit II	(3)
ENGL	S365	Advanced Literature of Alaska	(3)
ENGL	S370	Native American Literature	(3)
ENGL	S376	Literature and the Environment	(3)
ENGL	S418	Themes in Lit: Selected Topics	(3)
ENGL	S430	Shakespeare: Selected Topics	(3)
ENGL	S490	Readings and Conference	(3)
ENGL	S497	Independent Study (3 credits only)	
LA	499	Liberal Arts Thesis	(1-6)

Up to 6 credits from the following:

ENGL	S311	Advanced Composition	(3)
ENGL	S361	Intermediate Creative Writing	(3)
ENGL	S461	Advanced Creative Writing	(3)
ENGL	S414	Research Writing	(3)

## General Studies Emphasis (30 credits)

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. Eighteen of the 30 credits must be upper division.

## Government Emphasis (30 credits)

Note: ECON S201 (Principles of Economics I: Macro) and ECON S202 (Principles of Econ II: Micro) must be included in the GERs or in the Social Science breadth area.

GOVTS201	Comparative Politics	(3)
GOVTS211	State and Local Government	(3)
GOVTS230	Introduction to Political Philosophy	(3)
GOVTS251	Introduction to International Relations	(3)
GOVTS313	Alaska Politics and Government	(3)
Choose one		(3)
GOVTS101	Introduction to American Government	
GOVTS102	Introduction to Political Science	
Choose one		(3)
GOVTS337	The American Presidency	
GOVTS408	The Legislative Process	
Choose one		(3)
GEOG	S405 Political Geography	
HIST	S341 History of Alaska	
HIST	S450 Twentieth Century America	

Advisor Approved Electives (6)

Government Internships, including the Legislative Internship Program (12 upper division credits), may be used in this sequence, but only after consultation with and approval of the student's advisor.

## Mathematics Emphasis (30 credits)

MATH	S200	Calculus I	(4)
MATH	S201	Calculus II	(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	S411	History of Math and Science	(3)

Advisor-approved mathematics or mathematics-related courses (such as computer science, physics, population dynamics, and statistics) (3)

## Social Science Emphasis (30 credits)

SSCI	S210	First Portfolio Review Class	(1)
SSCI	S310	Final Portfolio Review Class	(1)

Passing the Social Science Portfolio Review

12 credits in one Social Science discipline

12 credits, 6 in each of two additional Social Science disciplines

6 additional Social Sciences credits

A minimum of 15 of the 30 credits required must be upper-division

SSCI S300 Research Methods in the Social Sciences is a recommended Upper Division option, (3 credits)

The social science disciplines are anthropology, economics, geography, government, history, psychology, and sociology.

---

Minimum Credit Hours

120

## Bachelor of Science in Biology (J) (B.S.)

With emphasis in

- General Biology
- Marine Biology

The Bachelor of Science degree in Biology with an emphasis in either Marine Biology or General 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. The program has five permanent faculty 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/uas/biology/](http://www.uas.alaska.edu/uas/biology/)

**Admission Requirements:** Pre-major status: 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, BIOL S106.
4. High School Chemistry or CHEM S103 with a “C” or higher.

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 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.

**General Education Requirements for Biology 36 credits**

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

1. MATH S200 (prerequisites include MATH S107 and MATH S108).
2. BIOL S105 and BIOL S106.

**Major Requirements 43 credits**

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
PHYSS103/S104 College Physics I and II	
or	
PHYSS211/S212 General Physics I & II	8
STAT S273 Elementary Statistics	3

**Area of Emphasis 20 credits**

Choose only one emphasis area. Students must select 20 credits from one of the area listed below. Other courses may be substituted with approval of the advisor.

**General Biology Emphasis**

BIOL S239 Introduction to Plant Biology	4
BIOL S300 Vertebrate Zoology	4
BIOL S305 Invertebrate Zoology	4
BIOL S375 Special Topics in Biology	1-2
BIOL S382 Wetlands Ecology	4
BIOL S384 Marine Mammalogy	4
BIOL S396 Field Studies in Behavior and Ecology*	
and	
BIOL S398/S498 Research*	1-6
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 S495 Behavioral Ecology	3

\* Up to 6 credits may be applied toward emphasis.

**Marine Biology Emphasis**

Students must select three of the following courses. The remaining credits, to equal 20 credits for the Marine Biology emphasis, can be chosen from the General Biology emphasis list.

BIOL 305 Invertebrate Zoology	4
BIOL S384 Marine Mammalogy	4
BIOL S401 Phycology	4
BIOL S427 Introduction to Ichthyology	4
BIOL S481 Marine Ecology	3

**Electives 21 credits**

Must include a minimum of 12 credits of upper division courses.

**Minimum Credit Hours 120**

**Bachelor of Science in Environmental Science (J) (B.S.)**

The main objective of the Environmental Science 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.

**Admission Requirements:** Pre-major status: Applicants enter as premajors and will be considered for full admission into the Bachelor of Science in Environmental Science program after completion of the following:

1. ENV S101.
2. MATH S107 (May be met by placement examination)
3. ENGL S111.
4. BIOL S105, BIOL S106.
5. High School Chemistry or CHEM S103 with a “C” or higher.

When a student becomes a major in Environmental Science 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 Environmental Science are listed below. Degree must include 48 credit hours of upper-division (300 or above) courses, 24 of which must be completed at UAS.

**General Education Requirements 37 credits**

Students should consult with an advisor and select courses that satisfy prerequisites required in this degree program. The following courses must be included in the GERs for a B.S. in Environmental Science:

1. MATH S108
2. MATH S200
3. ENVS S101
4. And other GERs required by UAS

**Major Requirements including Capstone courses 50–54 credits**

BIOL S105 Fundamentals of Biology I	4
BIOL S106 Fundamentals of Biology II	4
CHEM S105General Chemistry I	4
CHEM S106General Chemistry II	4
CHEM S341Organic and Biological Chemistry I	4
ENVS S491 Internship or Senior Thesis	1–4
ENVS S492 Environmental Science Seminar	3
GEOL S104 Physical Geology	4
GEOL S271 Earth Materials	3
or	
BIOL S271 Ecology	4
GEOLS302 Hydrology	4
MATHS201 Calculus II	4
PHYSS103/ PHYS S104 College Physics I & II	8
or	
PHYSS211/PHYS S212 General Physics	8
STAT S273 Elementary Statistics	3
Writing Portfolio Part 1: by 62 <sup>nd</sup> credit	
Writing Portfolio Part 2: by semester before graduation	
Environmental Science Research Tools (Optional Courses)	
ENVSS110 Introduction to Arcview	1
ENVSS111 Introduction to GPS	1

**Breadth Requirements 20 credits**

Students must select 20 credits from the following list of courses which may include the Juneau Icefield courses:

BIOL S382 Wetlands Ecology	4
BIOL S480 Water Pollution Biology	3
BIOL S481 Marine Ecology	4
CHEM S450Environmental Chemistry	3
ENVS S301 Soil Sciences	4
ENVS S310 Geographical Information Systems	4
ENVS S402 Limnology	4
ENVS S403 Remote Sensing	3
GEOL S300 Geology of Alaska	3
GEOL S301 Geomorphology	4
GEOL S310 Glaciation and Climate Change	3
GEOL S315 Glacier Surveying	3
MATH S302 Differential Equations	3

**Juneau Icefield Research Program Courses (Summers Only)**

The program is held on the Juneau Icefield, Alaska and the Atlin Lake region of northern British Columbia for 8 weeks each summer. Undergraduate and graduate students participate in an interdisciplinary program aimed at a total environment study of the fifth largest icefield in North America.

Arctic and Alpine Geology/Geomorphology	3–4
Mt. and Arctic Environmental Geoscience	3–4
Field Geology	3–4

**Breadth Offerings – Special Topics Courses**

These course options are offered as demand warrants. Please consult with an Environmental Science program faculty member for course availability

ENVSS393 ST: Oil Spill Science and Technology	3
ENVSS393 ST: Hazardous Materials Operations and Emergency Response	2
ENVSS393 ST: Writing Workshop for ENVS	1
ENVSS493 Environmental Law for Scientists	3

Upper-Division and Approved Non-Science Electives 12  
Students may take any upper division courses in Humanities and Social Science. Suggested disciplines from which to choose courses to meet this requirement.

- Anthropology
- Geography
- Economics

**Minimum Credit Hours 120**

**Environmental Science Writing Portfolio:** A two-part portfolio will be submitted to the ENVS Coordinator (Part 1) by the 62<sup>nd</sup> credit and (Part 2) the semester prior to graduation. Writing components required for the portfolio are listed below.

**PART ONE:**

- One semester of lab notebook: CHEM S105, or S106, or PHYS S103/211, or PHYS S104/212.
- Field Lab report including field notes, data, and report GEOL S104 or BIOL S271.
- Lower Division, Library Research, Term paper (five page minimum).  
BIOL S105, S106, S271, ENVS S101, or GEOL S205

**PART TWO:**

- Lab Notebook CHEM 341.
- Field Data Notebook and Summary analysis and report, BIOL S382, ENVS S310, S402, GEOL S301, S302, S315, S493 (JIRP).
- Upper-division term paper or semester scale research project, BIOL S480, S481, ENVS S301, S310, S403, GEOL S300, S301, S302 or S310.
- Independent Research Paper based on original student research project ENVS S497 or Summary Report of Internship Experience ENVS S491.
- A memo to ENVS Coordinator and ENVS Faculty detailing the Student's Research Project or Internship. (This must be approved by ENVS Faculty before research or internship can commence.)

# 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 requirements but will not receive double credit.

## Art

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. This minor requires 18 credits.

---

### 9 credits of the following:

ART S261 or	
ART S262 Art History (I or II)	(3)
ART S162 Color and Design	(3)
ART S105 Drawing	(3)

---

### Six credits in one of the following studio classes:

Drawing: ART S106, S205, S304, S305, S319, S404, S405  
Painting: ART S123, S213, S214, S223, S313, S314, S323, S413, S414, S423  
Ceramics: ART S201, S226, S301, S401, S450  
Sculpture: ART S211, S311, S411  
Printmaking: ART S207, S307, S407, S208, S308, S408, S210, S310, S410

---

### One of the following:

ART S261 or	
ART S262 or	
ART S363 Art History (I or II)/History of Modern Art	(3)

Upper-division studio art class from chosen area above.

---

### Approved for the following degree programs:

Bachelor of Business Administration (all emphasis)  
Bachelor of Science in Biology (marine and general)  
Bachelor of Environmental Science  
Bachelor of Liberal Arts (all emphasis)

## Business

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. This minor requires 15 credits.

ACCTS201 Principles of Financial Accounting	(3)
BA S301 Principles of Management	(3)
BA S343 Principles of Marketing	(3)
Approved business courses	(6)

---

### Approved for the following degree programs:

Bachelor of Science in Biology (marine and general)  
Bachelor of Environmental Science  
Bachelor of Liberal Arts (all emphasis)

## Computer Information and Office Systems

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. This minor requires a minimum of fifteen credits. Students are strongly encouraged to complete any one of the following twenty credit departmental certificates (please see CIOS Certificates of Completion (Departmental Programs) found in the Undergraduate Degree and Certificate Requirements section for individual listings):

Administrative Office Support  
Cisco Networking Certification  
Computer Applications  
Desktop Publishing and Graphics  
Medical Office  
Networking Essentials  
Programming Foundations  
Web Authoring  
Web Foundations

---

### Approved for the following degree programs:

Bachelor of Business Administration (all emphasis)  
Bachelor of Science Biology (marine and general)  
Bachelor of Environmental Science  
Bachelor of Liberal Arts (all emphasis; General Studies emphasis students should consult with an advisor before choosing this minor.)

## Creative Writing

The minor in creative writing is designed to provide students with skills necessary to write poetry, fiction, and non-fiction. Students will also learn to explicate contemporary texts and analytically evaluate them for technique and form. This minor will help prepare students for entrance into an M.F.A. program. This minor requires 18 credits.

ENGL S261 Beginning Creative Writing	(3)
ENGL S361 Intermediate Creative Writing	(3)
ENGL S461 Advanced Creative Writing	(9)
LA S499 Creative Writing Thesis	(3)

---

### Approved for the following degree programs:

Bachelor of Business Administration (all emphasis)  
Bachelor of Science in Biology (marine and general)  
Bachelor of Environmental Science  
Bachelor of Liberal Arts (all emphasis; General Studies emphasis students should consult with an advisor before choosing this minor.)

## English

The minor in English 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. This minor requires 18 credits.

---

### Both of the following for 6 credits:

ENGL S250 Introduction to Literary Study	(3)
ENGL S311 Advanced Composition	(3)

---

### Two complete literature sequences from the following 12 credits

Sequence 1: World Literature

ENGL S221 or	
ENGL S321 Survey (Advanced Survey) of World Literature I and	
ENGL S222 or	
ENGLS322 Survey (Advanced Survey) of World Literature II	

Sequence 2: British Literature

ENGL S223 or	
ENGL S323 Survey (Advanced Survey) of British Literature I and	
ENGL S224 or	
ENGL S324 Survey (Advanced Survey) of British Literature II	

Sequence 3: American Literature

ENGL S225 or	
ENGL S325 Survey (Advanced Survey) of American Literature I and	
ENGL S226 or	
ENGL S326 Survey (Advanced Survey) of American Literature II	

Approved for the following degree programs:

Bachelor of Business Administration (all emphasis)  
Bachelor of Science Biology (marine and general)  
Bachelor of Environmental Science  
Bachelor of Liberal Arts (all emphasis but English; General Studies emphasis students should consult with an advisor before choosing this minor.)

---

## Northwest Coast Art

5 credits from the following:

ART S263 Northwest Coast Native History and Culture	(1-3)
ART S493 Portfolio Review of the best work from elective classes and an independently created piece	(1-3)
ANTH S225 The art and Legends of Alaska Natives	(3)

2 additional credits in:

ART S181 Beginning Northwest Coast Design	(1-3)
ART S281 Intermediate Northwest Coast Design	(1-3)
ART S381 Advanced Northwest Coast Design	(1-3)

15 credits in one of the three following areas:

---

ART S286 Beginning Northwest Coast Woolen Weaving	(1-3)
ART S386 Intermediate Northwest Coast Woolen Weaving	(1-3)
ART S486 Advanced Northwest Coast Woolen Weaving	(1-3)
ART S116 Fiber Arts-Spinning	(1-3)
ART S138 Natural Dye	(1-3)
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)
ART S138 Natural Dye	(1-3)
ART S183 Northwest Coast Harvesting and Preparation of Basketry Materials	(.5)
ART S284 Northwest Coast Basket Design	(1 - 3)

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 NWC arts.

---

## Professional Communication

The minor in professional communication 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. This minor requires 18 credits.

---

### Two of the following for 6 credits:

ENGL S311 Advanced Composition	(3)
SPC S335 Organizational Communication OR	
SPC S475 Speech Communication in Education and Training	(3)

---

### One of the following for 3 credits:

ENGL/SPC S491 Internship	
ENGL/SPC S494 Practicum	
LA S499 Liberal Arts Thesis/Project	

---

### Select three of the following courses for 9 credits:

CIOS S260 Business English or other approved Computer Information and Office Systems (CIOS) courses	(3)
COMT S432 Telecommunications	(3)
COMT S434 Applied Audio-Visual Technologies	(3)
COMT S473 Advanced Telecommunication & Networking	(3)
ENGL S212 Technical Writing	(3)
ENGL S414 Research Writing	(3)
JOUR S101 Introduction to Journalism	(3)
JOUR S102 Introduction to News Editing and Layout	(3)
JOUR S221 Introduction to Photography or	
JOUR S224 Intermediate Photography	(3)
JOUR S294/394/494 Newspaper Practicum	(3)
SPC S235 Small Group Communication and Teambuilding or	
SPC S241 Public Speaking	(3)
SPC S330 Intercultural Communication	(3)
SCP S418 Studies in Speech Communications: Leadership/Persuasion	(3)
SPC S335 Organizational Communication or	
SPC S475 Speech Communication in Education and Training	(3)

---

### Approved for the following degree programs:

Bachelor of Business Administration (all emphasis)  
Bachelor of Science Biology (marine and general)  
Bachelor of Environmental Science  
Bachelor of Liberal Arts (All emphasis. Communication and General Studies emphasis students—consult with an advisor before choosing this minor.)

## Speech Communication

The minor in speech communication is designed to provide students with a broad introduction to the discipline of speech communication as well as enhance their reading, speaking, research, writing, computer literacy, professional behavior and critical thinking skills. This minor requires 18 credits.

---

### Two of the following for a total of 6 credits:

SPC S110	Basic Speaking	(1)
SPC S111	Fundamentals of Oral Communication	(3)
SPC S235	Small Group Communication and Teambuilding	(3)
SPC S237	Interpersonal Communication	(3)
SPC S241	Public Speaking	(3)

---

### Three of the following for a total of 9 credits:

SPC S330	Intercultural Communication	(3)
SPC S335	Organizational Communication	(3)
SPC S475	Speech Communication in Education & Training	(3)
SPC S418	Studies in Speech Communication*	(3)

---

### One of the following for 3 credits:

ENLG/SPC S491	Internship	(3)
ENLG/SPC S494	Practicum	(3)
LA S499	Liberal Arts Thesis/Project	(3)

\*Note: SPC S418: Studies in Speech Communication includes but is not limited to the following courses: Persuasion, Oral Interpretation, Gender Communication, Leadership, Communication Theory, and Family Communication. These courses may be repeated for credit with a change in the subtitle.

---

### Approved for the following degree programs:

Bachelor of Business Administration (all emphasis)  
Bachelor of Science Biology (marine and general)  
Bachelor of Environmental Science  
Bachelor of Liberal Arts (Communication and General Studies emphasis students should consult with an advisor before choosing this minor)

## Theatre

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. This minor requires 18 credits.

---

### Both of the following for 6 credits:

THR S211	Introduction to Drama I	(3)
THR S212	Introduction to Drama II	(3)

---

### Two of the following for 6 credits:

THR S221	Acting I	(3)
	or	
THR S321	Acting II	(3)
THR S331	Directing	(3)
	or	
THR S493	Advanced Directing	(3)

THR S293	Stagecraft I	(3)
	or	
THR S393	Stagecraft II	(3)
THR S393	Arts Administration I	(3)
	or	
THR S493	Arts Administration II	(3)

---

6 additional credits from the following and/or any of the above THR courses which have not already been completed.

ENGL S430	Shakespeare: Selected Topics	(3)
SPC S418	Oral Interpretation	(3)
ENGL S418	Themes in Literature (when playwright or plays are the topic)	(3)
THR S391/S491	Internship (Production, Arts Administration, Acting)	(1-3)
THR S394/S494	Practicum (Production, Arts Administration, Acting)	(1-3)
THR S397/S497	Independent Study	(1-3)

---

Approved for the following degree programs:

Bachelor of Business Administration (all emphasis)  
Bachelor of Science Biology (marine and general)  
Bachelor of Environmental Science  
Bachelor of Liberal Arts (all emphasis; General Studies emphasis students should consult with an advisor before choosing a minor)



*UAS students benefit from small class sizes and caring, professional faculty.*

# **Other** **Academic** **Opportunities**

## **Exchanges**

All UAS campuses participate in the International Student Exchange Program (ISEP). Students may spend a semester or full year at one of over 100 international sites. Costs for tuition, room, and board are comparable to a year at UAS. For more information, visit the ISEP website: <http://www.isep.org>

UAS is also a part of the Northwest Council on Study Abroad (NCSA). NCSA offers term-based programs in Argentina, Austria, Chile, Ghana, Greece, England, France, Italy, and Spain. More information about NCSA programs is available on the website: <http://www.aha-intl.org>

The National Student Exchange (NSE) is a program offering undergraduate students an opportunity to study for up to one academic year at one of over 170 colleges and universities in the United States, Puerto Rico, Guam, and the Virgin Islands. UAS students pay resident tuition at either their home campus or the host campus. For more information visit NSE website: <http://www.nse.org>

International students seeking admission to the University of Alaska should consult the section in this catalog entitled "International Student Admission Requirements."

For further information on exchange opportunities, contact the Office of Academic Exchanges (907) 465-6455 or (907) 465-6528, on the web: <http://www.uas.alaska.edu/exchanges>, or email at: [elizabeth.schelle@uas.alaska.edu](mailto:elizabeth.schelle@uas.alaska.edu).

## **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. Interested students should consult with their advisor before applying. Internship credit may be applied toward undergraduate

programs as follows: 6 credits in a certificate program, 9 credits in an associate degree, and 12 credits in a bachelor's degree program.

## **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.

## **Human Service Technology, University of Alaska Fairbanks**

The Human Service technology program provides training and knowledge in basic helping skills needed for entry-level employment in public, private and volunteer human service agencies.

Human service technicians provide case management, needs assessment, advocacy, crisis intervention and stabilization, and supportive task-centered short-term counseling under the supervision of a specialist worker and usually within a multidisciplinary team. Students are

employed in a wide variety of human service settings such as mental health, Native corporations, developmental disabilities, public assistance, corrections, and substance abuse treatment.

Persons seeking a career in human service should recognize that in order to be successful they must be emotionally stable, creative, and flexible. Human service technicians work with diverse groups of people of all ages, social and cultural backgrounds, and life situations.

Upon completion of the major or minor, students are eligible to apply for certification as a substance abuse counselor technician through the Alaska Commission for Chemical Dependency Professionals Certification.

The minor in HST provides the opportunity to gain knowledge and skills applicable to careers in the helping professions. Contact the Sitka campus for more information.

## **Microcomputer Support Specialist Program (MSSP)**

### **University of Alaska - Statewide**

The purpose of the MSSP Certificate or Associate of Applied Science program is to train students for entry-level computer support positions. Students will develop skills applicable to small to middle size offices and to self-employment. Students will have skills that, with further training, could be used to gain other certification.

One of the highlights of this program is that the student will rely on local experts, faculty mentors and committee advising to gain the most beneficial opportunity for the individual student. Students may take distance delivered or on site courses from all three University of Alaska campuses, as well as through local campus centers and will be able to register locally. Contacts for the MSSP are located on each UAS campus.

The MSSP web address is:<http://www.alaska.edu/mssp>

## **Pre-Nursing**

Currently the University of Alaska Southeast is partnering with University of Alaska Anchorage to bring nursing education to the Southeastern Alaska region. Students interested in pursuing careers in nursing may be able to complete requirements through the Associate Degree in Nursing (ADN) level. In order to be admitted by UAS partners into the study of nursing, students need to have taken some preparatory courses. These courses would normally include Human Anatomy and Physiology (BIOL S111, S112), Chemistry (CHEM S103), Microbiology

(BIOL S242), and English and Mathematics (ENGL S111, MATH S105). Other preparatory requirements can be met by distance classes.

The Pre-Nursing sequence may meet the needs of students interested in Pre-Medicine and a number of other programs in allied health offered at other institutions. Students should seek advisement at the earliest possible opportunity if career goals are in nursing, medicine, or related areas of allied health. Contact the local advising center for more information.



*UAS is helping meet the demand for nurses.*

# **Graduate Study**

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 life long learners. Admission to graduate school is an opportunity; it is also a significant responsibility. Graduate school requires the kind of commitment that demands 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 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's graduates 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 (D)
- Elementary Education (J)
- Elementary Education (D)
- Secondary Education (J)

## **Master of Education**

- Early Childhood Education (D)
- Educational Technology (D)
- Elementary Education (J)
- Secondary Education (J)

## **Master of Public Administration (J, D)**

# **Admission Requirements**

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's program if they have a bachelor's degree appropriate to the intended master's degree from an accredited institution and a GPA of 3.0 overall computed on a four-point scale. Program faculty will determine the adequacy of 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. Students who think they may not meet minimum qualifications for graduate study should contact the Graduate Dean.

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

## **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 Graduate Dean judge that the student shows potential for advanced academic work. Conditional admission can be extended for a second semester only upon approval of the advisor and the Graduate Dean. For purposes of conditional admission, UAS will temporarily accept unofficial transcripts. 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 Graduate 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.

## **Graduate Degree Standards**

### **General University Requirements**

General University requirements for master's degree students include maintaining a minimum GPA of 3.0 and completing the minimum credit hours required for their program. All courses must be post baccalaureate credits, and at least 27 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 UAS, transferred from other University of Alaska campuses 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/Advisory Committee**

Students will have a graduate advisor, but no committee until they are ready for their professional portfolio review or commencement of their research project. At that time they will consult with their advisor to formulate a three-member committee. The major advisor will be a member of the graduate faculty and will serve as the chair of the committee. The second member will be another UAS faculty member, University of Alaska faculty member or person qualified as having expertise in the content chosen by the student. The third member of the committee may be a faculty member or a qualified community member. Advisory committees may consist of fewer than three members with the approval of the Graduate Dean. An

advisor may be replaced where deemed appropriate or upon the request of the student.

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" (3.0) 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 3.0, 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 or 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, if applicable.

If not removed from academic probation within two consecutively enrolled semesters or two summer sessions in succession, the student will be removed from the program. Should the suspended student wish to continue to pursue a degree, the student must submit a new application for admission (including supporting documents, not including 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 elsewhere in this catalog.

## **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 Office. 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 Office. At least one-third of the credits must be earned at UAS.

## **Time Expected to Complete Degree**

The period of time required to complete a graduate degree varies with each program.

## **Time Limit on Graduate Study**

All courses, projects, and theses accepted for a master's degree program must be completed within a seven-year interval immediately preceding the date the degree requirements are completed and the degree is granted.

## **Full-Time/Part-Time Status**

A graduate student enrolled in nine or more semester credit hours or its equivalent will be classified as full 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 Graduate Dean. For sessions of one week, students may not exceed one credit hour.

## **Program Requirements**

**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. The advisor and graduate student work together on the courses, which will be the program of study to fulfill the requirements. The advisor's responsibility is to 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 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 has completed at least 9 credit hours at UAS, the student should apply for advancement to candidacy. The student must apply for advancement to candidacy no later than the semester in which 15 credit hours of coursework are completed (not counting transfer credit to be applied to the degree program). If the student has not applied for advancement to candidacy by the semester in which 15 credit hours are completed, he or she must petition to remain in the program and be advanced to candidacy. Changes in the program must be approved by the student's advisor and filed with the Provost as an amendment to the degree program. Failure to apply for advancement to candidacy may delay a student's graduation.

Admission to graduate study does not imply advancement to candidacy for a degree. The student's advisor is responsible for making recommendations for candidacy for a degree.

**Research Project (M.Ed. Program):** The draft of the research project must be submitted to the major advisor not later than four weeks before the end of the semester in which the student is expected to graduate. The final draft research project must be submitted to the major advisor at least seven days before the end of the semester of graduation. Upon acceptance by the advisory committee of the project, as evidenced by the signatures of all committee members, the faculty chair will forward the second copy of the project to the UAS Egan Library.

**Graduate Exit Portfolio (M.Ed. and MAT programs):** The graduate portfolio should document evidence of mastery of the teacher standards articulated in the UAS Conceptual Framework. This evidence should be presented in a format determined by the advisor for the graduate program, who may require it to be a notebook, a CD-ROM, or a web site. The evidence should consist of artifacts (unit plans, formal papers, classroom observations, etc.) as well as writing that articulates the relationship between the evidence and the standard. The evidence must include artifacts representing teaching in schools and K-12 classrooms. A sample of teaching that shows impact on K-12 student learning must be included as a portfolio artifact. The graduate portfolio will be reviewed and evaluated by the student's committee. If the committee has questions about the quality of the portfolio, an oral presentation and discussion may be required. Upon final approval, the student is asked to submit an "original" version of the portfolio to UAS.

The portfolio will be reviewed and evaluated by the student's committee. If the committee has questions as to the quality of the portfolio, an oral presentation and discussion may be required. Upon final approval, the student is asked to submit an "original" version of the portfolio to UAS.

**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 Graduation :** Degree candidates must formally apply for graduation. A \$25 fee is required. The application for graduation must be filed with the Office of Records and Registration no later than the filing deadline for the semester of graduation (see semester schedule for specific dates).

**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. Students may register for EXTE 693, Extended Registration, 1 credit, to satisfy this requirement. A student's graduation may be delayed if he or she is not registered the semester of graduation.

**Grade Point Average:** To meet graduation requirements, the student's grade point average must be 3.0 or above.

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



*A few of the happy members of the class of 2002.*

# 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's 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 may be approved by the advisor from other graduate degrees the student has received, 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 Degree

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.

# Graduate Degrees and Requirements

## Master of Public Administration (MPA) (Distance delivered statewide)

The master's program in public administration provides a strong interdisciplinary context in which to pursue the study of policy formation, implementation, and administration.

Admission to the Master of Public Administration degree requires the following:

1. A completed application and \$35 processing fee.
2. Official academic transcripts sent directly from all previously attended colleges or universities.
3. Professional resume or vita.
4. 500 word statement of professional objectives describing past vocational experiences, outlining professional goals and stating how the MPA program might help attain those goals.
5. A sample of professional or academic writing.
6. Three current letters of recommendation.
7. OPTIONAL: GRE or GMAT (recommended for those without government or non-profit managerial experiences).

See Admission to Graduate Study for more information.

**Prerequisites:** Students entering the MPA program are expected to have introductory level knowledge of American or Canadian government, statistics, and micro and macro economics. Students deficient in any of these subjects must make up these deficiencies by completing equivalent undergraduate courses or proving competency.

**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 Program Director and the Graduate Dean. The student's approved program of study is reflected in the Application for Advancement to Candidacy.

Core Requirements	24
These courses develop the fundamental knowledge and skills for all students.	
PADM S601 Introduction to Public Administration	3
PADM S612 Organization Theory and Behavior	3
PADM S618 Administrative Law for Managers	3
PADM S625 Economics of Public Policy	3
PADM S632 Public Budgetary Process	3
PADM S670 Human Resources and Personnel Management	3
PADM S688 Program Evaluation	3
PADM S689 Scope and Methods of Research	3

Approved Electives	9
--------------------	---

Thesis or Capstone Course:	3-6
To qualify for graduation from the MPA program, students must elect to complete either a master's thesis (PADM S698, 3 to 6 credits) or the "Capstone" course (PADM S690, 3 credits)	

Minimum Credit Hours	36
----------------------	----

### MPA Concentrations (J)

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 9 credits

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.

#### Required courses:

RD F601 Political Economy of the Circumpolar North	3
RD F651 Management Strategies for Rural Development	3
The third course to be selected in consultation with the UAF Rural Development Advisor and MPA Program Director.	

### Concentration in Criminal Justice 9 credits

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.

#### Required courses:

JUST F605 Administration and Management of Criminal Justice Organizations	3
JUST F640 Community/Restorative Justice	3
The third course to be selected in consultation with the UAF Justice Advisor and MPA Program Director.	

# Master of Arts in Teaching (MAT)

with emphasis in:

- Elementary (J)
- Secondary (J) (selected distance sites)
- Elementary (D)
- Early Childhood Education (D)

The Master of Arts in Teaching (MAT) 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. The MAT programs are delivered two ways:

1. One-year intensive classroom-based programs in elementary education or secondary education.
2. Course-based programs in elementary education or early childhood education. These programs are offered by distance delivery for those individuals in rural communities or others who desire this flexibility.

Call (907) 465-6429 for a complete application packet.

## Admission Requirements:

Admission to the Master of Arts in Teaching Program requires the following:

1. A completed application and \$35 processing fee.
2. Official academic transcripts sent directly from all previously attended colleges or universities.
3. Three current letters of recommendation.
4. A statement of professional objectives. This is a 2-3 page typewritten and double spaced formal paper containing a statement of the applicant's professional goal in applying to the program and a description of your educational experiences that have led the applicant to that goal. For graduate application purposes, the paper will be evaluated for the compatibility of student objectives with the degree program. For the Juneau-based MAT programs, this statement is used for the internship placement process, so honest, polished, personal writing is important.
5. Portfolio of written materials demonstrating proficiency in written communications (see MAT Writing Assessment Guidelines).
6. Praxis I test scores. Passing scores must be attained for full admission.

Qualifying Praxis scores for the State of Alaska are:

Reading	PPST: 175	CBT: 322
Writing	PPST: 174	CBT: 321
Math	PPST: 173	CBT: 318

7. Applicants for the MAT distance program must also submit (a) documentation of successful work with

children in an elementary or secondary school setting and (b) a letter of support from the local school district administration.

## Master of Arts in Teaching Elementary (J)

## Master of Arts in Teaching Secondary (J)

The MAT Elementary and the MAT Secondary programs 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 Type A Elementary (grades K-8) or Secondary (grades 6-12) teaching certificate. Certification is granted by the Alaska Department of Education and Early Development; UAS provides the institutional recommendation for certification.

In addition to the admission requirements listed, a placement in a school district must be available to be admitted.

The MAT Elementary and MAT 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 two-month summer session that prepares students to begin the year as teacher-interns.

Phases Two and Three:

- Elementary Students. During the public school year (end of August through the end of May), the MAT student serves as an intern with a team of two teachers in an elementary school, one primary and one intermediate. 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 MAT 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 that will draw on the recent classroom experiences of students and extend their knowledge and preparation for the profession.

The application deadline for the MAT Elementary and Secondary programs is March 1.

### Elementary (J)

Students who enroll in the MAT Elementary Program must show evidence of adequate course work or demonstrate knowledge in the basic content areas of history, literature, composition, math, biological science, physical science, and the arts. Placements for this program are only available in Juneau. A total of 40 graduate credits is required.

#### Degree Requirements:

<b>Minimum Credit Hours</b>	<b>40</b>
ALST S600 Alaska Resources, People and Perspectives	(3)
ED S620 Curriculum Development	(3)
ED S626 Classroom Research	(3)
ED S632 Educational Applications of Telecommunication	(3)
ED S633 Educational Applications of Multi-Media	(3)
ED S666 Advanced Studies in the Exceptional Learner	(2)
ED S680 Multicultural Education Seminar	(3)
ED S681 Reading and Writing/Literacy Instruction: Theory & Practice I	(4)
ED S682 Reading and Writing/Literacy Instruction: Theory & Practice II	(2)
ED S686 Mathematics Instruction: Theory & Practice I	(2)
ED S687 Mathematics Instruction: Theory & Practice II	(2)
ED S689 Human Development, Curriculum Design, Assessment & Instruction: Integration of Elementary Content	(4)
ED S691 Elementary Teaching Internship I (Fall)	(2)
ED S691 Elementary Teaching Internship II (Spring)	(4)

#### Master's Portfolio

Contact: Dr. Mary-Claire Tarlow, (907) 465-6435  
maryclaire.tarlow@uas.alaska.edu

### Secondary (J)

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 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. Placements for this program are made in Juneau

and selected other Alaska communities. A total of 36 graduate credits are required.

#### Degree Requirements:

<b>Minimum Credit Hours</b>	<b>36</b>
ALST S600 Alaska's Resources, People, and Perspectives	(3)
ED S612 School-Community Relations	(3)
ED S620 Curriculum Development	(3)
ED S626 Classroom Research	(3)
ED S630 Educational Application of Tool Software	(3)
ED S631 Advanced Educational Psychology	(3)
ED S632 Educational Application of Telecommunication	(3)
ED S679 Content Area Literacy	(3)
ED S680 Multicultural Education Seminar	(3)
ED S691 Secondary Teaching Internship I (Fall)	(3)
ED S691 Secondary Teaching Internship II (Spring)	(3)
ED S692 Educational Seminar	(3)

#### Master's Portfolio

Contact: Dr. Dave Marvel, (907) 465-4679  
dave.marvel@uas.alaska.edu

### MAT Elementary Education (D)

### MAT Early Childhood Education (D)

These programs are offered by distance delivery methods to students in rural communities and to others who desire the flexibility of a distance program. Students in these programs 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 school. These programs lead to an Alaska Type A Elementary (grades K-8) or Early Childhood Education (grades PreK-3) teaching certificate. Certification is granted by the Alaska Department of Education and Early Development; UAS provides the institutional recommendation for certification.

Applicants should consult with an advisor for individual program scheduling:

Contacts: Dr. Katherine Spangler (Elementary)  
(907) 694-7019, kathy.spangler@uas.alaska.edu

Dr. Marjorie Fields (Early Childhood Education)  
(907) 465-6412, marjorie.fields@uas.alaska.edu

### Elementary (D)

#### Degree Requirements:

---

**Prerequisite Coursework:**

ALST S300	Alaska Studies	(3)
ED S230	Introduction to Educational Technology	(2)
ED S333	Learner and the Learning Process	(3)
ED S320A	Art in the Elementary Curriculum	(1)
ED S320B	PE in the Elementary Curriculum	(1)
ED S320C	Music in Elementary Curriculum	(1)
ED S304	Literature for Children	(3)

Note: ED S230 and ED S333 must be completed before registering for graduate-level coursework

---

**Program Coursework (minimum 39 credits hours):**

ED A460	Exceptional Child	(3)
ED S615	Literacy in the Intermediate Grades	(3)
ED S616	Math Methods in the Elementary School	(3)
ED S617	Science Methods in Elementary Classroom	(3)
ED S618	Social Studies in the Elementary School	(3)
ED S619	Classroom Management and Discipline	(3)
ED S661	Advanced Studies in Young Children and Literature	(3)
ED S680	Multicultural Education Seminar	(3)
ED S688	Student Teaching	(6)

Endorsement 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 degree during their initial years as classroom teachers:

ED S626	Classroom Research	(3)
ED S698	Master's Research Project or Portfolio	(1-3)

Choose one (3)

ED S630	Ed Applications of Tool Software or other 600-level Ed Tech course	
ED S692	Education Seminar	

**Early Childhood Education (D)****Degree Requirements:**

---

**Prerequisite Coursework:**

ED S230	Intro to Educational Technology	(2)
ED S301	Parents and Teachers as Partners	(3)
ED S304	Children's Literature	(3)
ED S319	Health & Safety Issues in ECE	(1)
ED S321	ECE and Motor Development	(1)
ED S324	Enhancing Young Children's Creative Dev	(1)

Choose one (3)

ALST S300	Alaska Studies	
HIST 341	History of Alaska	

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

---

**Program Coursework (minimum 39 credits hours):**

ED S465	Math & Science for Young Children	(3)
---------	-----------------------------------	-----

ED S605	ECE Principles and Practices	(3)
ED S610	Guidance & Discipline in ECE	(3)
ED S652	Understanding & Teaching Young Children	(3)
ED S661	Adv Studies in Young Children & Literature	(3)
ED S664	Adv Studies in Classroom Management for Young Children	(3)
ED S680	Multicultural Education Seminar	(3)
ECE	Special Education Course from UAA	(3)
ED S688	Student Teaching	(6)

Endorsement for certification will be granted upon successful completion of the above coursework and the prerequisite coursework. Students are encouraged to complete the remaining 9 credits of coursework required for the MAT degree during their initial years as classroom teachers:

ED S626	Classroom Research	(3)
ED S698	Master's Research Project or Portfolio	(1-3)

Choose one

ED S630	Ed Applications of Tool Software or other 600-level Ed Tech course	(3)
ED S692	Education Seminar	(3)

## Master of Education (M.Ed)

with emphasis in

- Early Childhood Education (D)
- Educational Technology (D)
- Elementary (J)
- Secondary (J)

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 or an Alaska teaching certificate with a minimum of 30 semester hours in education.

**Admission Requirements:** Admission to the Master of Education Program requires the following:

1. A completed application and \$35 processing fee.
2. Official academic transcripts from all colleges or universities attended.
3. Three current letters of recommendation.
4. Statement of Objectives. This is a 3-5 page typewritten and double spaced formal paper containing a summary of educational experiences, a description of professional goals, and a statement of how the program might help in attaining those goals. 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. Portfolio of written materials demonstrating proficiency in writing and in computer-mediated communications. For Early Childhood, Elementary, and Secondary applicants, the portfolio must include a sample of a previously created formal paper and a sample of professional writing. For Educational Technology applicants, the portfolio must contain a complete instructional unit, which integrates technology and another piece of writing, or self-created media, that represents the student as an educator.

## Early Childhood Education (D)

### (Preschool and Primary grade teachers)

The M.Ed. Early Childhood Education Program is designed as a part-time program for practicing pre-school 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 prekindergarten 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 credential program. For an initial teaching credential see Bachelor of Arts in Elementary Education programs, or Masters of Arts in Teaching programs.

#### Program Requirements **9 credits**

Core: Select 3 credits from each of the following areas with advisor's approval:

- Research
- Technology
- Special Student Populations

#### Program Coursework **21 credits**

ED S465	Math and Science for Young Children	(3)
ED S605	Early Childhood Education Principles and Practices	(3)
ED S610	Guidance and Discipline in Early Childhood Education	(3)
ED S652	Understanding and Teaching Young Children I: Social and Emotional Development	(3)
ED S653	Understanding and Teaching Young Children II: Creative, Physical and Healthy Development	(3)
ED S661	Advanced Studies in Young Children and Literacy	(3)

ED S664 Advanced Studies in Classroom Management for the Young Child (3)

#### ED S698 Master's Research Project or Portfolio **3 credits**

Minimum credit hours 33 credits

Contact: Dr. Marjorie Fields, (907) 465-6412  
marjorie.fields@uas.alaska.edu

## Educational Technology (D)

The M.Ed. in Educational Technology develops the skills and abilities to make effective use of technology in a classroom setting. ED S693 Professional Portfolio Development is the final course in the program sequence.

The M.Ed. Educational Technology Program is not a teacher credential program. For an initial teaching credential 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 Endorsement Program.

#### Program Requirements **33 credits:**

ED S626	Classroom Research	(3)
	or	
ED S627	Educational Research	(3)
ED S630	Educational Applications of Tool Software	(3)
ED S631	Advanced Educational Psychology	(3)
ED S632	Educational Applications of Telecommunications	(3)
ED S633	Educational Applications of Multi-Media	(3)
ED S634	Educational Applications of Digital Video/Audio Visual	(3)
ED S635	Thinking About Technology	(3)
ED S670	Educational Applications of Technology Planning	(3)
ED S673	Educational Networks	(3)
ED S693	Professional Portfolio Development	(3)

One elective course which must be approved in advance by the program advisor. Candidates may select from the following:

ED S620	Curriculum Development	(3)
ED S652	Understanding and Teaching Young Children I: Social and Emotional Development	(3)
ED S665	Current Issues in Elementary Education	(3)
ED S680	Multicultural Education Seminar	(3)
ED S697	Independent Study Variable	

Other graduate level course approved by advisor.

Contact: Jason Ohler, (907) 465-6427  
jason.ohler@uas.alaska.edu

## Elementary Education (J)

The full curriculum for the M.Ed. Elementary is offered only to students participating as a cohort group. Therefore, interested students should contact the program chair for course sequencing information.

The purpose of this program is to extend and develop classroom skills and abilities for practicing teachers in elementary education (K–8). In addition to the 24 credits listed below, the additional 12 hours required for the degree will be cooperatively selected by the student and the graduate advisor. This plan of study should reflect the student's own professional and personal growth objectives. A maximum of 3 credits of 400 level coursework may be included in the approved plan of study.

---

**Program Requirements:** **12**

ED S627 Educational Research	(3)
ED S631 Advanced Educational Psychology	(3)

Select six credits from the following:

ED S612 School-Community Relations	(3)
ED S620 Curriculum Development	(3)
ED S630 Educational Applications of Tool Software	(3)
ED S632 Educational Applications of Telecommunications	(3)
ED S633 Educational Applications of Multi-Media	(3)

---

**Subject Area Courses:** **12**

ED S623 Advanced Studies in Language Arts	(3)
ED S624 Advanced Studies in Math Methods	(3)
ED S626 Classroom Research	(3)
ED S665 Current Issues in Elementary Education	(3)

---

**Courses approved by academic advisor** **12**

---

**Minimum Credit Hours** **36**

Contact: Dr. Mary-Claire Tarlow, (907) 465-6435  
maryclaire.tarlow@uas.alaska.edu

## Secondary Education (J)

The full curriculum for the M.Ed. Secondary is offered only to students participating as a cohort group. Therefore, interested students should contact the program chair for course sequencing information.

The purpose of this program is to extend and develop classroom skills and abilities for practicing teachers in secondary education. In addition to the 24 credits listed below, the additional 12 hours required for the degree will be cooperatively selected by the graduate student and the graduate advisor. This plan of study should reflect the graduate student's own professional and personal growth objectives. A maximum of 3 credits of 400 level coursework may be included in the approved plan of study.

---

**Program Requirements:** **12**

ED S627 Educational Research	(3)
ED S631 Advanced Educational Psychology	(3)

Select six credits from the following courses:

ED S612 School-Community Relations	(3)
ED S620 Curriculum Development	(3)
ED S630 Educational Applications of Tool Software	(3)
ED S632 Educational Applications of Telecommunications	(3)
ED S633 Educational Applications of Multi-Media	(3)

---

**Subject Area Courses:** **12**

ED S601 Teaching Select Content I	(3)
ED S602 Teaching Select Content II	(3)
ED S626 Classroom Research	(3)
ED S692 Educational Seminar	(3)

---

**Courses approved by academic advisor** **12**

---

**Minimum Credit Hours** **36**

Contact: Dr. David Marvel, (907) 465-4679  
dave.marvel@uas.alaska.edu

## Educational Leadership

The three programs in Education Leadership (Master of Education, School Principal Credential, and School Superintendent Credential) formerly at UAS have been merged into a single statewide program supervised by the School of Education, University of Alaska Anchorage. Students expressing interest in admission are encouraged to contact the UAA program director at (907) 786-4400.

## Professional Credential and Endorsement Program Requirements

### Credential Program (D)

with emphasis in

- Elementary Education
- Early Childhood Education

Credential programs are non-degree post-baccalaureate programs of study preparing students for a Type A Alaska teaching certificate. Programs are offered for elementary teachers (grades K-8) and early childhood teachers (preK-3). Certification is granted by the Alaska Department of Education and Early Development; UAS provides the institutional recommendation for certification.

The credential programs are offered by distance delivery only and are 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 school. Credential students must receive approval of the local school district, as extensive practicum experiences are required.

Courses are delivered via audio conference, video tape, computer conferencing, and correspondence. Students should be familiar with using email, the Internet, and computer conferencing and should have fax access.

Applicants must have a bachelor's degree with a general-education background from an accredited institution. A minimum cumulative GPA of 2.5 is required. The program advisor will examine transcripts to determine if the applicant has sufficient background in writing, math, 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.

Credential 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 3.0 or higher.

It is recommended that students desiring to teach in primary grades select the Early Childhood Credential option.

**Admission Requirements:** Admission to the Credential Program requires the following:

1. A completed application and \$35 processing fee.
2. Official academic transcripts sent directly from all previously attended colleges or universities.
3. Three current letters of recommendation.
4. Statement of Professional Objectives. This is a 3-5 page typewritten and double spaced formal paper containing (a) a summary of educational experiences, (b) a description of professional goals, and (c) a statement of how the credential program might help in attaining those goals. This statement will be judged on readability and style as well as compatibility of the student's objectives, expectations, and goals of the program.
5. Portfolio of written materials demonstrating proficiency in written communications (see Writing Assessment Guidelines).
6. Praxis I test scores. Passing scores must be attained for full admission. Qualifying Praxis scores for the

State of Alaska are:

Reading	PPST: 175	CBT: 322
Writing	PPST: 174	CBT: 321
Math	PPST: 173	CBT: 318

Students may be conditionally admitted until passing scores have been documented. Documentation must be received by UAS within one semester of admission.

7. Letter of support from local school district administration.
8. Documentation of successful work with children in an early childhood or elementary school setting.

## Elementary Education

### Prerequisites:

ED 230 Intro to Educational Technology (2)  
or competency

Content competency in writing, math, social science, science, psychology, arts, physical education, and health.

### Program Coursework

42

ALST S300	Alaska Studies	(3)
ED S304	Children's Literature	(3)
ED S320A	Art in the Elementary Curriculum	(1)
ED S320B	PE in the Elementary Curriculum	(1)
ED S320C	Music in the Elementary Curriculum	(1)
ED S333	Learner and the Learning Process*	(3)
ED A460	Exceptional Child	(3)
ED S615	Literature in the Intermediate Grades	(3)
ED S616	Math Methods in the Elementary School	(3)
ED S617	Science Methods in the Elementary Classroom	(3)
ED S618	Social Studies in the Elementary School	(3)
ED S619	Classroom Management and Discipline	(3)
ED S661	Advanced Studies in Young Children and Literature	(3)
ED S680	Multicultural Education Seminar	(3)
ED S688	Student Teaching	(6)

\*ED S333 must be completed prior to methods semesters.

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



*Education students learn by actual classroom teaching.*

## Early Childhood Education

Prerequisites: Ed 230 Intro to Educational Technology (2) or competency. Content competency in writing, math, social science, science, psychology, arts, physical education, and health.

Program Coursework	42 credits
ALST S300 Alaska Studies	(3)
ED S301 Parents and Teachers as Partners	(3)
ED S304 Children's Literature	(3)
ED S319 Health and Safety Issues in ECE	(1)
ED S321 ECE and Motor Development	(1)
ED S324 Enhancing Yng Chldrn's Creat Dev	(1)
ED S465 Math & Science for Young Chldrn	(3)
ED S605 ECE Principles and Practices	(3)
ED S610 Guidance and Discipline in ECE	(3)
ED S652 Understanding and Teaching Young Children	(3)
ED S661 Advanced Studies in Young Children and Literature	(3)
ED S664 Advanced Studies in Classroom Management for Young Child	(3)
ED S680 Multicultural Education Seminar	(3)
ECE Special Education Course from UAA	(3)
ED S688 Student Teaching	(6)

Contact: Dr. Marjorie Fields  
(907) 465-6412; [marjorie.fields@uas.alaska.edu](mailto:marjorie.fields@uas.alaska.edu)

## Endorsement Programs (D)

With emphasis in:

- Early Childhood Education
- Educational Technology
- Reading

Endorsement programs are non-degree programs of study preparing certified teachers to add endorsements to an existing Alaska Type A certificate. All course work must be completed within a seven-year period immediately preceding the date the endorsement is granted. Certification is granted by the Alaska Department of Education and Early Development; UAS provides the institutional recommendation for certification.

### Admission Requirements:

1. Application for admission and fee (if applicable to the endorsement program).
2. Graduation from an accredited teacher preparation program.
3. Copy of a current Alaska Type A Teaching Certificate.
4. Official transcript(s) are required only for courses transferred in from another institution.

### Early Childhood Education (grades PreK-3)

Call (907) 465-6429 for application materials.

### Minimum Credit Hours 21

ED S605 Early Childhood Education Principles and Practices	(3)
ED* S465 Math and Science for Young Children	(3)
ED S610 Guidance and Discipline in Early Childhood Education	(3)
ED S652 Understanding and Teaching Young Children I: Social and Emotional Development	(3)
ED S653 Understanding and Teaching Young Children II: Creative, Physical and Healthy Development	(3)
ED S661 Advanced Studies in Young Children and Literacy	(3)
ED S664 Advanced Studies in Classroom Management For Young Children	(3)

\*Prerequisite: Any 100-level math with a "B" or higher.

### Educational Technology (grades K-12)

Call (907) 465-8750 for application materials.

### Minimum Credit Hours 21

ED S630 Educational Applications of Tool Software	(3)
ED S632 Educational Applications of Telecommunications	(3)
ED S633 Educational Applications of Multi-Media	(3)
ED S634 Educational Applications of Audio-Video Technology	(3)
ED S670 Planning for Educational Technology	(3)
ED S673 Educational Applications of Networking	(3)
ED S635 Thinking About Technology	(3)

### Reading (grades K-8 or 9-12)

Students will be endorsed in their area of certification.

Call (907) 465-8750 for application materials.

### Minimum Credit Hours 24

ED S671 Language, Culture & Literacy	(3)
ED S674 Developing Literacy, ECE-12	(3)
ED S675 Reading and Cognition	(3)
ED S676 Reading Instruction & Assessment I	(3)
ED S677 Reading Instruction & Assessment II	(3)
ED S678 Literature & Reading: Supporting Readers at all Levels	(3)
ED S679 Content Area Literacy	(3)
Approved 600-level elective	(3)

Contacts: Dr. Shirley Kaltenbach

(907) 465-5753, [Shirley.kaltenbach@uas.alaska.edu](mailto:Shirley.kaltenbach@uas.alaska.edu)

# Juneau Center School of Fisheries and Ocean Sciences (JCSFOS)

## University of Alaska Fairbanks Fisheries Division

fisheries@uaf.edu • [www.sfos.alaska.edu/fishdiv](http://www.sfos.alaska.edu/fishdiv)

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 three-story Anderson building (15,000 sq. ft.) is located on the Auke Bay shore adjacent to the U.S. National Marine Fisheries Service, Auke Bay Laboratory, approximately 12 miles north of Juneau. The building is equipped with a high-quality seawater system, walk-in freezer, coldroom, 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.

### Dean

Vera Alexander, Dean

Charles Hocutt, Associate Dean

## Faculty

Milo D. Adkison

Assistant Professor of Quantitative Fisheries

Robert Fagen

Associate Professor of Biometry

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

Nicholas Hughes

Assistant Professor of Fisheries

Brendan Kelly

Associate Professor of Biology (joint appointment with UAS)

Gordon Kruse

Professor of Fisheries

Ole A. Mathisen

Professor of Fisheries, Emeritus

Terrance J. Quinn II

Professor of Fish Population Dynamics

Thomas C. Shirley

Professor of Marine Invertebrates

William W. Smoker

Professor of Fisheries

Michael S. Stekoll

Professor of Chemistry and Biochemistry (joint appointment with UAS)

Albert V. Tyler

Professor of Fisheries

## Degree Programs

### Bachelor of Science

- Fisheries: Upper-division Fisheries courses are offered at the Juneau Center to qualified undergraduates; the B.S. Fisheries program is located on campus at Fairbanks.

### Master of Science

- 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](http://www.uaf.edu/catalog/current/grad/enroll.html)

## Master of Science in Fisheries (M.S. Fisheries)

**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.

F: course offered at Fairbanks J: course offered at Juneau

### Prerequisites

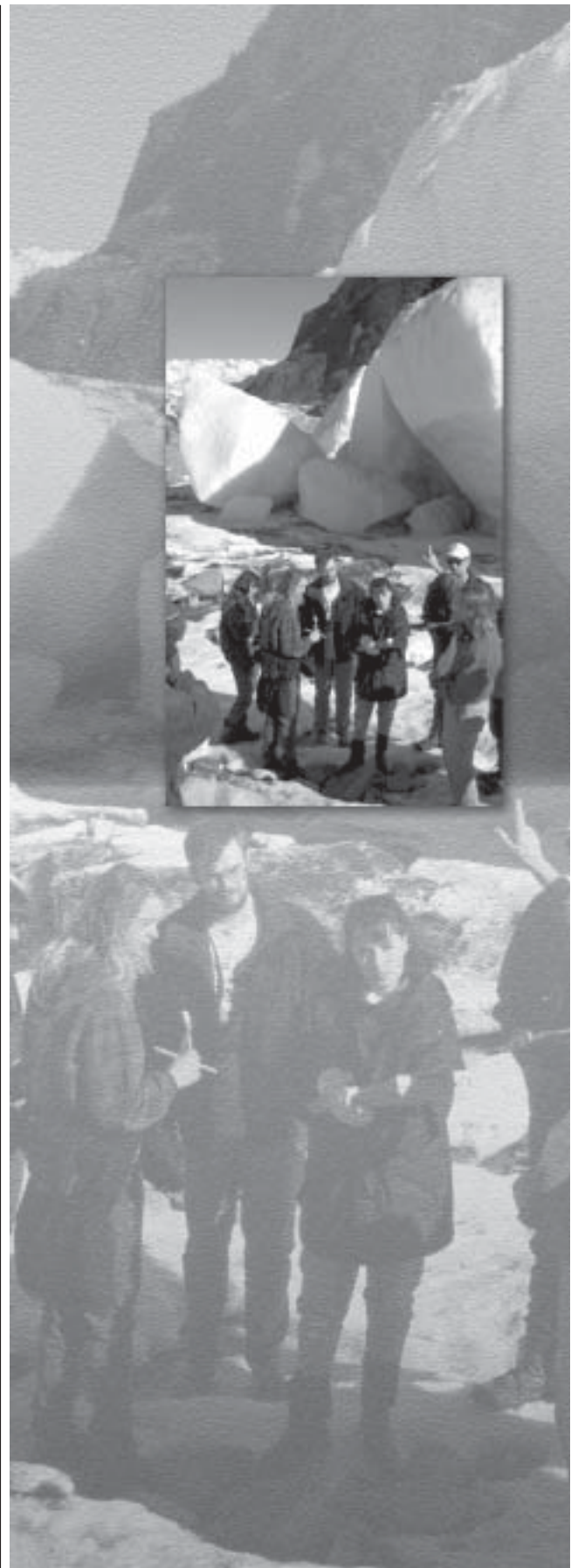
F MATH F200 Calculus I	(4)	or
J MATH S200 Calculus I	(4)	or
F MATH F272 Calculus for Life Sciences	(3)	and
F STAT F301 Elementary Statistics	(3)	or
J STAT S273 Elementary Statistics	(3)	and
F BIOL F432 Ichthyology	(4)	or
J BIOL S427 Introduction to Ichthyology	(4)	or
F BIOL F305 Invertebrate Zoology	(4)	or
F BIOL F305 Invertebrate Zoology	(4)	

### Major Requirements

F J STAT F401 Regression and Analysis of Variance	(4)	<b>12-18</b>
F J FISH F699 Thesis Research	(6-12)	

Graduate seminars in the appropriate discipline  
(Two one-credit Seminars)  
FISH F692, MSL F692, ALR F692, BIOL F692. (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.



*UAS field trips enable students to study in one of the most amazing natural laboratories in the world.*